

Final Report for the Assessment of the 6th Environment Action Programme

Annexes

DG ENV.1/SER/2009/0044

Ecologic Institute, Berlin and Brussels

in co-operation with

Institute for European Environmental Policy,
London and Brussels

Central European University, Budapest

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1 Annex A: Area specific assessment of the achievements of the 6EAP

1.1 Climate Change

1.1.1 Introduction

The 6EAP contains a number of overall aims, specific objectives and priority actions on climate change as well as on cross-cutting issues with relevance for climate change.

Overall aims

The 6EAP's **overall aims** in the climate change thematic area are set out in **Article 2**¹:

'emphasising climate change as an outstanding challenge of the next 10 years and beyond and contributing to the long term objective of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Thus a long term objective of a maximum global temperature increase of 2°Celsius over pre-industrial levels and a CO₂ concentration below 550 ppm shall guide the Programme. In the longer term this is likely to require a global reduction in emissions of greenhouse gases by 70% as compared to 1990'.

The wording corresponds to Article 2 of **United Nations Framework Convention of Climate Change (UNFCCC)** insofar, as it underlines the need to prevent dangerous climate change. The 6EAP specifies this objective by referring to the 2°Celsius stabilisation target – which has already been promoted by the Environment Council since 1996² - and the CO₂ concentration limit of 550 ppm.

Specific objectives and priority actions

Article 5 as the main provision in the 6EAP on climate change contains specific objectives which further elaborate the overall aim. According to paragraph 1, the aims set out in Article 2 should be met by pursuing the following objectives³:

- ratification and entering into force of the Kyoto Protocol to the United Nations framework Convention on climate change by 2002 and fulfillment of its commitment of an 8% reduction in emissions by 2008-12 compared to 1990 levels for the European Community as a whole, in accordance with the commitment of each Member State set out in the Council Conclusions of 16 and 17 June 1998;

¹ All other articles are those of the 6EAP unless qualified differently.

² 1939th Council Meeting, Luxembourg, 25 June 1996, see press release at: <http://europa.eu/rapid/pressReleasesAction.do?reference=PRES/96/188&format=HTML&aged=1&language=EN&guiLanguage=en>.

³ Emphasis to quotes throughout this text has been added by author.

- realisation by 2005 of demonstrable progress in achieving the commitments under the Kyoto Protocol;
- placing the Community in a credible position to advocate an international agreement on more stringent reduction targets for the second commitment period provided for by the Kyoto Protocol. This agreement should aim at cutting emissions significantly, taking full account, inter alia, of the findings of the IPCC 3rd Assessment Report, and take into account the necessity to move towards a global equitable distribution of greenhouse gas emissions.

The first objective specifying an 8% reduction target reflects a joint commitment of the European Community and its then 15 Member States for the first commitment period of the Kyoto Protocol, based on Article 3 and 4 of the Kyoto Protocol.⁴

The second objective is aimed at short term measures. It corresponds to a ‘soft’ law provision in Article 3(2) of the Kyoto Protocol which was meant to pressure developed countries not to delay action.⁵ Demonstrable progress was envisaged to help build trust between the parties and constitute a warning system identifying states that are lagging behind.⁶

The third objective is of special importance for mid- and long-term climate protection at the international level and interacts with the 6EAP objectives on international issues as outlined in Articles 2 and 9 (see below). The Quantified Emission Limitations and Reduction Objectives (QELRO) as set out under the Kyoto Protocol expire in 2012. In Accordance to Article 3 (9) of the Kyoto Protocol, Parties are obliged to consider further commitments before the end of the so called first commitment period of the protocol. The reference to the 3rd IPCC assessment report is somewhat outdated, as it has been followed by a 4th report and complemented by special reports.

Article 5 specifies a number of **sub-areas** which are to contribute to the objectives outlined. The sub-areas enumerated in paragraphs 2 to 5 can be defined as follows:

- i) Implementation of international climate commitments;*
- ii) Reduction of greenhouse gas emissions in the energy sector;*
- iii) Reduction of greenhouse gas emissions in the transport sector;*
- iv) Reduction of greenhouse gas emissions in industrial production;*
- v) Reduction of greenhouse gas emissions in other sectors;*
- vi) Use of other appropriate instruments;*
- vii) Adaptation to consequences of climate change;*

⁴ See also 2002/358/EC: Council Decision of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, OJ L 130, 15.5.2002, p. 1–3 (Burden Sharing Agreement).

⁵ Anderson, Molly (2003): ‘Demonstrable progress on climate change: prospect and possibilities’ in Verification Yearbook 2003, download on <http://www.vertic.org/publications/verification%20yearbook.html>, p. 172.

⁶ Still, no indicator is provided to determine ‘demonstrable progress’. Implementation guidance has been weak, though e.g. the Secretariat to the Kyoto Protocol prepared a synthesis of reports by parties demonstrating progress which was adopted by the Conference. FCCC/KP/CMP/2007/9/Add.1, p. 23: Decision 7/CMP.3 Demonstration of progress in achieving commitments under the Kyoto Protocol by Parties included in Annex I to the Convention.

- viii) *Climate change in relation to enlargement of the EC; and*
- ix) *Climate change in relation to the EU's external relations policy.*

The 6EAP lists a number of **priority actions** for these sub-areas. The actions outlined differ greatly in terms of how specific they are. Some actions are linked to quantitative targets,⁷ while others are rather general⁸.

Cross-cutting aims, objectives and priority actions

There are a number of relevant **cross-cutting aims, objectives and priority actions** outlined in Articles 3, 9 and 10 of the 6EAP. These cross-cutting objectives address mainly international issues, integration, participation and evaluation. They do not specifically address climate policy, but are meant to facilitate and guide policy making in all thematic areas (including climate change).

Article 3 provides a number of **strategic approaches** in relation to the performance of the programme and the thematic areas dealing *inter alia* with the effective implementation and enforcement of environmental legislation, integration of environmental protection requirements in different EU policy areas and the collaboration and partnerships with private enterprises as well as consumer groups and non-governmental organizations (NGOs). The cross-cutting objectives of Article 3 will be addressed in more detail below in the context of the analysis of the different sub-areas.

With respect to **international issues**, the 6EAP shall - according to the overall aim in Article 2 (6) – stimulate:

*'the positive and constructive role of the European Union as a **leading partner** in the protection of the global environment and in the pursuit of a sustainable development; awareness and public participation; analysis of benefits and costs, taking into account the need to internalise environmental costs; the development of a **global partnership** for environment and sustainable development; the integration of environmental concerns and objectives into all aspects of the Community's external relations.'*

More specific objectives regarding international issues can be found in Article 9 (1):

- the pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment;
- the further promotion of sustainable consumption and production patterns at the international level; and
- making progress to ensure that trade and environment policies and measures are mutually supportive

Article 9 (2) contains a number of priority actions that aim to guide the integration of the thematic areas outlined in Articles 4 to 8 into the Community's external relations, i.e.

⁷ For example: Article 5, paragraph 2 (c): [...] 'encouraging the use of renewable energy sources, including the use of incentives, including at the local level, with a view to meeting the indicative target of 12% of total energy use by 2010.'

⁸ For example: Article 5, paragraph 2 (f): [...] '*promoting energy efficiency.*'

- aiming for swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment where the Community is a Party;
- promoting cross-border environmental cooperation with neighbouring countries and regions;
- promoting a better policy coherence by linking the work done within the framework of the different conventions, including the assessment of interlinkages between biodiversity and climate change, and the integration of biodiversity considerations in to the implementation of the United Nations Framework Convention on Climate Change and the Kyoto Protocol. (See 1.5.1.3).

Cross cutting Article 10 on **environmental policy making** lists a number of **priority actions**, through which objectives on participation and best available scientific knowledge and the strategic approaches in Article 3 shall be pursued. These priority actions concern good governance, participation, policy evaluations, research programs, information (improvement of indicators) and monitoring.

1.1.2 Achievement of objectives

The following section analyses if and how the aforementioned objectives relating to climate change have been achieved. The assessment follows the structure of the relevant sub-areas as determined in Article 5 (2). For each sub-area, the relevant objectives and the most important measures are presented. Subsequently, the measures' contribution to the relevant objectives is analyzed. Implementation of international climate commitments

Relevant objectives

To successfully address climate change, concerted global action is crucial. This underlines the importance of the **first sub-area** in Article 5 (2) (i): '*implementation of international climate commitments*'. **Priority actions** according to Article 5 (2) (i) are:

- examining the results of the European Climate Change Programme and adopting effective common and coordinated policies and measures on its basis, as appropriate, for various sectors complementary to domestic actions in the Member States;
- working towards the establishment of a Community framework for the development of effective CO₂ emissions trading with the possible extension to other greenhouse gases;
- improving monitoring of greenhouse gases and of progress towards delivering Member States commitments made under the Internal Burden Sharing Agreement;

Actions in this field will contribute to the **climate objectives** enumerated in Article 2(2) and Article 5(1) (mitigating greenhouse gas emissions, fulfillment of commitments, demonstrating progress, building a credible position for the EU at international negotiations).

Moreover, there are some relevant **cross cutting objectives**. The implementation of international commitments contributes to the objectives regarding **international issues**, especially with respect to 'effective compliance' (Article 9 (2)). It also helps further the

objective of **integration** of environmental concerns in other policy areas (Articles 2 (4) and 3 (3)) and objectives related to monitoring of effective implementation (Article 10 f and g). Furthermore, Article 3 (4) the 6EAP places an emphasis on the exploration of **economically efficient instruments** for environmental policy, including '*tradable environmental permits as a generic instrument and of emission trading with a view to promoting and implementing their use where feasible*' (Article 3 (4)). This is part of the priority actions outlined for this sub-area.

Overview of measures

The EU ratified the Kyoto Protocol in 2002, and supported – through diplomatic efforts – its entry into force in 2005.⁹ The EU had also adopted a number of measures in order to meet its international climate commitments before the Kyoto Protocol entered into force in 2005. The first important overarching foundation was laid by the first and second phase of the **European Climate Change Programme (ECCP)** in 2000 and 2005. Although the international community has not yet been able to agree on internationally binding commitments for the post-2012 period, the lifetime of EU efforts to mitigate greenhouse gases extend beyond 2012. In 2009, the EU passed the **Climate and Renewable Energy Package** which comprises measures implementing the '20-20-20' by 2020 targets agreed by the Spring European Council in March 2007. This set of targets contains the political commitments to reduce the EU's greenhouse gas emissions by at least 20% below 1990 levels by 2020, to increase the share of renewable energy in EU's final energy consumption to 20% by 2020 and to save 20% on the EU's projected energy consumption by 2020.¹⁰ These overarching strategic documents have provided the basis for the following legislative and policy measures:

As early as 2003, the Directive 2003/87/EC establishing the **EU Emission Trading Scheme** (EU ETS) was adopted to implement the joint mitigation commitment as laid down in the 2002 Burden Sharing Agreement.¹¹

The 2004 **Linking Directive** (2004/01/EC) is the foundation for using credits obtained through the Kyoto mechanisms to comply with obligations under the EU- ETS.¹² In 2008, the EU adopted the **Aviation Directive** (Directive 2008/101/EC) to include aviation in the EU ETS.¹³ The EU ETS has been improved by measures included in the Climate and Renewable

⁹ Oberthür, Sebastian/ Pallemarts, Marc: The EU's Internal and External Climate Policies: An Historical Overview. In Oberthür, Sebastian, Pallemarts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 39.

¹⁰ Brussels European Council (2007): Presidency Conclusions. 8/9 March 2007. 7224/1/07.

¹¹ 2002/358/EC: Council Decision of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, OJ L 130, 15.5.2002, p. 1–3.

¹² Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, OJ L 338, 13.11.2004, p. 18–23.

¹³ Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8, 13.1.2009, p. 3–21.

Energy Package, such as Directive 2009/29/EC¹⁴, which provides for amendments of the original EU ETS Directive and more ambitious reduction targets than the Burden Sharing Agreement for the post-2012 period. The new EU ETS Directive is complemented by the **Effort-Sharing-Decision** which contains binding reduction targets for the post-2012 period for other sectors not covered by the trading scheme.¹⁵

Other important measures relevant for this sub- area include legislation related to the **monitoring of greenhouse gas emissions**, which help determine whether Member States are meeting their targets under the Kyoto Protocol, notably the so called Monitoring Decision¹⁶.

In addition to these legislative measures, the Commission adopted a number of **policy papers** to develop the EU's role in the international post-2012 negotiations including the following Communications: 'Winning the Battle Against Global Climate Change' of February 2005; 'Limiting Global Climate Change to 2 degrees Celsius: The way ahead for 2020 and beyond' of January 2007, 'Towards a comprehensive climate change agreement in Copenhagen' of January 2009; 'Stepping up international climate finance: A European blueprint for the Copenhagen deal'; of September 2009; and 'International climate policy post-2012: Acting now to reinvigorate global action of climate change' of March 2010.¹⁷ These papers helped to inform and further the debate in the EU.

Furthermore, while negotiating its vision at the international level, the EU committed to a unilateral 20% emission reduction target by 2020 in the context of the aforementioned 20-20-20 target. This commitment represented a strong signal to the international community and the respective negotiations on a future global regime. In addition, the EU made the conditional offer to move to a 30% reduction by 2020 compared to 1990 levels, provided that other developed countries commit themselves to comparable emission reductions, and that developing countries also contribute to global mitigation efforts based on the principle of common but differentiated responsibility.¹⁸

Contributions of measures to overall aim/ specific objectives

To date, the global community has not shown sufficient commitment to limiting global warming to a maximum global temperature increase of 2°Celsius above pre-industrial

¹⁴ Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJ L 140, 5.6.2009, p. 63–87.

¹⁵ Decision No 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020, OJ L 140 , 05/06/2009. P. 0136 - 0148

¹⁶ Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol (Monitoring Decision), OJ L 49, 19.2.2004, p. 1–8; 2004/156/EC: Commission Decision of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, OJ L 59, 26.2.2004, p. 1–74; 2007/589/EC: Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council,, OJ L 229, 31.8.2007, p. 1–85.

¹⁷ Available at: http://ec.europa.eu/environment/climat/future_action_com.htm.

¹⁸ Brussels European Council (2007). Presidency Conclusions 8/9 March 2007. 7224/1/07.

levels.¹⁹ The EU, however, contributed to the **overall aim of Article 2 6EAP** of limiting global warming to 2°C based on the adopted and implementation of the aforementioned measures and the further development of international climate commitments. The EU even **outgrew the level of ambition** set out in the 6EAP by acknowledging the findings of the 4th IPCC assessment report *'which demonstrates that keeping the 2°C objective within reach [...] requires stabilisation of the concentration of greenhouse gases in the atmosphere in line with the lowest stabilisation level assessed, i.e. about 450 ppm CO₂ eq.'*²⁰

The **entry into force** of the Kyoto Protocol occurred three years later than originally envisaged in Article 5 of the 6EAP. This political reality demonstrates that the accomplishment of this specific objective did not lie solely with EU powers, as it was dependent on ratification by a sufficient number of other Parties. However, the EU has continuously aimed to reach this specific objective through uninterrupted and open support of the Kyoto Protocol regime.²¹

The EU as a whole, and most of its Member States, are generally on track to meet their respective Kyoto Protocol emission reduction obligations for the first commitment period.²² The 27 Member States seem to be on track to meet its greenhouse gas reduction target of 20% by 2020 compared to 1990 levels, though it is still too early to make a reliable assessment. These positive trends are a result of the measures outlined above. They serve the specific objectives of Article 5 and 9 in fulfilling the commitments under the Kyoto Protocol, while building a credible position for the EU internationally through the pursuit of ambitious environmental policies.

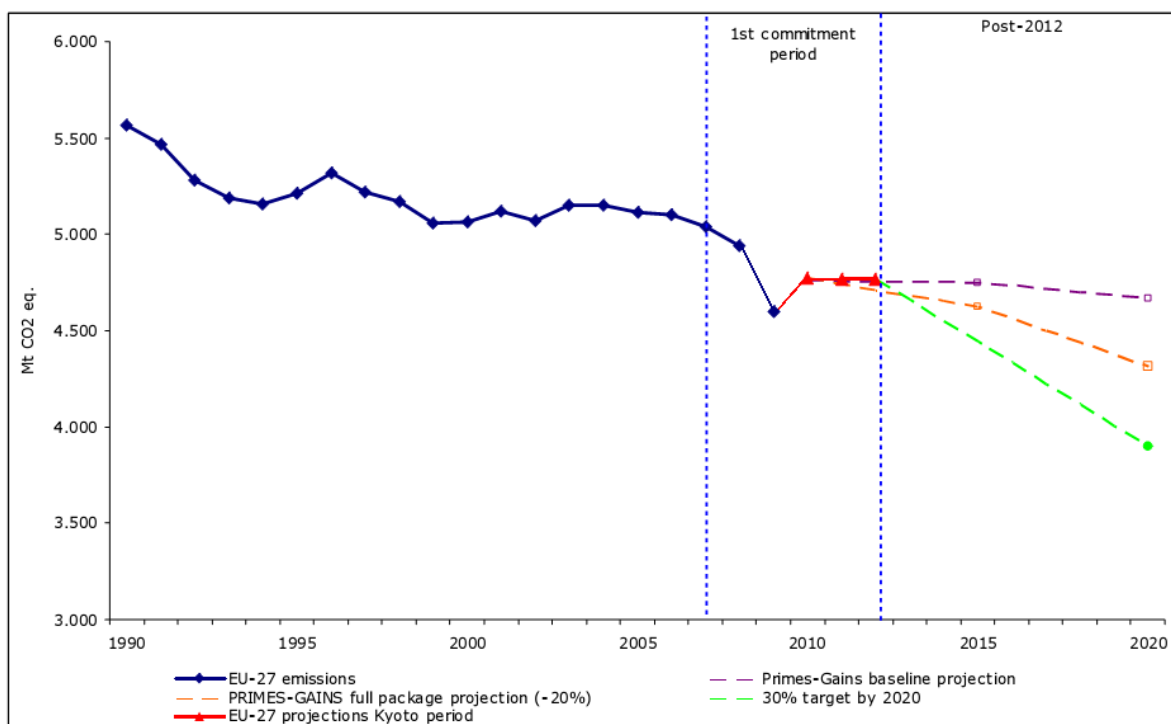
¹⁹ Commission Staff Working Document: '2009 Environment Policy Review, Part 2, 2 August 2010, COM (2010) 975 final, p. 14.

²⁰ Environment Council (2007). Council conclusions on climate change, 2826th Environment Council Meeting, Luxembourg, 30 October 2007, Available at: <http://www.consilium.europa.eu/App/NewsRoom/loadBook.aspx?target=2007&bid=89&lang=en&id=356>; EU climate change expert group (2008): The 2° degree target. Background on Impacts, Emission Pathways, Mitigation Options and Costs, p. 28.

²¹ See also: Oberthür/ Sebastian, Pallemmaerts, Marc: The EU's Internal and External Climate Policies: an Historical Overview. In Oberthür, Sebastian, Pallemmaerts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 33.

²² According to Eurostat, but also according to the latest report of the European Environment Agency and the European Commission's analyses, the EU-15 will meet their Kyoto target. EEA (2009): Greenhouse gas trends and projections. Available on http://www.eea.europa.eu/publications/eea_report_2009_9, page 84; Report from the Commission to the European Parliament and the Council - Progress towards achieving the Kyoto objectives (required under Article 5 of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, COM(2009) 630 final. Five EU 15 countries - France, Germany, Greece, Sweden and the United Kingdom – and several other Member States with individual targets under the Kyoto Protocol have already achieved average greenhouse gas emission levels below their Kyoto target/their commitment under the Burden Sharing Agreement.

Figure 1: Actual and projected emissions for EU-27



Source: European Commission, Progress towards achieving the Kyoto objectives ²³

According to a 2005 progress report, the EU realized **demonstrable progress** in achieving its commitments under the Kyoto Protocol **by 2005**, especially by implementing a number of measures adopted within the context of the European Climate Change Programme.²⁴ This is in line with the respective specific objectives of Article 5(1) and 9.

Moreover, the EU managed to place itself in a credible position in international climate negotiations and to promote ambitions in international environmental protection by **advocating a stringent international agreement** for the period beyond 2012 by promoting the 2°Celsius limit (which has been integrated in the Copenhagen Accord²⁵), mid- and long-term targets in line with IPCC scenarios, by making the offer of an 30% reduction goal and by unilaterally committing to the 20% reduction target by 2020. Particularly when compared to the positions of other major greenhouse gas emitting countries, the EU is in general perceived as a credible player in international climate negotiations.

²³ Report from the Commission to the European Parliament and the Council 'Progress towards achieving the Kyoto objectives' required under Article 5 of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol. COM (2010) 569, p. 5.

²⁴ Communication from the Commission - Report on demonstrable progress under the Kyoto protocol (required under Article 5(3) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol), COM (2005)615 final.

²⁵ The EU and more than 130 developed and developing countries, accounting for over 80% of global greenhouse gas emissions, have expressed their support for to the Accord, which had been only 'noted' by the UNFCCC COP.

Contribution of measures to priority actions

The majority of **priority actions** in this sub-area has been met and includes concrete measures proposed to facilitate the achievement of the overall aims and specific objectives.

*European Climate Change Programme (ECCP)*²⁶

Article 5 requires examination of the ECCP and the adoption of policies and measures. This has been accomplished based on the implementation for the following policies and measures: the ECCP was already launched in 2000 (2 years prior to adoption of the 6EAP) as a stakeholder-driven programme to identify and develop measures for an EU strategy to implement the Kyoto Protocol. In 2003, the Commission presented its ECCP Progress Report with further analyses.²⁷ Building on the first phase and the associated reports, the second phase of the ECCP was launched in 2005, consisting of five working groups (ECCP I review, aviation, CO₂ and cars, carbon capture and storage, adaptation and EU ETS review). In most fields, policies and measures were adopted.

Emission Trading Scheme (EU ETS)

The EU ETS as a market based instrument was introduced in 2005. This is in line with the priority action required by Article 5 (2) (i) on the establishment of an effective CO₂ emission trading as well as the aim of Article 3 (4) 6EAP on the internalization of impacts on the environment through the use of instruments such as tradable environment permits.

While the precise environmental effects (= relevant for the CO₂ reduction objective and aims) of this measure are hard to quantify given the numerous factors affecting emissions from covered entities; ex-post analyses as well as questionnaires of installation operators suggest that the measure has had a noticeable effect on planning and investment decisions in covered sectors, and has ultimately been one of several relevant factors in achieving lower greenhouse gas emissions in the EU.²⁸

The comparatively low price for carbon that has existed since the introduction of the EU ETS has partly undermined the environmental effectiveness of the measure, with excess allocation of allowances during the first trading period from 2005-2007 failing to create a real scarcity of allowances in the market and hence resulting in little pressure to change existing practices or behaviour.²⁹

²⁶ Note: These numberless subheadings within the sub-areas are summaries of the priority actions on tackling climate change outlined by the 6EAP.

²⁷ European Commission (2003): Second ECCP Progress Report: Can we meet our Kyoto Targets?

²⁸ Ellerman, Denny / Joskow, Paul: The European Union's Emissions Trading System in Perspective (Cambridge, MA: MIT, 2008), p. 15.

²⁹ Rodi, Michael: Die Fortentwicklung des Emissionshandels vor dem Hintergrund der Kyoto-Nachfolge-Diskussion. In In Schulze-Fielitz, H. und Müller, T. (eds). Europäisches Klimaschutzrecht. Nomos 2010, p. 192.

After 2007, allocation of allowances has been noticeably tighter, causing a greater behavioural effect. Point Carbon ascribes a significant part of emissions reductions in the affected sectors to the emissions trading system.³⁰

The revised Directive of 2009 ensures continuity of the EU emission trading system with predetermined reduction targets and expanded central powers of the Commission in the emission allowance allocation process. Although these aspects only enter into effect with the third trading period starting in 2013 the long-term perspective and expectation of stricter allowance allocation with a higher share of auctioning have already influenced supply and demand dynamics in the European carbon market and had a favourable effect on allowance prices, thereby influencing important long-term investment decisions in the energy and industry sectors. This part of the priority action taken is a relevant contribution to the Article 5 objective of putting the EU in a credible position internationally (as well as to the long-term emission reduction aim of Article 2).

The extension of the EU ETS to other gases (see respective priority action in Article 5 (2) (i)) has been realized. Under the revised Directive, new gases are included in the system as of 2013, namely N₂O (by the production of nitric acid, adipic acid, nitrous oxide and glyoxal and glyoxylic acid)) and PFCs (by the production of primary aluminium).

One expected benefit of introducing a carbon price through an emissions trading system is an improved incentive to harness energy sources with lower carbon intensity, notably renewable energy, as well as greater energy efficiency. Evidence suggests that internalizing environmental costs with a clearly identified carbon price has had such an effect in Europe, allowing carbon emissions to become a relevant factor in corporate accounting and investment decisions. By increasing the overall cost of carbon-intensive fuels, moreover, the emissions trading system has also incurred a shift in the merit order of different energy sources in the power sector, benefitting natural gas and renewable energy sources vis-à-vis coal.

A number of factors affect fuel choices and the decision to invest in more energy efficient equipment, processes and infrastructures, however, and moderate carbon prices are often not enough to tip the balance when other variables, such as the cost of equipment, may still be the determining factor. More importantly, in the portfolio of instruments for climate and energy policy, static targets or technology standards for renewable energy deployment and energy efficiency improvements – though they might be helpful to reach climate policy goals in general – can impede the effectiveness of emissions trading as a policy instrument: for instance, when a policy mandate to increase the share of renewable energy sources in the energy mix results in a unit of conventionally generated energy being replaced with a unit of renewable energy, the resulting reduction in emissions from the affected installation will – assuming this installation participates in the emissions trading system – also free up an emissions allowance in the carbon market that may be used to cover additional emissions from carbon-intensive fuels, or sold to other market participants so these may increase their emissions.

³⁰ Point Carbon, Carbon 2008: Post-2012 is Now, Oslo: Point Carbon, 2008, p. 24-27.

Monitoring/progress towards Burden Sharing Agreement/Effort Sharing Decision

The 6EAP in Article 5 (2) (i) (c) calls for the improved monitoring of greenhouse gases and progress towards commitments made under the Burden Sharing Agreement. A number of measures were adopted to meet these requirements, such as the 2004 and 2007 **Monitoring Decisions** that established guidelines for the monitoring and reporting of greenhouse gas emissions.³¹

To contribute to the 2007 Spring European Council's 20-20-20 climate and energy goals, the EU adopted, *inter alia*, the **Effort-sharing Decision**, which established legally binding quantitative emission limitation and reduction objectives for each Member State for non-EU ETS-sectors to contribute to the 20% by 2020 greenhouse gas emission reduction target. This decision actually exceeds the priority actions set out in the 6EAP since the latter only focuses on the 8% reduction target for 2008-2012 agreed on in the Burden Sharing Agreement.

1.1.2.1 Reduction of greenhouse gas emissions in the energy sector

Relevant objectives

The second sub-area as outlined in Article 5 (2) (ii) addresses the reduction of greenhouse gas emissions in the energy sector. This second sub area requires the following priority actions:

- undertaking as soon as possible an inventory and review of **subsidies** that counteract an efficient and sustainable use of energy with a view to gradually phasing them out;
- encouraging renewable & lower carbon fossil fuels for power generation;
- encouraging the **use of renewable energy sources**, including the use of incentives, including at the local level, with a view to meeting the indicative target of 12% of total energy use by 2010;
- introducing incentives to increase **Combined Heat and Power** and implement measures aiming at doubling the overall share of Combined Heat and Power in the Community as a whole to 18% of the total gross electricity generation;
- prevent and **reduce methane emissions** from energy production and distribution;
- promoting energy efficiency.

Similar to the first sub-area (implementing international climate obligations), the second sub-area links not only to the specific objectives of Article 5 (1) but also to the overall aim as described in Article 2 (2).

³¹ Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, OJ L 49, 19.2.2004, p. 1–8; 2004/156/EC: Commission Decision of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council . OJ L 59, 26.2.2004, p. 1–74; 2007/589/EC: Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, COM(2007) 3416), OJ L 229, 31.8.2007, p. 1–85.

The international cross-cutting objectives in Article 2 and 9 are concerned with all energy targets. Further cross-cutting objectives of relevance can be found in Article 3 (4), which refer to the *'reforms of subsidies that have considerable negative effects on the environment and are incompatible with sustainable development'*.

Relevant objectives are also those of horizontal environmental policy integration objectives in Article 3 (3), considering the integration of climate change policy in the policy area of energy.

Overview of measures

The EU adopted a number of measures relevant to sub-area 2.

The **Renewable Energy Directive** introduced binding national targets to achieve a **renewable energy** share of 20% as part of the EU's gross final energy consumption by 2020.³² It outgrew the 6EAP's indicative target of a 12% share of gross national energy consumption that builds on the former 2001 Renewable Electricity Directive, which also provided for an indicative target on **electricity** produced from renewable energy sources in total EU electricity consumption of 22,1% by 2010.³³

Moreover, the EU adopted a **Cogeneration Directive**, which aims to create a framework for promotion and development of high efficiency cogeneration of heat and power.³⁴ It does not introduce any quantitative targets but obliges Member States *inter alia* to provide guarantees of the origin of electricity from high-efficiency cogeneration and to establish an analysis of the national potential for the application of high-efficiency cogeneration.

A number of other measures to improve **energy efficiency** were introduced after the adoption of the 6EAP, such as the Eco-design Directive³⁵, the Energy Performance of Buildings Directive³⁶ and the Energy End-Use Efficiency and Energy Services Directive.³⁷ The Energy End-Use Efficiency and Energy Services Directive obliges Member States to aim to achieve an overall national indicative energy saving target of 9% by 2015 and to submit

³² Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5.6.2009, p. 16–62. The Directive furthermore contains a 10% renewable energy target specifically for the transport sector which replaces the previous indicative targets of the 2003 Biofuels Directive.

³³ Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, OJ L 283, 27.10.2001, p. 33–40.

³⁴ Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC OJ L 52, 21.2.2004, p. 50–60.

³⁵ Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council, OJ L 191, 22.7.2005, p. 29–58.

³⁶ Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings, OJ L 1, 4.1.2003, p. 65–71.

³⁷ Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC, OJ L 114, 27.4.2006, p. 64–85.

energy efficiency action plans. The action plans submitted were assessed in 2008.³⁸ The Energy Efficiency Action Plan runs from 1 January 2007 to 31 December 2012 and proposes a number of concrete measures to realize the EU energy saving potential of 20% by 2020.³⁹

Of relevance to the energy sector (and other sectors) as well as for the objectives of the 6EAP (e.g. Article 3 (6) on procurement), are the **Directives on Public Procurement**.⁴⁰ They were adopted to coordinate the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors and the procedures for the award of public works contracts, public supply contracts and public service contracts. Though procurement is not explicitly mentioned in the priority actions, green procurement can contribute indirectly to many of the enumerated actions.

There are also measures, although no legislative acts, addressing harmful **subsidies** in the energy sector.⁴¹

Contributions of measures to overall aim/ specific objectives

All measures in sub-area 2 aim at the reduction of greenhouse gas emissions in the energy sector. Such measures will simultaneously contribute the overall aim in Article 2 (2) and the specific objectives in Article 5 (1) of the 6EAP. Furthermore, they help place the Community in a credible position as Party to the international negotiations and thus contribute to the respective objectives of Article 5 and 9, and the aim of Article 2 (6). With its 20-20-20-targets; the EU has endorsed an ambitious set of goals intended to provide an example and promote an ambitious post-2012 climate agreement at the UN climate negotiations.

The Renewable Energy Directive can be considered the most far reaching measure adopted in the energy sector contributing to greenhouse gas emission reductions. According to the latest EEA reports on greenhouse gas emissions trends and projections up to 2009, gross electricity generation from renewable energy sources (RES) in Europe grew significantly, with an increase of about 60% between 1990 and 2007. According to the latest Eurostat data, the renewable energy share in electricity generation rose from 13% in 1990 to 22% in 2010 in EU-15 and from 11.9% to 21% in the EU 27.⁴² The share of renewable energy of the

³⁸ Communication from the Commission to the Council and the European Parliament on a first assessment of the national energy efficiency action plans as required by Directive 2006/32/EC on energy end-use efficiency and energy services: moving forward together on energy efficiency. Document COM (2008) 11 final.

³⁹ Communication from the Commission of 19 October 2006 entitled: Action Plan for Energy Efficiency: Realising the Potential (COM(2006) 545).

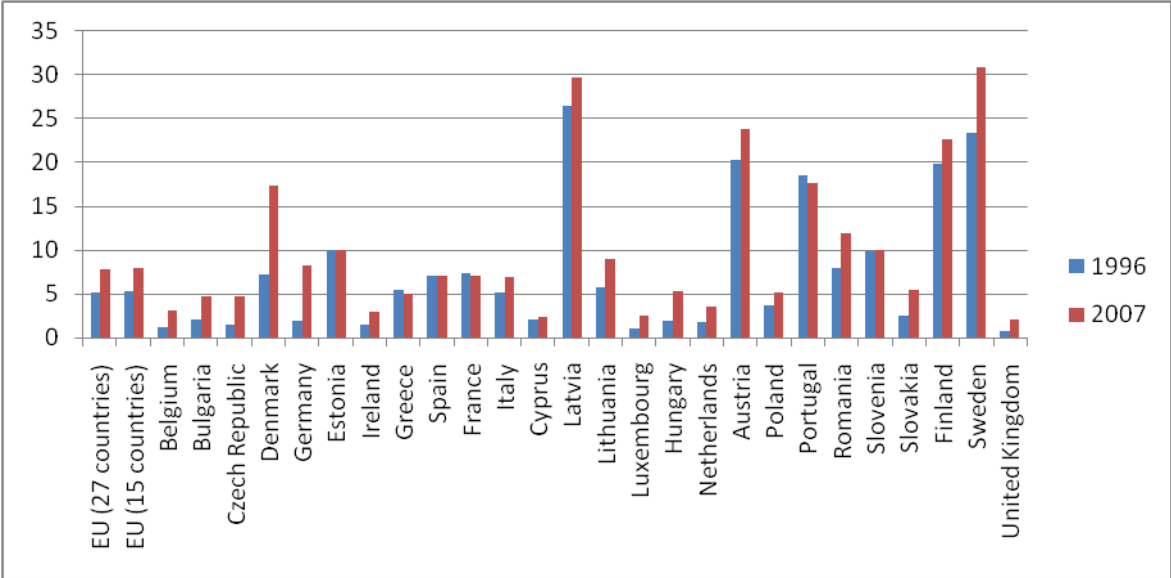
⁴⁰ Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors, OJ L 134, 30.4.2004, p. 1–113 and Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts OJ L 134, 30.4.2004.

⁴¹ Commission staff working paper SEC(2002)1275: Inventory of public aid granted to different energy sources and Green Paper (COM(2007)140) on market based instruments for environment and related policy purposes; (including the issue how to best reform environmentally harmful subsidies); IEEP et al (2009): Environmentally Harmful Subsidies (EHS): Identification and Assessment. Report to the European Commission, Available at <http://ec.europa.eu/environment/enveco/taxation/index.htm>.

⁴² Eurostat (2010): Electricity generated from renewable sources - [tsien050].

EU-27's gross final energy consumption amounted to 10,3% in 2008.⁴³ The EEA report underlines that the contribution from renewable energy remains limited in the energy mix and that further substantial efforts are needed to meet the 2020 target.⁴⁴

Figure 2: Share of renewable energy in gross inland energy consumption (in%)⁴⁵



Source: Eurostat [tsdcc110]

According to national renewable energy forecasts, which had to be published by Member States under the Renewable Energy Directive by February 2010,⁴⁶ the EU seems to be on track to meet the 2020 target of the Renewable Energy Directive. These forecasts had to indicate the estimated excess production of energy from renewable sources, the estimated potential for joint projects and the estimated demand for energy from renewable sources, to be satisfied by means other than domestic production. According to the summary of the submitted forecasts, at least ten Member States expect to have a surplus of renewable energy in 2020 compared to their binding target for the share of renewable energy in their final energy consumption. Ten Member States expect a deficit in 2010 compared to their binding target for the share of renewable energy in their final energy consumption and require statistical transfers of a specified amount of energy by other Member States to meet their targets. As a net result, the EU is expected to exceed its 20% target by approximately 0.3% in 2020.

Though the 20%-target refers to 2020, measures taken until 2012 also contribute to the Article 5 objective of fulfilling the EU commitment under the Kyoto Protocol of an 8% emission reduction (as the energy target also addresses areas not covered by the emission

⁴³ Eurostat (2010): Share of renewable energy in gross final energy consumption – [t2020_31].

⁴⁴ EEA (2009): Greenhouse gas trends and projections, p. 56 ff.

⁴⁵ No indicator on final energy production not available yet, see: http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators.

⁴⁶ European Commission (2010): Forecast of Member State Forecast Documents. Available at: http://ec.europa.eu/energy/renewables/transparency_platform/forecast_documents_en.htm.

trading scheme and starts incentivizing renewable energies at the present time – so results can be expected to contribute immediately to the reduction goals in the first commitment period of the Kyoto Protocol).

The successful integration of climate change policy in the policy area of energy corresponds to the specific objectives in Article 3 (3).

Contribution of measures to priority measures

Undertaking an inventory and reviewing subsidies counteracting sustainable use of energy with a view to phasing them out

The EU developed an inventory of subsidies that counteract an efficient and sustainable use of energy by the relevant measures in its 2002 staff working paper. However, given the timing, the working paper was obviously not motivated by the 6EAP.⁴⁷ No concrete measures have been undertaken to phase out such subsidies since then. The 2006 Sustainable Development Strategy did call for the adoption of a roadmap to reform environmentally harmful subsidies by 2008, with a view to eliminating them.⁴⁸ However, no roadmap has been adopted as of yet, despite the fact that the Commission has released a number of exploratory studies on the subject.⁴⁹

Encouraging the use of renewable and lower carbon fossil fuels for power generation

The priority action of ‘encouraging renewable and lower carbon power generation’ interacts with other priority actions listed in Article 5 (2) (ii) 6EAP, i.e. the encouragement renewable energy sources usage and the introduction of incentives to increase Combined Heat and Power (CHP) (see sections below). Measures taken to strengthen renewable energy consumption and CHP have also encouraged the uptake of renewable energy and low carbon power generation. These measures are evaluated in the following two sections, since they contribute to more specific priority actions reflected in these sections.

Encouraging the use of renewable energy sources

The 2009 **Renewable Energy Directive** corresponds to the priority action of ‘increasing the share of renewable energy sources’. The Directive also provides for incentives and provisions concerning local level administrative procedures, regulations and codes (e.g. Articles 3(3) and 13 Renewable Energy Directive), as in principle is claimed in the priority action (‘...including the use of incentives, including at the local level...’). The legislative act has, however, a different timeline and a target than that spelled out in the 6EAP: it sets a

⁴⁷ Commission staff working paper SEC(2002)1275: Inventory of public aid granted to different energy sources and Green Paper (COM(2007)140) on market based instruments for environment and related policy purposes; (including the issue how to best reform environmentally harmful subsidies)

⁴⁸ European Council (2006): Review of the Sustainable Development Strategy (EU_SDS) – Renewed Strategy. Document 10917/06, page 24; IEEP (2006): Drowning in Process? The Implementation of the EU’s 6th Environmental Action Programme. An IEEP Report to the European Environmental Bureau (EEB).

⁴⁹ IEEP et al (2007): Reforming environmentally harmful subsidies Final report to the European Commission’s DG Environment, March 2007 and IEEP et al. (2009), Environmentally Harmful Subsidies: Identification and Assessment, Final report for the European Commission’s DG Environment, November 2009. Available at: <http://ec.europa.eu/environment/enveco/taxation/index.htm>.

binding (instead of aspirational) target to achieve 20% (instead of 12%) of the EU's final energy consumption from renewable sources by 2020 (instead of 2010).

The Renewable Energy Directive stands out due to its ambitious binding target and scope. It is the first Directive to introduce a comprehensive legal framework for renewable energy in electricity, heating/cooling and transport. The former 2001 Renewable Electricity Directive addressed the use of renewable energy sources in electricity only. Its targets were indicative and needed to be achieved by 2010 (national indicative targets had to be consistent with a global indicative target of 12% of gross national energy consumption by 2010 and a 22,1% indicative share of electricity produced from renewable energy sources in total Community electricity consumption by 2010). Biofuels were addressed by a separate Directive.⁵⁰

The Renewable Energy Directive also supports the 'aim of ensuring a high level of protection' with regard to environmental policy while granting flexibility to the Member States when achieving their mandatory national targets (except transport). According to Article 3(3) of the Directive, they may apply support schemes, measures of cooperation or other measures. The Directive provides measures of cooperation between Member States (i.e. statistical transfer between Member States, joint projects between Member States or third countries, joint support schemes) and thus takes different resources and capacities in the EU into account. This helps achieve national targets cost effectively and contributes to the overall aim in Article 2 (3) 6EAP (use 'most effective and appropriate means available'). Moreover, guarantees of origin of electricity, heating and cooling produced from renewable energy sources according to Article 15 of the Directive ensure that 'purchasers are better informed about the ... products in terms of their environmental impact' (Article 3 (6)).

Finally, the 2020 targets of the Renewable Energy Directive contribute to objectives regarding the international dimension, notably in Article 2 (6) and Article 9. The targets increase the EU's credibility in the international negotiations. Moreover, the EU continues to serve as a world-wide role model in the renewable energy sector.

The effect of the ETS on incentivize renewable energies through pricing carbon and thus driving the markets towards more efficient and low carbon production methods is addressed in the section on the EU ETS.

Introducing incentives to increase Combined Heat and Power

The 18% target for CHP in the 6EAP was not new, but the 6EAP was the first time it was affirmed in a decision adopted through co-decision. The target was already discussed in 1997.⁵¹ The 2004 **Cogeneration Directive** did not include any target.⁵² According to the latest Commission Environment Policy Review (2010), the EU is still far from reaching the 18%, as the contribution of cogeneration to electricity generation was 10.3% in 2008 for EU-

⁵⁰ Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport, OJ L 123, 17.5.2003, p. 42–46.

⁵¹ European Commission (1997): Communication from the Commission, of 15 October 1997, on a Community strategy to promote combined heat and power (CHP) and to dismantle barriers to its development. COM (1997)514 final.

⁵² Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, OJ L 52, 21.2.2004, p. 50–60

15 and 11.0% for EU-27.⁵³ The effect of the ETS on incentivize more efficient production like CHP through pricing carbon and thus driving the markets towards more efficient and low carbon production methods is addressed in the section on the EU ETS.

Prevent and reduce methane emissions from energy production and distribution

Fossil fuel (oil, gas and coal) extraction, transport and distribution are important sources of methane emissions. The Commission proposed respective reduction measures in 1996.⁵⁴ However, these measures have not been adopted to date.

Promoting energy efficiency

The promotion of energy efficiency is not only a priority action in this second sub-area, but also in other sub-areas of the 6EAP such as industry. It is apparent that it is a overlapping issue. The very general priority action in this sub-area is thus refined in other sub-areas.

Energy intensity (i.e. energy consumption by gross domestic product) in EU-27 has decreased during 1995 to 2008 by 24.7%.⁵⁵ According to the latest Commission Annual Environment Policy Review, the improvement of energy efficiency would cut emissions by around 800 million tons CO₂-equivalents (though details remain unclear in the review).⁵⁶

The most prominent measure was the conclusion of the 2007 Spring European Council, which 'stresse[d] the need to increase energy efficiency in the EU so as to achieve the objective of saving 20% of the EU's energy consumption compared to projections for 2020, as estimated by the Commission', making efficiency part of the 20-20-20 targets. However, unlike the targets for greenhouse gas reductions and renewable energy consumption, the efficiency target is not binding.

Despite the various references to energy efficiency, the 6EAP was not very ambitious with regard to efficiency measures. The same applies to the policy initiatives by the European Council. Considering the low priority given to efficiency measures at EU level, it is perhaps not surprisingly that no measure on energy efficiency was adopted as part of the Climate and Renewable Energy Package.

To date, the Commission's Energy Efficiency Action Plan is – in terms of scope - the most far reaching measure.⁵⁷ As the 6EAP did not specify the priority action with regard to efficiency measures (it just claims 'promoting energy efficiency'), one could see the priority action as being fulfilled by this Action Plan. However, more could have been done.⁵⁸

⁵³ Commission Staff Working Document: '2009 Environment Policy Review, Part 2 , 2 August 2010, COM(2010) 975 final, pa. 25.

⁵⁴ Strategy Paper for reducing methane emissions (Communication from the Commission to the Council and to the European Parliament, COM/96/0557 final.

⁵⁵ Eurostat (2010): Energy intensity of the economy - [t2020_32].

⁵⁶ Commission Staff Working Document: '2009 Environment Policy Review, Part 2, 2 August 2010, COM(2010) 975 final, p. 26.

⁵⁷ European Commission (2006): Energy Efficiency Action Plan: Realising the Potential, Document COM(2006) 545 final.

⁵⁸ See in general: Reimer, Franz: Ansätze zur Erhöhung der Energieeffizienz im Europarecht – Eine kritische Bestandsaufnahme. In Schulze-Fielitz, H. und Müller, T. (eds). Europäisches Klimaschutzrecht. Nomos 2010, p. 147ff.

The effect of the ETS on incentivize energy efficiency through pricing carbon is addressed in the section on the EU ETS.

1.1.2.2 Reduction of greenhouse gas emissions in transport

Overview of relevant objectives

The third sub-area as outlined in Article 5 (2) (iii) addresses the reduction of greenhouse gas emissions in the transport sector. This third sub area requires the following priority actions:

- '(a) identifying and undertaking specific actions to reduce greenhouse gas emissions from aviation if no such action is agreed within the International Civil Aviation Organisation by 2002;
- (b) identifying and undertaking specific actions to reduce greenhouse gas emissions from marine shipping if no such action is agreed within the International Maritime Organisation by 2003;
- (c) encouraging a switch to more efficient and cleaner forms of transport including better organisation and logistics;
- (d) in the context of the EU target of an 8% reduction in greenhouse gas emissions, inviting the Commission to submit by the end of 2002 a Communication on quantified environmental objectives for a sustainable transport system;
- (e) identifying and undertaking further specific action, including any appropriate legislation, to reduce greenhouse gas emissions from motor vehicles including N₂O;
- (f) promoting the development and use of alternative fuels and of low-fuel-consuming vehicles with the aim of substantially and continually increasing their share;
- (g) promoting measures to reflect the full environmental costs in the price of transport;
- (h) decoupling economic growth and the demand for transport with the aim of reducing environmental impacts;'

By promoting more efficient transport, clearer price signals and alternative fuels, this sub-area aims to contribute to the overall aims of climate protection, sustainable production and consumption patterns and international leadership as outlined in Articles 2. It also was to contribute to the objectives in Article 5 (1) (emission reduction, international credibility) and in Article 9 (promotion of sustainable consumption and production patterns at the international level).

Overview of measures

In 2008, the EU adopted the **Aviation Directive** to include aviation activities in the EU emission trading scheme.⁵⁹

⁵⁹ Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8, 13.1.2009, p. 3–21.

Other important measures in the transport sector are the **Biofuels Directive**, which includes an indicative target of 5.75% of transport fuels to be biofuels by 2010. This target was later replaced by the 2009 **Renewable Energy Directive**, with a 10% renewables target for the transport sector by 2010.

The 2009 **Regulation on CO₂ emissions from passenger cars**⁶⁰ gradually introduces, until 2015, a fleet average of 130g CO₂/km. The 2009 **Fuel Quality Directive**⁶¹ complements the Renewable Energy Directive and its 10% target for the transport sector. It implements sustainability criteria for the production of biofuels and criteria for calculating the cumulative carbon savings of alternative fuels.

In 2009, the **Directive on the promotion of clean and energy-efficient road transport vehicles** was adopted⁶² to reduce pollutant emissions in the transport sector. Member States have to ensure that all public or private authorities, contracting entities and operators, take the operational lifetime energy and environmental impacts into account when purchasing road transport vehicles.

Contributions of measures to overall aim/specific objectives

The measures outlined above did **not** lead to absolute greenhouse gas reductions as aimed for in Article 2 (2) and Article 5 (1). While greenhouse gas trends in Europe are on the whole encouraging, the respective developments in the transport sector are alarming. During the last decade (1990-2007), CO₂ emissions from transport rose by 29% in the EU-27.⁶³ or climate protection the trends in transport are all the more relevant as in 2008, transport accounted for 19.5% of total greenhouse gas emissions (compared to 14% in 1990).⁶⁴

Trends in air transport are particularly disturbing. Air transport is the second highest consumer of energy in the transport sector, accounting for 14.5% of total energy consumption. Energy use in air transport increased by more than 33% while energy use e.g. in inland waterway transport and rail decreased. In 2008, road transport accounted for more than 80% of total energy consumption in transport. The share of road transport has been quite stable in the last decade. Though demand for transport increased, improvements in fuel efficiency and fuel shifting have counter-balanced this trend.⁶⁵

⁶⁰ Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009, setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles, OJ L 140, 5.6.2009, p. 1–15.

⁶¹ Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC, OJ L 140, 5.6.2009, p. 88–113.

⁶² Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles, OJ L 120, 15.5.2009, p. 5–12.

⁶³ EEA (2009): Greenhouse gas emission trends and projections, page 42.

⁶⁴ EEA (2009): Greenhouse gas emission trends and projections, p. 114.

⁶⁵ Commission Staff Working Document: '2009 Environment Policy Review, Part 2, COM (2010) 975 final, p. 27.

Although absolute emission reductions could not be achieved, the measures contributed to a slower growth of emissions and thus to the overall aim and specific objectives mentioned above.

Furthermore, the protection of biodiversity was considered in the Fuel Quality Directive contributing to the respective aim of Article 2 (2). Furthermore, at least a part of the measures was ambitious enough to contribute or at least not undermine the EUs credibility in the international sphere (Articles 2 (6), 5 (1) and 9).

Though not intended by sub-area 3 originally, in practice measures relating to this sub-area also contributed to the aim of Article 10 (c) ('ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives') when the EU took counterbalancing measures after its original move into biofuels by the 2001 Renewable Electricity Directive proved woefully inadequate and unsustainable.

Contribution of measures to priority actions

A good number of priority actions and output requirements in this sub-area were met, however not all of them.

Reduce greenhouse gas emissions from aviation

Greenhouse gas emissions from aviation are covered by mitigation measures within the EU agreed by Council and Parliament in 2008, which will apply from 2012. Although the Kyoto Protocol said that States should act in the International Civil Aviation Organization (ICAO) to identify and elaborate upon the appropriate mitigation measures, divisions among members of the organization have delayed agreement on measures. Attempts to introduce price-based mechanisms – such as a kerosene tax – remain unsuccessful and risked violation of numerous bilateral aviation service agreements, despite efforts from the EU to remove fuel tax exemptions from these agreements. As a result, emissions from the aviation sector have continued to rise in recent years, and are projected to grow by 3.1% per year over the next 40 years, resulting in a possible 300% increase in emissions by 2050 compared to 2007.⁶⁶

The 6EAP priority action was fulfilled when the EU adopted the **Aviation Directive**. The Directive introduces a cap (quantity limit) on CO₂ emissions from international flights landing in and departing from the EU, and for domestic flights within the EU aviation at least in Europe, thus placing a price on greenhouse gas emissions from aviation. This constitutes one of the first measures to manage emissions from this sector. The EU approach could have been more ambitious e.g. by including not only CO₂ but also other climate impacts from aviation in the scheme. However, as the 6EAP did not provide specifics, lack of ambition cannot be used to conclude that the priority action has not been fulfilled.

This action contributes to emission reduction, sustainability and international aims and specific objectives as outlined in Articles 2, 5, and 9.

⁶⁶ IPCC (Intergovernmental Panel on Climate Change) (1999), *Special Report on Aviation and the Global Atmosphere*. IPCC/WMO/UNEP, Cambridge, UK.

Reduce greenhouse gas emissions from marine shipping

The 6EAP states that the EU should take specific actions to reduce greenhouse gas emissions from maritime shipping, if no such action is agreed within the International Maritime Organization. While regulations on sulphur and nitrogen oxide emissions from ships are covered by Annex VI of the Marine Pollution Convention (MARPOL 73/78) by the International Maritime Organization, no regulation covering CO₂ from shipping has been agreed to date in the International Maritime Organization. Despite the deadline in the 6EAP, the EU has not yet proposed specific actions to reduce greenhouse gas emissions from maritime shipping. The Commission adopted a Communication on a strategy to reduce atmospheric emissions from seagoing ships in November 2002.⁶⁷ In 2008, the Commission launched a study on technical support for EU action to reduce greenhouse gas emissions from international maritime transport. The European Parliament and Council included another deadline in the 2009 Emission Trading Directive and the Effort Sharing Decision. According to its recital (3), and recital (2) of the Effort Sharing Decision, in the absence of an agreement including maritime emissions in reduction commitments within the International Maritime Organization or the UNFCCC, *'the Commission should make a proposal to include international maritime emissions [in the EU ETS] according to harmonised modalities in the Community reduction commitment, with the aim of the proposed act entering into force by 2013.'* A roadmap for a possible proposal has been published by the Commission in relation to its work programme for 2011.

Encouraging a switch to more efficient and cleaner forms of transport including better organisation and logistics

The European Union adopted a number of actions to switch to a more cleaner and sustainable transport, especially with a focus on implementing the 2001 White Paper on the European transport policy.⁶⁸ In 2003, the Marco Polo Programme was introduced to grant financial assistance to improve the environmental performance of the freight transport system.⁶⁹ It was relaunched in 2006.⁷⁰ In 2006, the Commission published a review on the Transport White Paper.⁷¹ It issued a communication on freight transport logistics in Europe

⁶⁷ Communication from the Commission to the European Parliament and the Council, of 20 November 2002, 'A European Union strategy to reduce atmospheric emissions from seagoing ships', COM (2002) 595 final.

⁶⁸ White Paper - European transport policy for 2010: time to decide, COM/2001/0370 final.

⁶⁹ Regulation (EC) No 1382/2003 of the European Parliament and of the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme), OJ L 196, 2.8.2003, p. 1–6

⁷⁰ Regulation (EC) No 1692/2006 of the European Parliament and of the Council of 24 October 2006 establishing the second Marco Polo programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003, OJ L 328, 24.11.2006, p. 1–13.

⁷¹ Communication from the Commission to the Council and the European Parliament - Keep Europe moving - Sustainable mobility for our continent - Mid-term review of the European Commission's 2001 Transport White paper, COM(2006) 324 final.

in the same year,⁷² what led to the adoption of the Freight Transport Logistics Action Plan in 2007. This set out a number of actions to improve efficiency and sustainability of freight in Europe.⁷³ Moreover, the Commission launched an action plan for the deployment of Intelligent Transport Systems⁷⁴ in the EU as well as a proposal for a corresponding Directive⁷⁵ in 2008. In 2009, an action plan of urban mobility was adopted.⁷⁶ However, in conclusion, the measures taken so far seem not to be sufficient to cope with the continuing rise in freight and passenger transport and increasing emissions in the transport sector. Some measures did not have the expected response, such as the Marco Polo Programme. Its funds were not drawn down completely by the addressees.⁷⁷

Communication on quantified environmental objectives for transport system

In the context of the 8% greenhouse gas emission reduction target, the 6EAP urged 'the Commission to submit by the end of 2002 a Communication on quantified environmental objectives for a sustainable transport system'. **No such communication** was submitted in 2002.

Reduction of emissions from motor vehicles

With regards to the priority action in the transport sector, the 6EAP requests 'specific action, including any appropriate legislation, to reduce greenhouse gas emissions from motor vehicles including N₂O'.

The 2009 **Regulation on CO₂ emissions from passenger cars** was adopted and intended to phase in an energy efficiency target of 130 g CO₂/km for vehicle fleets by 2015. While this corresponds to the call in the mid-term review of the 6EAP for the adoption of measures to replace the failed 1998 voluntary agreement with the car industry, the overall environmental ambition of the regulation is lower than the level of ambition of the voluntary agreement – i.e. an average of 140 g CO₂/km from new cars by 2008 – which can be partly attributed to the delay in implementing stricter requirements under the Regulation.

However, the Regulation's 2020 target of 95g CO₂/km is the most ambitious target announced globally to date. In response to the pending legislation, car manufacturers

⁷² Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Freight Transport Logistics in Europe - The key to sustainable mobility, COM/2006/0336 final.

⁷³ Communication from the Commission - Freight Transport Logistics Action Plan COM (2007) 607 final.

⁷⁴ Communication from the Commission - Action plan for the deployment of Intelligent Transport Systems in Europe, COM(2008) 886 final

⁷⁵ Proposal for a Directive of the European Parliament and of the Council laying down the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other transport modes, COM/2008/0887 final.

⁷⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Action Plan on Urban Mobility, COM/2009/0490 final.

⁷⁷ Proposal for a Regulation (EC) No .../2008 of the European Parliament and of the Council amending Regulation (EC) No 1692/2006 establishing the second 'Marco Polo' programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system ('Marco Polo II'), COM/2008/0847 final/2.

introduced a range of new emission reduction technologies in 2008.⁷⁸ Although the impacts of these technologies have not yet been assessed, the Regulation seems likely to significantly lower the CO₂ emission profile of the EU's passenger car fleet up until 2015 and beyond. This in turn will positively contribute to the achievement of the 6EAP (and many other) climate change goals in Article 5 (1) 6EAP.

The Regulation's 2020 target of 95g CO₂/km does not only contribute the emission reduction aims and objectives of the 6EAP (Articles 2 and 5) but effectively confirms the EU's credibility in the international climate negotiations with respect to vehicle emissions and contributes to objectives in Article 2 (6) 6EAP and in Article 9 (1) 6EAP.

The 2009 **Fuel Quality Directive** implements sustainability criteria for the production of biofuels and criteria for calculating the cumulative carbon savings of alternative fuels. The European Commission estimates that the Directive will lead to cumulative savings of approximately 500 million tons of CO₂ by 2020.⁷⁹ Positive effects are also expected with regard to other environmental impacts, for example on biodiversity, soil protection, and air quality. The fuels objective is presented in tandem with the objective to produce lower emitting vehicles. In light of the challenges that arose with the EU's initial foray into biofuels, because of the realization that the promotion of biofuels was having a series of (unintended) negative environmental impacts, the promotion of this Directive is clearly an attempt to recognize the importance of Article 2 (2) 6EAP ('protecting, conserving, restoring and developing the functioning of natural systems...with the aim of halting...the loss of biodiversity...both in the European Union and on a global scale) and is also in line with Article 2(6) 6EAP (where the EU is supposed to play a 'positive and constructive role' and be 'a leading partner in the protection of the global environment and in the pursuit of sustainable development'). It also has implications for the achievement of the objectives of Article 9 (1) 6EAP ('the promotion of sustainable consumption and production patterns at the international level) and also Article 10 (c) 6EAP ('ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives'), as the original move into biofuels proved inadequate in this respect.

Alternative fuels and low-fuel-consuming vehicles

The priority action of 'promoting the development and use of alternative fuels and of low-fuel-consuming vehicles with the aim of substantially and continually increasing their share' was addressed in the 2009 **Renewable Energy Directive** which has a **biofuel target**: It requires that by 2020, at least 10% of all transport fuels (petrol, diesel, biofuels for road/rail transport, and electricity) must be derived from renewable sources. This target corresponds not only with the priority action but also with the aim and objective to achieve greenhouse gas emissions reductions (Articles 2 and 5). However, the binding target for biofuels in transport can be in partial conflict with the objectives of of Articles 3(10) (sustainable use of land) and

⁷⁸ European Federation for Transport and Environment (2009): 'Reducing CO Emissions from New Cars: 2A Study of Major Car Manufacturers' Progress in 2008', p. 11-12.

⁷⁹ European Commission (2009) 'Fifth National Communication from the European Community under the UN Framework Convention on Climate Change (UNFCCC)' Technical Report – 2009 – 038. p. 137.

6(1) (protection of nature and biodiversity), as this target may cause (indirect) land use change.⁸⁰

Reflecting environmental costs in the price of transport

The priority action of ‘promoting measures to reflect the full environmental costs in the price of transport’ was addressed in the context of the **Greening Transport Package** of July 2008. In the context of the package, the Commission presented a **strategy for the internalisation of external costs**,⁸¹ as provided for in the so called **Eurovignette Directive**.⁸² The European Parliament adopted a first-reading opinion in 2009 and the adoption of a Directive in this regard is expected in 2011.⁸³ As the priority action did not ask for legislative measures and did not go into great detail (e.g. no targets, timeframes etc.), one could argue that the measures taken fulfil the priority action outlined. On the other hand, in the context of the overall aim and specific objectives, one could point to outstanding implementation needs of the measures taken by the EU.

Decoupling economic growth and the demand for transport

No measures were adopted to meet the priority action on ‘decoupling economic growth and the demand for transport with the aim of reducing environmental impact’, which has been also one of the 2001 Transport White Paper’s objectives. Notably, in the 2006 review of the White Paper, this objective was dropped.⁸⁴

1.1.2.3 Reduction of greenhouse gas emissions in the industrial sector

Overview of relevant objectives

The fourth sub-area as outlined in Article 5 (2) (iv) addresses the reduction of greenhouse gas emissions in the industrial sector. This fourth sub-area requires the following priority actions:

- promoting eco-efficiency practices and techniques in industry;
- developing means to assist SMEs to adapt, innovate and improve performance;
- encouraging the development of more environmentally sound and technically feasible alternatives, including the establishment of Community measures, aiming at reducing emissions, phasing out the production where appropriate and feasible and reducing the use of industrial fluorinated gases HFCs (hydrofluorocarbons), PFCs (Perfluorocarbons) and SF₆ (sulphur hexafluoride).

⁸⁰ See: Bowyer, C. (2010) Anticipated Indirect Land Use Change Associated with Expanded Use of Biofuels and Bioliquids in the EU – An Analysis of the National Renewable Energy Action Plans’, November 2010, Report prepared by IEEP for T&E and partners.

⁸¹ Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions - Strategy for the internalisation of external costs (COM(2008)435).

⁸² Directive 2006/38/EC of the European Parliament and of the Council of 17 May 2006 amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures, OJ L 157, 9.6.2006, p. 8–23.

⁸³ IEEP (2010): Manual of European Environmental Policy. Proposed Policy Development. Available at http://www.europeanenvironmentalpolicy.eu/view/meep/MEEP_0010.xml

⁸⁴ EurActiv: White Paper on Transport. <http://www.euractiv.com/en/transport/white-paper-transport/article-129628>.

As in all the other sub-areas, the overall aim in Article 2 (2) and the specific objectives in Article 5 (1) are relevant to the reduction of greenhouse gas emissions in the industrial sector.

Furthermore, there are a number of relevant cross cutting objectives. As far as the measures help with the implementation of international commitments or with promoting environmental measures at international level, they contribute to the aims and specific objectives on international issues in Articles 2 (6), 5 (1) and 9. In addition, Article 3 (5) on the wider uptake of the Community's Eco-Management and Audit Scheme (EMAS) is relevant with regard to the continuation and revision of EMAS. Better collaboration and partnership of consumer groups and NGOs as required in Article 3 (9) is relevant with respect to improving the information available on industrial pollution.

Overview of measures

It is difficult to define what measures fall under this sub-area on the industrial sector. Firstly, many measures taken with regard to other policy areas outlined in the 6EAP have relevance also for the industrial sector, such as the EU ETS Directive. The authors of this report decided to evaluate only those measures in the context of this section on the industrial sector in accordance with the allocation of measures presented in the 6EAP. The authors also included measures with relevance for the industrial sector in this section, that were not mentioned explicitly by the 6EAP (such measures on carbon capture and storage as well as on pollutant release and transfer register).

The first group of relevant measures is promoting energy efficiency, such as the **Cogeneration Directive** and the **Eco-Design Directive**. Energy efficiency measures relate to those covered under section 2.2 in relation to the discussion of the energy sector. Please refer to this section for further information.

In 2006, the EU adopted a Regulation on the establishment of a **European Pollutant Release and Transfer Register** (PRTR) that provides environmental data (including greenhouse gas emissions) of industrial facilities in the EU for public and private purposes.

Regarding **other emissions of fluorinated greenhouse gases**, the EU adopted measures on emissions from air conditioning systems in motor vehicles⁸⁵ and in relation to the mitigation of certain fluorinated greenhouse gases.⁸⁶

The **IPPC Directive** – which aims to minimize pollution from various industrial sources – was amended in 2008, although it only included an update in order to integrate changes from

⁸⁵ Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air conditioning systems in motor vehicles and amending Council Directive 70/156/EEC, OJ L 161, 14.06.2006.

⁸⁶ Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases, OJ L 161, 14.6.2006, p. 1–11.

previous amendments and some linguistic changes.⁸⁷ Its substance has not been changed, despite a Commission proposal challenging certain aspects of the Directive.⁸⁸

In 2009, the EU revised the Regulation on the eco-management and audit scheme (**EMAS Regulation**) in order to improve the applicability of EMAS and strengthen its visibility and outreach.⁸⁹ EMAS is a tool for enterprises and other organizations to evaluate, report (including greenhouse gas emissions) and improve their overall environmental performance. A review in 2005 revealed only marginal benefits of the EMAS registration for private and public services.⁹⁰ Therefore, the revision of the Regulation focused on a greater promotion, harmonization and simplification of the scheme within the Member States to improve its attractiveness. Special attention has been given to the needs of small enterprises by providing certain derogations for them.⁹¹

In the context of the Climate and Renewable Energy Package, the EU adopted a Directive to promote the development and environmentally safe use of the carbon capture and storage technology.⁹² The **CCS Directive** sets the framework and conditions for use of CCS technology in the EU, whereas the decision on the actual usage of this technology has to be taken by the Member States. According to the Directive, the *'technology should not serve as an incentive to increase the share of fossil fuel power plants. Its development should not lead to a reduction of efforts to support energy saving policies, renewable energies and other safe and sustainable low carbon technologies, both in research and financial terms.'*

Contribution of measures to overall aims/specific objectives

With respect to achieving greenhouse gas emission reductions, the measures implemented contribute to the overall aim and specific objectives of Articles 2 (2) and 5 (1). According to Eurostat, emissions from industrial processes decreased in EU-27 from 4840 Mt CO₂ equivalents in 1990 to 4097 Mt CO₂ equivalents in 2008.⁹³

⁸⁷ Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, OJ L 24, 29.1.2008, p. 8–29.

⁸⁸ European Commission (2007). Proposal for a Directive of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control). COM(2007) 843 final.

⁸⁹ Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC, OJ L 342, 22.12.2009, p. 1–45.

⁹⁰ EVER study and REMAS project; for information see Commission Proposal for a Regulation of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), COM(2008) 402.

⁹¹ IEEP: Eco-management and audit (EMAS). In: Manual of European Environmental Policy. Available at: http://www.europeanenvironmentalpolicy.eu/view/meep/MEEP_0408.xml?rskey=5CZUPw&result=1#MEEP_0408C1.

⁹² Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006, OJ L 140, 5.6.2009, p. 114–135.

⁹³ Eurostat [tsdcc210], Available at: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdcc210&language=en>.

Contribution of measures to priority actions

Promoting eco-efficiency practices and techniques in industry

The priority action of 'promoting eco-efficiency practices and techniques in industry' corresponds to a number of measures adopted by the EU to improve energy-efficiency. These measures are also relevant to the energy sector measures which are outlined in section 2.2.

Developing means to assist SMEs to adapt innovate and improve performance

The improvement of the EMAS Regulation contributes to this priority measure in that it focuses on a wider participation of small enterprises in the scheme. Moreover, the EMAS revision is relevant to the achievement of the cross-cutting objectives in Article 3 (5) on the participation of enterprises, which explicitly asks for encouragement of a 'wider uptake of the Community's Eco-Management and Audit Scheme (EMAS) and developing initiatives to encourage companies to publish rigorous and independently verified environmental or sustainable development performance reports'. Small and medium-size enterprises were also been given assistance by a specifically designed programme to help small and medium-sized enterprises comply with environmental legislation adopted by the Commission in 2007.⁹⁴

Hydrofluorocarbons, Perfluorocarbons and Sulphur Hexafluoride

This priority action on the reduction of fluorinated greenhouse gases was challenging to the EU. According to the latest EEA report on greenhouse gas trends and projections, trends in this field are alarming. Of all greenhouse gases, hydrofluorocarbons are the only ones for which emissions have drastically increased between 1990 and 2007 in the EU, i.e. by more than 125%. This can be traced back to their use as a substitute for ozone depleting substances which were phased out as required under the Montreal Protocol and their increased use for air conditioning.⁹⁵

By adopting the **Regulation on certain fluorinated greenhouse gases** and the **Directive relating to emissions from air-conditioning systems in motor vehicles** in 2006, the EU contributes to the reduction of non-CO₂ emissions with high global warming potential and thus to the priority actions of the 6EAP.

In a wider sense, the **PRTR Regulation** support the decrease of emissions from industrial plants, since it obliges operators to report *inter alia* on greenhouse gas emissions. This is supposed to result in a better environmental performance. However, this legislation was not explicitly mentioned in Article 5 (2) (iv) 6EAP on industrial emissions. They further contribute to other cross-cutting objectives in the 6EAP such as Article 3 (6) on improved collaboration and partnership with consumers and NGOs by providing information on industrial pollutions.

⁹⁴ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Small, clean and competitive - A programme to help small and medium-sized enterprises comply with environmental legislation, COM/2007/0379 final.

⁹⁵ EEA (2010): Greenhouse gas trends and projections, p. 19.

1.1.2.4 Reduction of greenhouse gas emissions in other sectors

Overview of relevant objectives

Sub-area 5 addresses the issue of reduction of greenhouse emissions in other sectors. This sub-area identifies the following priority actions in Article 5 (2) (v):

- promoting energy efficiency notably for heating, cooling and hot tap water in the design of buildings;
- taking into account the need to reduce greenhouse gas emissions, alongside with other environmental considerations, in the Common agricultural policy and in the Community's waste management strategy.

Besides the contribution to the often repeated overall aim and specific objectives of Articles 2 and 5, this sub-area touches the cross-cutting objectives of Article 3 (3), which requires '*further integration of environmental criteria into Community funding programmes*' and of Article 3 (10), which requests '*enhancing the use, increasing resources and giving broader scope for agri-environment measures under the Common Agricultural Policy*.'

Overview of measures

In 2002, the EU adopted the **Energy Performance of Buildings Directive**⁹⁶ which requires Member States to set minimum energy performance requirements for buildings, whereby they can distinguish between new and existing buildings. Member States have to ensure *inter alia* that energy performance certificates are made available to owners or occupiers of buildings. A recast of the Directive was adopted in 2010, mainly to meet shortcomings of the previous one by clarifying, strengthening and simplifying certain provisions, extending its scope, and providing for the leading role of the public sector.⁹⁷

The Common Agricultural Policy (CAP) was reformed in 2003, which led to a single farm payment linked to environmental, food safety, animal and plant health and animal welfare standards. It also includes the requirement to keep all farmland in good agricultural and environmental condition ('cross-compliance'). However, it did not include climate change issues. The **CAP 'Health Check'** and the resulting legislation adopted in 2009⁹⁸ attempted to integrate greenhouse gas emission reductions and adaptation to climate change as well as several other environmental concerns into the CAP. To receive additional funds for

⁹⁶ Directive 2002/91/EC on the energy performance of buildings, OJ L 1, 4.1.2003, p. 65–71.

⁹⁷ Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, OJ L 153, 18.6.2010, p. 13–35

⁹⁸ Council Regulation (EC) No 72/2009 of 19 January 2009 on modifications to the Common Agricultural Policy by amending Regulations (EC) No 247/2006, (EC) No 320/2006, (EC) No 1405/2006, (EC) No 1234/2007, (EC) No 3/2008 and (EC) No 479/2008 and repealing Regulations (EEC) No 1883/78, (EEC) No 1254/89, (EEC) No 2247/89, (EEC) No 2055/93, (EC) No 1868/94, (EC) No 2596/97, (EC) No 1182/2005 and (EC) No 315/2007, OJ L 30, 31.1.2009, p. 1–15; Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003, OJ L 30, 31.1.2009, p. 16–99; Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31.1.2009, p. 100–111.

measures, which address these new challenges, Member States are obliged to revise their rural development programmes (programming period 2007-2013).

The 2006 **Waste Framework Directive**⁹⁹ established the legislative framework for the handling of waste with a focus on environmental requirements. It was revised in 2008.¹⁰⁰ It obliges Member States to increase waste-prevention and recycling rates. The reduction of waste volumes generally leads to a decrease of waste-related greenhouse gas emissions, mostly methane. Major savings of emissions of waste result from decreasing landfill rates of biodegradable waste according to the 1999 Landfill Directive (adopted prior to 6EAP).¹⁰¹

Another climate relevant measure taken in 'other sectors' was the adoption of the **EU Forest Action Plan (FAP)**¹⁰² in 2006. Though forests have not been explicitly mentioned in the priority actions above, forestry is a relevant 'other' sector, and measures adopted contribute to the climate aims and objectives of the 6EAP. The FAP includes maintenance of carbon sequestration of EU forests with a number of actions in order to facilitate compliance with the international climate negotiations.

Contributions of measures to overall aims/specific objectives

With regards to greenhouse gas emissions reductions, the measures discussed above contribute to the overall aim and specific objectives of Articles 2(2) and 5(1). According to Eurostat, emission from industrial processes decreased in the EU-27 from 4840 Mt CO₂ equivalents in 1990 to 4097 Mt CO₂ equivalents in 2008.¹⁰³ Industrial processes are responsible for 8.5% of greenhouse gas emissions in the EU in 2007 compared to other sectors.¹⁰⁴

Emissions from agriculture have been reduced in the EU-27 from 5915 Mt of CO₂ equivalents in 1990 to 4718 Mt of CO₂ equivalents in 2008.¹⁰⁵ In 2007, their share of greenhouse gas emissions compared to other sectors was 9.2%. Waste emissions amount 2, 8%.¹⁰⁶ The waste sector demonstrates a remarkable reduction of 34% of greenhouse gas reductions from 1990 to 2007.¹⁰⁷

⁹⁹ Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste, OJ L 114, 27.4.2006, p. 9–21.

¹⁰⁰ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ L 312, 22.11.2008, p. 3–30

¹⁰¹ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste; Official Journal L 182, 16/07/1999 p. 0001 – 0019.

¹⁰² Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan, COM(2006) 302 final (adopted on 15 June 2006).

¹⁰³ Eurostat [tsdcc210], available at: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdcc210&language=en>.

¹⁰⁴ EEA (2009): GHG trends and projections 2009, p. 21.

¹⁰⁵ Eurostat [tsdcc210], available at: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdcc210&language=en>.

¹⁰⁶ EEA (2009): GHG trends and projections 2009, p. 21.

¹⁰⁷ EEA (2009): GHG trends and projections 2009, p. 34.

Contribution of measures to priority actions

Energy efficiency in the design of buildings

The priority action of ‘promoting energy efficiency notably for heating, cooling and hot tap water in the design of buildings’ has been addressed in the **Energy Performance of Buildings Directive**. However, a large amount of energy saving potential remained unexploited due to the complexity of the sector, the limited scope of the Directive (especially on existing buildings) and the limited level of ambitious implementation by some Member States. In 2008, the building sector was still responsible for 40% of total EU energy consumption.¹⁰⁸ A recast of the Directive was proposed by the EU Commission in 2008. A revised version of this proposal was adopted in May 2010, which included, *inter alia*, extended requirements on new and existing buildings.¹⁰⁹ According to the Commission’s original proposal, the minimum impact on the Directive’s recast amounts 160 to 210 Mt/year CO₂ savings by 2020, i.e. 4-5% of EU total CO₂ emissions in 2020.¹¹⁰ However, these numbers can only be an indication of the actual potential of the Directive due to the above mentioned changes to the proposal.

Need to reduce greenhouse gas emissions in agricultural policy and waste management

The priority action outlining the need to reduce greenhouse gas emissions under the CAP and the waste management strategy has been addressed by the respective European measures.

The **CAP Health Check** was initiated in 2007 to modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to better respond to signals from the market and face so called new challenges such as climate change, better water management, protection of biodiversity and the production of bioenergy.

As a result of the CAP Health Check, Council Regulation (EC) No 74/2009 was adopted acknowledging that the Community, as a party to the Kyoto Protocol, has to *‘implement and/or further elaborate policies and measures [...], such as the promotion of sustainable forms of agriculture in the light of climate change considerations [...] containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change. [...] Therewith, the agriculture sector will be called upon to step up its emission reduction efforts as part of the EU global climate change strategy.’*

As a consequence of this Regulation, additional funds have been made available to address climate change as well as other new challenges such as renewable energy, biodiversity, water management and re-structuring of the dairy sector. Member States receiving additional funds are obliged to revise their rural development programs (programming period 2007-2013) in order to introduce specific operations that address *inter alia* climate change. An

¹⁰⁸ Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast), COM/2008/0780 final.

¹⁰⁹ Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, OJ L 153, 18.6.2010, p. 13–35.

¹¹⁰ Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast), COM/2008/0780 final.

indicative list with types of operations and potential effects related to climate change adaptation and mitigation was provided in the Annex of the Council Regulation. In addition to operations listed under 'climate change', several operations addressing 'renewable energies' contribute to the reduction of greenhouse gas emissions such as, for example, biogas production using organic waste or perennial energy crops. It is yet too early to evaluate the effects of the CAP Health Check on greenhouse gas emission reductions. However, its contribution are presumably rather limited, especially as the budget is mainly allocated to already existing measures and only few new measures have been developed and financed.¹¹¹

The **Waste Framework Directive** helped to prevent and reduce waste in the Member States through improved waste management. Less volume of waste can generally be expected to lead to less waste-related greenhouse gas emissions. However, major emission reductions in the waste sector can be traced back to the diversion of waste to landfill and the reduced organic content of landfill waste as a result of the Landfill Directive¹¹² requirements. However, this Directive was adopted in 1999 prior to 6EAP¹¹³

1.1.2.5 Use of other appropriate instruments

Overview of relevant objectives

Sub-area 6 addresses the 'use of other appropriate instruments'. According to Article 5(2)(vi), the following priority actions should be used for this purpose:

- promoting the use of fiscal measures, including a timely and appropriate Community framework for energy taxation, to encourage a switch to more efficient energy use, cleaner energy and transport and to encourage technological innovation;
- encouraging environmental agreements with industry sectors on greenhouse gas emission reductions;
- ensuring climate change as a major theme of Community policy for research and technological development and for national research programmes.

These actions contribute to the overall aim and specific objectives in Article 2 and Article 5 especially insofar as they can contribute to greenhouse gas emission reduction. The extent to which they contribute to compliance with international obligations is of relevance for the international objectives of the 6EAP. Obviously, this sub-area cuts across a number of other sub-areas. Relevant cross-cutting objectives on research and development can be found in Article 2 (3), Article 3 (5) and Article 10 (d), which *inter alia* call for '*ensuring that environment and notably the priority areas identified in this Programme are a major priority for Community*

¹¹¹ Tietz, A. (2010): Auswirkungen von Health Check und EU-Konjunkturprogramm auf die ländlichen Entwicklungsprogramme der deutschen Bundesländer. Arbeitsberichte aus der vTI-Agrarökonomie 03/2010. See also chapter on Natur and Biodiversity, section 1.2.1.4.

¹¹² Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ L 182, 16.7.1999, p. 1–19.

¹¹³ The authors refer to chapter on Natural Resources and Waste for more information.

research programmes'. Article 3 (4) calls for the promotion and encouragement of 'the use of fiscal measures such as environmentally related taxes and incentives.'

Overview of measures

In 2003, the **Community framework for the taxation of energy products and electricity** was restructured, widening the scope of the EU's minimum rate system for energy products in order to, *inter alia*, increase incentives for efficient energy use to reduce greenhouse gases and comply with international climate commitments.¹¹⁴

Regarding research and development, a number of relevant EU programmes were started. In 2004, the Commission adopted an **Environmental Technologies Action Plan** in order to improve the development and wider use of environmental technologies. It provides for technology platforms, environmental performance targets and improvement of funding schemes and public and private procurement policies (with the latter also relevant for reaching the objective of Article 3(6), which aims at the promotion of green procurement practices). Moreover, the **European strategic energy technology plan (SET Plan)**¹¹⁵ was adopted in 2007 to accelerate the development and deployment of cost-effective low carbon technologies. The **LIFE programme** was revised in 2007, which *inter alia* finances projects on energy and climate.¹¹⁶ Moreover, the EU funds scientific and technological cooperation in Europe in the context of the **7th Framework Programme for Research and Technology Development** with a budget of €53.000 million part of which is also relevant to climate issues.¹¹⁷

Contributions of measures to overall aim/ specific objectives

There is no notable impact on the overall aim and specific objectives by the measures mentioned in the previous section, since they generally have no direct effect on greenhouse gas emission reductions.

Contribution of measures to priority actions

Fiscal measures, including energy taxation

The priority action of 'promoting the use of fiscal measures, including a timeline and appropriate Community framework for energy taxation, to encourage a switch to more efficient energy use, cleaner energy and transport and encourage technological innovation' overlaps with the respective sector/topic-specific priority actions (e.g. on transport or energy

¹¹⁴ Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, OJ L 283, 31.10.2003, p. 51–70.

¹¹⁵ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions of 22 November 2007 entitled: 'A European strategic energy technology plan (SET Plan) - Towards a low carbon future' [COM(2007) 723 final - Not published in the Official Journal].

¹¹⁶ Regulation (EC) No 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission state Council Decision 969/2006/EC concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom) or nuclear research and training activities (2007-11).

¹¹⁷ For more information http://ec.europa.eu/research/fp7/understanding/fp7inbrief/what-is_en.html. See also Chapter on Research.

efficiency). The above mentioned taxation framework for energy products and electricity contributed to the requirements of the priority action in Article 5 (2) (vi) (a) on energy taxation as well as in Article 3 (4).

Agreements with industry sectors on greenhouse gas emission reductions

The priority action to encourage 'environmental agreements with industry sectors' on greenhouse gas emission reductions were not implemented by concrete measures.

Climate change as a major theme of research policy

The last priority action asked for measures 'ensuring climate change as a major theme of Community policy for research and technological development and for national research programmes' was implemented by a number of research and development programmes such as the Environmental Technologies Action Plan, the SET Plan and the FP7 and its budget for projects on climate change.¹¹⁸

1.1.2.6 Adaption to consequences of climate change

Overview of relevant objectives

Sub-area 7, as framed in Article 5 (3) calls for measures aimed at adapting to the consequences of climate change with the following priority actions:

- reviewing Community policies, in particular those relevant to climate change, so that adaptation is addressed adequately in investment decisions;
- encouraging regional climate modelling and assessments both to prepare regional adaptation measures such as water resources management, conservation of biodiversity, desertification and flooding prevention and to support awareness raising among citizens and business.

Other relevant targets on adaptation are not provided in the 6EAP, which generally affirms and elaborates mitigation targets in Article 2 (2) and 5 (1).

Overview of measures

In 2007, the Commission adopted a Green Paper on Adaptation,¹¹⁹ followed by a White Paper on Adaptation in 2009. The White Paper includes a framework for adaptation measures and policies. It proposes more than 30 concrete actions in a number of areas, i.e. the development of a knowledge base, the integration of adaptation in EU policies, health and social policy, agriculture and forests, biodiversity, ecosystems and water, coastal and marine areas, production systems and physical infrastructure as well as financial instruments. The White paper was supplemented by three Commission staff working documents focusing on the sectors agriculture, health as well as water, coasts and marine issues.

¹¹⁸ For their contribution to 6EAP's objective, see chapter on Research.

¹¹⁹ Green Paper from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Adapting to climate change in Europe – options for EU action, COM(2007)354 final.

One of the first measures to be introduced after the release of the White Paper was a Guidance Document on adaptation to climate change in water management in December 2009. This paper illustrates ways on how to consider climate change in the context of the River Basin Management Planning (RBMP) cycles. In 2010, a Green Paper on Forest protection and information was adopted.¹²⁰ This paper addresses potential for forestry related adaptation measures.

Contributions of measures to overall aim/ specific objectives

Since the overall aim and specific objectives on climate change in Article 2 (2) and Article 5 (1) focus on mitigation policy, the contribution of adaptation measures cannot be assessed in light of the overall aim /specific objectives.

Contribution of measures to priority actions

Overall, the requirements of the priority actions have been met by the assessment and policies outlined in the Green and White Paper on Adaptation.

Review of community policies so that adaptation is addressed adequately in investment decisions

The 6EAP calls for a review of the 'Community policies ... so that adaptation is addressed adequately in investment decisions.' This review was initiated by the White Paper on Adaptation which calls on the EU and Member States to *inter alia* 'explore the possibility of making climate impact assessment a condition for public and private investment.'¹²¹

Climate modeling and assessments

The priority action of 'encouraging ... climate modeling and assessments ... to prepare ... adaptation measures ... and support awareness raising' has been addressed in the actions presented in the White Paper on adaptation. The paper requests the EU and Member States for example to 'develop methods, models, data sets and prediction tools by 2011' and to 'develop indicators to better monitor the impact of climate change, including vulnerability impacts, and progress on adaptation by 2011.'¹²² In 2009, the overarching priority of the environment theme of the FP7 was adaptation to climate and environmental change and related issues such as sustainable cities and coastal zones.¹²³

1.1.2.7 Climate change in enlargement

Overview of relevant objectives

Sub-area 8, as framed in Article 5 (4), calls for climate change to be taken into account in the EU's enlargement process. The following priority actions are outlined in this regard:

¹²⁰ Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change, COM(2010)66 final.

¹²¹ White paper - Adapting to climate change : towards a European framework for action, COM(2009) 147, p. 13.

¹²² White paper - Adapting to climate change : towards a European framework for action, COM(2009) 147, p. 8.

¹²³ See FP 7 Work Programme 2009, Cooperation, Theme 6, Environment (including Climate Change)

- supporting capacity building, for the application of domestic measures for the use of the Kyoto mechanisms and improved reporting and emission monitoring;
- supporting a more sustainable transport and energy sector;
- ensuring that cooperation with candidate countries is further strengthened on climate change issues.

This sub-area also contributes to the general aim of Article 2. The first priority action can also contribute – though probably not significantly – to the international objectives of Article 5 (1) and Article 9.

Overview and contribution of measures to overall aim/specific objectives/priority actions

Overall, climate change issues were successfully linked to EU enlargement policy. The new Member States (EU-12), which joined the EU since the adoption of the 6EAP in 2002, are parties to the UNFCCC and the Kyoto Protocol except for Cyprus and Malta. They achieved concrete greenhouse gas emission reductions and contributed to the overall aim and specific objectives in Article 2(2) and Article 5(1). Their specific reduction commitments range from 6% to 8%. According to the latest EEA report, nine of the EU-12 (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia) have emission levels well below their respective Kyoto targets.¹²⁴ The EU-12 greenhouse gas emissions in 2007 were 25% lower than in 1990. However, the current level is the highest recorded since 1999.¹²⁵

1.1.2.8 Climate change as part of the EU's external relations policy

Overview of relevant objectives

Sub-area 9, as framed in Article 5 (5) calls for measures addressing the EU's external relations policy. The following priority actions are to be pursued:

- capacity-building to assist developing countries and countries with economies in transition for example through encouraging projects in connection with the Clean Development Mechanism (CDM) in the Kyoto Protocol and Joint Implementation;
- responding to identified technology-transfer needs;
- assisting with the challenge of adapting to climate change in the countries concerned.

Closely linked to these actions are those outlined in Article 9 (2) (c) and (d) which aim to address the objectives set out in Article 9, i.e. '*the pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment*' and include the following priority actions:

¹²⁴ EEA (2009). Greenhouse gas trends and projections 2009. Available at : http://www.eea.europa.eu/publications/eea_report_2009_9_p_71.

¹²⁵ EEA (2009). Greenhouse gas trends and projections 2009. Available at : http://www.eea.europa.eu/publications/eea_report_2009_9_p_20.

- ‘work towards strengthening international environmental governance by the gradual reinforcement of the multilateral cooperation and the institutional framework including resources’;
- ‘for swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment where the Community is a Party.’

This sub-area and the enumerated priority actions contribute to the overall aim in Article 2(2) and specific objectives in Article 5(1) with relevance for the Community’s international credibility. Also the priority actions on the implementation of international commitments (Article 5 (2) (i) are of importance in this context, i.e. the review of the European Climate Change Programme and the improvement of the EU ETS.

Overview of measures

Climate has been an important topic in the external relations of the EU and its Member States over the last many years. This is reflected in a significant number of documents, speeches and policy initiatives. Furthermore, many measures taken by the Community with regard to climate protection (e.g. EU ETS) and especially the Climate and Renewable Energy Package and the EU’s 20-20-20 targets have relevance for external relations and more specifically the international climate negotiations for a post-2012 climate regime. Some of these measures are also relevant for the implementation of Kyoto Protocol commitments.

The EU was supportive of the operationalisation of the Clean Development Mechanism under the Kyoto Protocol regime. Through the adoption of the **Linking Directive**, emitters are allowed to use greenhouse gas emission allowances earned through the Kyoto flexible mechanisms in the EU ETS.¹²⁶

In the context of the international climate negotiations, the EU made the conditional offer ‘to move to a 30% reduction by 2020 compared to 1990 levels ... provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities.’¹²⁷ Though this does not necessarily contribute to the priority actions under Article 5(5), it is in line with the actions outlined in Article 9.

Furthermore, the EUs negotiating position in the international climate negotiations concerning the post-2012 period address important areas relevant not only for Article 9, but also for the Article 5 priority actions of:

- attaining a comprehensive and legally binding international agreement;
- political acceptance of the goal to limit global warming to 2°C above pre-industrial levels;

¹²⁶ Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol’s project mechanism, Official Journal L 338 , 13/11/2004, p. 0018 – 0023.

¹²⁷ Council conclusion of 21 October 2009 (Doc. 15265/09) and Presidency Conclusion of 29/20 October 2009 (Doc. 15265/1/09 REV 1).

- ambitious reduction commitments (global emission reduction of 50% by 2050 compared to 1990 levels, 80-95% by developed countries);
- reduction commitments by developed countries as a group of 25-40% by 2020;
- appropriate mitigation actions by developing countries leading to a deviation from business as usual of 15-30%;
- capacity building as cross-cutting issue relevant to the different building blocks;
- actions on adaption, the improvement of technology cooperation and adequate finance for mitigation and adaptation efforts in the developing world. Concerning the latter, the EU supports the Copenhagen Accord with its 'promise' for global financial support (100 billion \$ in 2020 and fast start money for 2010-2012 – and Member States pledged already to cover part of this money).

The Commission adopted a number of policy papers to develop the EU's role in the international post-2012 negotiations (see section on sub-area 1).¹²⁸ Moreover, the Commission adopted a number of communications on climate change and developing countries¹²⁹. The EU also supported the integration of developing countries into the international climate regime and the Commission has adopted a number of relevant communications to raise the issue in the Community and the Member States.¹³⁰

Contributions of measures to overall aim/ specific objectives /priority actions

Overall, the aim and specific objectives in Article 2 (2) and 5 (1) have been supported by the measures and initiatives taken.

In the context of international climate change negotiations under the UNFCCC and the Kyoto Protocol, the EU and its Member States have played an important role in the past and is striving (with mixed prospects of success) to take a leadership role in negotiations concerning the post-2012 international framework. This furthers enforces the importance of objectives under Article 5 (international credibility for ambitious negotiations) and Article 9 (strengthening international environmental governance).

Additionally, since the adoption of the Kyoto Protocol, the EU has been engaged in serious efforts to promote and implement the Protocol (see also section on sub-area 1). The ratification and implementation of international climate change commitments contributes not

¹²⁸ Available at: http://ec.europa.eu/environment/climat/future_action_com.htm.

¹²⁹ Commission Communication COM(2003)85 final: Climate change in the context of development cooperation, Commission Communication COM(2006) 583 final: Mobilising public and private finance towards global access to climate-friendly, affordable and secure energy services: The Global Energy Efficiency and Renewable Energy Fund, Commission Communication COM(2007)540 final: Building a global climate change alliance between the European Union and poor developing countries most vulnerable to climate change, Commission Communication on Financing carbon capture and storage (CCS) in Emerging and Developing Countries: financing the EU-China near Zero Emissions Coal Plant project.

¹³⁰ Communication from the Commission to the Council and the European Parliament - Climate change in the context of development cooperation, COM(2003) 85 final; Communication from the Commission to the Council and the European Parliament Mobilising public and private finance towards global access to climate-friendly, affordable and secure energy services : The Global Energy Efficiency and Renewable Energy Fund , COM(2006)0583 final; Communication from the Commission to the Council and the European Parliament - Building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to climate change, COM(2007)540 final.

only to the specific objectives of Article 9 (ratification, compliance), but also to those of Article 5 (ratification, implementation, progress, building the EUs credibility internationally).

However, difficulties in defining a common and ambitious European position and in communication have at times hindered the EUs leadership potential.¹³¹ Despite these shortcomings, the EU is still perceived as a relatively credible player with the potential to lead the international negotiations by example. The EU also funds the participation of developing countries in Multilateral Environmental Agreements and promotes their compliance with obligations through financial support under the Thematic Strategy for the Environment and Sustainable Management of Natural Resources and other incentives (e.g. specific clauses in trade agreements). Thus, the EU appears to have made some progress in achieving the 6EAP objectives to strengthen international environmental governance and the EU's positive and constructive role therein.

Furthermore, the priority actions were in general met by the engagement of the EU in international climate negotiations to integrate developing countries and the support for projects under the Clean Development Mechanism in developing countries.

1.1.2.9 Summary assessment of the thematic area

International commitment and engagement

A number of measures have contributed significantly to the **overall aim** in Article 2 (2) and **specific objectives** in Article 5 (1) of the 6EAP. The EU is on track to meet its international climate commitments and contributes to the global objective of stabilizing greenhouse gas concentrations to prevent global warming exceeding 2°Celsius. The EU ratified the Kyoto Protocol which entered into force in 2005 – albeit three years later than envisaged by the 6EAP. The EU as a whole and most of its Member States are generally on track to meeting their emission reduction obligations. All of this contributed to strengthening not only multilateral governance (Article 9 6EAP) but also the credibility of the EU and its Member States also at the international negotiations.

At the international negotiations, the EU is – especially when compared to the positions of other main greenhouse gas emitter countries – a credible and ambitious player. The greenhouse gas emission reductions already achieved and projected future emission reductions strengthened the EU's credibility in international climate negotiations. Credibility has been further strengthened by the adoption of far reaching measures, such as the emission trading scheme, the 2007 Spring European Council's 20-20-20 decision, as well as the resulting Climate and Renewable Energy Package and its ongoing implementation.

However, as demonstrated by rising global emissions as well as the disappointing outcome of the 2009 Copenhagen summit, further formidable challenges at the international level still lie ahead.

¹³¹ Oberthür, Sebastian/Pallemaerts, Marc: The EU's Internal and External Climate Policies: an Historical Overview. In: Oberthür, Sebastian/ Pallemaerts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 36f.

Priority actions

A great number of the priority actions set out in the 6EAP in relation to climate change have been implemented and have contributed to the aforementioned overall aim and specific objectives. Especially in 2007, EU climate policies have taken on a new level of ambition. Key measures were adopted in the context of the 2009 Climate and Renewable Energy Package Package, i.e. a revision of the **EU Emission Trading Scheme**, the **Effort-sharing Decision**, the **Renewable Energy Sources Directive**, the **Fuel Quality Directive** and the **Regulation on CO₂ emissions from passenger cars**. Furthermore, a measure of great relevance for the transport sector and its increasing emissions was the inclusion of aviation activities in the EU ETS through the **Aviation Directive**. Climate change as a 'new challenge' was also integrated into EU agriculture policies in the context of the **CAP Health Check**. There were also measures taken on issues that have not been foreseen by the 6EAP such as the **CCS Directive**.

While some of the priority actions outlined in the 6EAP are of great political, environmental and economic relevance, others seem to lack detail and are relatively modest in scope given the ambitious aim outlined in Article 2 6EAP. Given the complexity and inter-linkages between certain issues, it is hard– even when guided by the aims outlined in Article 2, especially the 2°Celsius limit – to determine whether measures comply with a specific priority action of the 6EAP in cases where the ambition of measures is not obvious and do not easily lend themselves to the identification of tangible emissions reductions. For example the priority action to 'promote energy efficiency' in the energy sector is very vague and it is thus difficult to evaluate progress against this, however in practice, it is evident that the EU is lagging behind in implementing its 20% energy efficiency target. Generally, most priority actions do not include targets. Where they do – in the case of renewable energy or cogeneration – the targets were not all new, and with respect to CHP have not been reached, while in the case of renewable energy the target set in the 6EAP was subsequently been overtaken by a new one.

1.1.3 Drivers and barriers

Greenhouse gas emissions and measures taken are of utmost importance with regard to the aim of Article 2 (2) (limitation of global warming and greenhouse gas concentration in the atmosphere) and the specific objectives of the 6EAP. A number of drivers and barriers contributed to the EU's emission trends, to the form of measures and their level of ambition.

1.1.3.1 Changes in target area

A number of factors influenced greenhouse gas emission trends in general as well as the level of ambition of respective climate measures both of which are crucial to prevent dangerous anthropogenic interference with the climate system (Article 2 (2)) and the specific objectives relating to greenhouse gas mitigation.

Greenhouse gas emissions trends – especially reductions - have been influenced by **economic developments**.¹³² A decrease in emissions in the 1990s can be traced back to the economic downturn affecting eastern Member States during this time. Also the economic recession of 2008-2009 with its attendant decrease in production output lead to lowered emission levels.¹³³ This has had a greater effect in terms of reducing greenhouse gas emissions in the EU and globally than most targeted policies.¹³⁴

Other emission reductions were achieved through: general **efficiency improvements** (in particular by industrial end users and energy industries); a shift from coal to **less polluting fuels** (in particular gas and biomass (for the production of electricity and heat); and **fuel efficiency improvements** in vehicles.¹³⁵

An **increase in emissions** was observed due to a rise in electricity and heat production by thermal plants and industrial activity.¹³⁶

Another important factor is the increase of transport demand, both passenger and freight. That is why transport continues to be the most problematic emitting sector with upward emission trends.¹³⁷ **Rising emissions** in the transport sector and the **failure of the voluntary agreement** (1998) with the car industry to reduce greenhouse gas emissions of passenger cars were a main driver for the adoption of the Regulation on CO₂ emissions from passenger cars.¹³⁸

1.1.3.2 Conformity/lack of conformity

The conformity or lack of conformity of measures with 6EAP priority actions and its contribution to 6EAP objectives is not evident, at any rate since the requirements formulated in the 6EAP are rather vague. The wording includes expressions such as ‘encouraging’, ‘promoting’ and ‘prevent and reduce’ without further details for specific actions to be taken.

Having this in mind, the requirements of most priority actions were generally met. In other less significant cases, the entire action was not taken. Notably, the emission trading scheme was not extended to other greenhouse gas emissions as proposed in Article 5 (2) (i). No specific actions were undertaken to reduce greenhouse gas emissions from marine shipping by the EU or the International Maritime Organization as required in Article 5 (2) (iii).

¹³² See Bowen, Alex/Parker, Sophia (2010): Economic Growth, Recession and Greenhouse Gas Emissions.

¹³³ EEA (2010): Tracking progress towards Kyoto and 2020 targets in Europe, p. 9.

¹³⁴ Oberthür, Sebastian., Pallemarts, Marc.: The EU's Internal and External Climate Policies: an Historical Overview. In, Oberthür, Sebastian., Pallemarts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, page 43.

¹³⁵ EEA (2009): Greenhouse gas emission trends and projections in Europe 2009, p. 35-43.

¹³⁶ EEA (2010): The European Environment: State and Outlook 2010 - A Synthesis, p. 22.

¹³⁷ EEA (2009): Greenhouse gas emission trends and projections in Europe 2009, p. 35-43.

¹³⁸ Stakeholder consultation, interview.

However, in conclusion, the conformity or – in some cases - lack of conformity cannot be considered to be a main driver or barrier for EU climate policies. As this analysis will conclude below, the 6EAP itself has not been the main driver for EU climate policies.

1.1.3.3 Decision-making

The decision-making process has influenced the outcome of many priority actions. Most importantly, the co-decision procedure shaped the final outcome of measures. Moreover, the decision-making process of the Climate and Renewable Energy Package seems to have had a considerable influence on the outcome.

The 2003 EU ETS Directive was the subject of significant deliberation during the **co-decision procedure** regarding certain elements of relevance to the ambition of the Directive, such as the allocation method. Significant differences between the Parliament – a strong advocate for more ambitious environmental objectives – and the Member States, resulted in a protracted legislative process with an above average number of amendments discussed and adopted. Several Member States in the Council were opposed to centralised decisions on emission allowance allocation, compromising the effectiveness of the final measure during the initial stages of implementation.¹³⁹

The legislative process around the **2009 amendment to the ETS** was also controversial and involved all actors. The decision-making procedures and practices were also important although to another extent than in the process leading to the adoption of the original ETS Directive. That is because the main disagreements could be sorted out in so called triilogue talks between the Commission, Parliament and the Council. Thus, unlike the previous 2003 Directive, which saw the EP request significant amendments to the proposed measure and hence necessitate a second reading, the Parliament approved the 2009 Directive at first reading. This time, the Parliament's amendments (such as the number of ETS allowances set aside for CCS) were negotiated and accepted in the triilogue meetings prior to the first reading.¹⁴⁰

The triilogue meetings were initiated by the French Presidency due to the high time pressure to complete the ETS reform and the other measures of the Climate and Renewable Energy Package before the UNFCCC meeting in Copenhagen in 2009 in combination with great differences of opinions. The measures of the Climate and Renewable Energy Package were finally negotiated and agreed between representatives of the Council, the Commission and the Parliament in a single round.¹⁴¹ This led to rapid decision-making. The decision-making dynamic was also influenced by the package approach of the Climate and Renewable Energy Package, which consists of a number of measures. The approach

¹³⁹ Skjærseth, Jon Birger and Wettstad, Jørgen (2008): EU emissions trading: initiation, decision-making and implementation, p. 132.

¹⁴⁰ Skjærseth, Jon Birger /Wettstad, Jørgen: The EU Emissions Trading System Revised 8Directive 2009/29/EC). In Oberthür, Sebastian/ Pallemarts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 83.

¹⁴¹ Lehnert, W./Vollprecht, J.: Neue Impulse von Europa: Die Erneuerbare-Energien-Richtlinie der EU. In Zeitschrift für Umweltrecht. 6/2009, p. 307.

allowed more bargaining between rich and poor countries, compared to negotiating the ETS revision isolated from other policies.¹⁴²

As part of the legislative process to include **aviation in the Emissions Trading Scheme**, the Parliament played a particularly active role, proposing a number of far-reaching amendments to the Commission proposal and the Council's Common Position in its first and second reading.¹⁴³ All of the amendments discussed at the second reading reflected a compromise position reached with the Council and were ultimately adopted. A staff working paper with an impact assessment based on stakeholder involvement guided the Commission in its elaboration of the proposed measure.

In the legislative process, involvement of the Parliament through the co-decision procedure was important for the final outcome of the **Effort sharing decision**, with the appointed rapporteur, influential in crafting a compromise with the Council in December 2008. With respect to the **Regulation on CO₂ emissions from passenger cars**, the co-decision procedure – through both the Council and the Parliament – also affected the final legislation. The Parliament's rapporteur, as well as Member States through the Council contributed to changes to the original proposal. This included moving the deadline for meeting the goal of 130g CO₂/km from 2012 to 2015. The fines for non-compliance were also altered during the co-Decision process.¹⁴⁴

The proposal on the 2009 **Renewable Energy Directive** changed during the negotiations in the Parliament and the Council, based on the amendments proposed in a report of the Committee on Industry, Research and Energy of September 2008. However, these changes generally concerned details such as transferability of guarantees of origin.¹⁴⁵ There was a broad political consensus on the need and the targets of a Renewable Energy Directive and the measure was adopted quickly compared to normal procedures.

The co-decision process on the **Fuel Quality Directive** affected the ambition of the priority action. The Commission proposed a mandatory 10% cut in the carbon content of fuels. However, the Parliament and the Council agreed to a 6% cut by 2020. A review will be conducted to determine if additional measures are necessary. If so, an additional 2% reduction will come from carbon capture and storage and electric vehicles, while another 2% will come from credits from the Clean Development Mechanism (CDM).

¹⁴² Skjærseth, Jon Birger and Wettestad, Jørgen: The EU Emissions Trading System Revised 8Directive 2009/29/EC). In Oberthür, Sebastian., Pallemmaerts, Marc (eds.) (2010). The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 82.

¹⁴³ Such amendments concerned the total quantity of allowances to be allocated to the aviation sector, the percentage of allowances to be auctioned, the use of revenues generated from the auctioning of allowances, the operation of the special reserve for fast growing operators, the timing and content of the review of the provisions of the Directive; and the exclusions from the scheme, including the de minimis exemption.

¹⁴⁴ See ten Brink, Patrick: Mitigation CO₂ Emissions from Cars in the EU (Regulation (EC) No 443/2009). In: Oberthür, Sebastian/ Pallemmaerts, Marc (eds.) (2010): The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 179ff.

¹⁴⁵ Lehnert, W./Vollprecht, J.: Neue Impulse von Europa: Die Erneuerbare-Energien-Richtlinie der EU. In Zeitschrift für Umweltrecht. 6/2009, p. 313.

1.1.3.4 Implementation

In some cases, implementation problems at Member State level influence the contribution of measures to the achievement of specific objectives and priority actions of the 6EAP. The most prominent example was the introduction of emissions trading.

Significant implementation challenges of the **2003 Emission trading Directive** included **delayed transposition** in various Member States. The scheme was also found to **lack stringency in the domestic emissions caps** set out in national allocation plans. In many cases, the European Commission had to initiate infringement proceedings against Member States held to have inadequately implemented the measure.¹⁴⁶ The discretion left to the Member States regarding implementation and application of the Monitoring and Reporting Guidelines lead to plurality of 27 national systems. The actual operation of the priority action has deviated in many ways from the 'ideal' concept originally envisioned by the European Commission in its early legislative proposals. Notably, **rent seeking, susceptibility to lobbying, concern about international competitiveness effects and other factors** have caused Member States to implement the measure in ways that did not always meet or promote the measure's objectives (thus, these factors can be seen as **barriers** as well). As a consequence, prices for greenhouse gas emission allowances have been generally lower than anticipated in the legislative process, with direct consequences for the ability of the measure to guide and alter individual and corporate behavior (making the **low carbon price** level a '**secondary**' barrier). In the early phases of implementation, in particular, the priority action did not perform as envisioned in the legislative process.

1.1.3.5 Financial resources

Measures to reduce greenhouse gas emissions require investment, especially in energy production and efficiency. There are interesting financial instruments that leverage private investments, e.g. feed in tariffs or quota systems in the electricity sector. The latter instruments are independent of the public budget which leads to greater certainty with regard to the continuity of financial flows. Other available instruments are tax rebates, grants and soft bans. Also the ETS and other market based mechanisms constitute economic incentives to reduce greenhouse gas emissions in different sectors.

A detailed analysis of this issue is beyond the scope of this report, however, it seems plausible that the availability of financial instruments which are independent of the public budget (i.e. for example no cuts in the public budget due to tax rebates or burden on the public budget in case of grants) helped raise the level of ambition. Taking for example the feed-in tariff, this could possibly be seen as a driver not only because it prevents extra burden to the public budget but also because it triggered an unexpected growth in renewable energy supply. Furthermore, by strengthening the respective renewable sector it might also have strengthened interest groups fighting for ambitious policies.

¹⁴⁶ E.g. C-107/05, Commission v Finland (non-transposition); C-122/05, Commission v Italy (non-transposition).

1.1.3.6 Public opinion

Public opinion was a major driver contributing to the overall aims, specific objectives and priority actions in this thematic area.¹⁴⁷ In this context, 2007 was the turn of the tide when newspaper headlines suddenly addressed the issue and public interest in the topic grew tremendously.

This public and press awareness was prompted by a multiplicity of factors, i.e. the publication of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change in 2007, the publication of the so-called Stern report on the economic implications of mitigation and adaptation (end of 2006), media events like the Oscar-winning film 'An inconvenient truth' by Al Gore, and natural disasters like Hurricane Katrina. Angela Merkel, heading the G8 in 2007, put climate change as one of the core issues on the agenda of the G8 summit in Heiligendamm. Public and media attention in 2007 also helped to forge the success of the international climate negotiations in Bali bringing about the Bali Action Plan outlining the negotiating mandate for a future regime. Not surprisingly, 2007 was also a year of great interest in and support for climate policy in the EU. High public support allowed the EU to pursue levels of ambition enshrined in the most important measures (especially the 20-20-20 targets), which are higher than in most other industrialized nations and helped to agree on the Climate and Renewable Energy Package December 2008. Public support for climate action climaxed in the lead up to the Copenhagen summit in December 2009.

It bears noting, however, that pressure from parts of civil society, in particular from interest groups representing industry and trade, also influenced many Member States and placed a limit on the level of ambition that could ultimately be pursued in certain area, e.g. the transport sector. For example, automakers, unions, environmental groups, and national governments played a significant role in determining the framework and specifics of the Regulation on CO₂ emissions from passenger cars. Powerful Member States with a large auto manufacturing presence – Italy, Germany, and France – offered a series of options and pushed the ambition of the Regulation in sometimes different directions. The governments of the latter two countries (and their respective industries) pushed hard to phase in the new standards and to reduce the penalties for non-compliance.

Furthermore, it has to be noted that at least after the disappointing results of the Copenhagen summit, public opinion and interest seems to have shifted. Though climate change has by now almost become a 'mainstream topic', support for measures in the face of global difficulties to agree on action in addition to the financial challenges for many countries may be decreasing again – at least with respect to mitigation action.

1.1.3.7 Competing/Complementary priorities

In the mitigation area, the policy framework in the EU was set out decisively by the 20-20-20 targets of 2007 and the Climate and Renewable Energy Package of 2009. The measures adopted in this package are the most comprehensive and ambitious climate measures taken so far.

¹⁴⁷ Stakeholder consultation, interview

Other EU strategies are the Lisbon Strategy and the EU Sustainable Development Strategy (EU-SDS). They were of minor importance to EU climate policy.

In 2000, the European Council in Lisbon agreed that by 2010 the EU should be ‘the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion’. To achieve this goal the Council launched the Lisbon Strategy, focusing primarily on social and economic aspects.¹⁴⁸

One year later in 2001, the Lisbon strategy was complemented with an EU-SDS, which added an environmental dimension that requires growth to be created on an ecological basis.¹⁴⁹ The objectives of the EU-SDS have been successfully mainstreamed into a number of EU policies; with climate change being one of them. However, the positive impact of the EU-SDS on the adoption of the measures outlined above is considered to be rather limited.¹⁵⁰ For instance, the EU ETS – one of the prominent EU climate policies – was generally supported by the EU-SDS. However, it is a result of policy initiatives taken before the release of the EU-SDS and even before the 6EAP. An important driver for this measure was the ECCP.

The EU-SDS could have been of relevance to the EU ETS revisions, which EU ETS resulted in the revised Directive passed in 2009. However, there is no clear indication the EU-SDS driving this process.

Moreover, the EU-SDS has rarely been referred to in climate change policy discussions. It might have had a supportive impact, but no substantial one.¹⁵¹

Similar considerations apply to the Lisbon Strategy. Since there is a logical overlap of energy and climate issues, climate change policies (for instance on energy efficiency and renewable) gained more attention by the Lisbon Strategy than other environmental topics. However, the substantial impact on climate change policies was rather limited.

Nevertheless, as the EU-SDS, the Lisbon Strategy might have had a supportive impact facilitating compromises between economic and climate change issues. Climate change is now mainstreamed into economic programmes of the EU, like for example in ‘Europe2020’, the renewed strategy on growth and jobs.¹⁵² The issue of energy efficiency and renewable energies in economic programmes is however most likely not primarily driven by environmental but also by energy security concerns. Notably, the 6EAP gained political

¹⁴⁸ Presidency Conclusions, Lisbon European Council, 23 and 24 March 2000, para. 5.

¹⁴⁹ Göteborg European Council, 15 and 16 June 2001, page 6, available at: http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf.

¹⁵⁰ Sachverständigenrat für Umweltfragen (2008): Umweltgutachten 2008. Umweltschutz im Zeichen des Klimawandels, S. 13.

¹⁵¹ Pallemmaerts, M. et al. (2007) Does the EU Sustainable Development Strategy Contribute to Environmental Policy Integration? http://ecologic.eu/projekte/epigov/documents/EPIGOV_paper_9_pallemaerts_herodes_adelle.pdf

¹⁵² European Commission, Europe 2020. A strategy for smart, sustainable and inclusive growth. COM(2010)2020, published 3.3.2010; Presidency Conclusions, Brussels European Council, 25/26 March 2010.

support from the European Council when it endorsed the objectives set out in the 6EAP – including the 2°C target – in the conclusions of the EU-SDS.

Regarding adaptation, according to expert opinions, no other strategy than the 6EAP has had an influence on the adoption of policies.¹⁵³ Water, cohesion and other policies that could have had an impact were not integrated in EU adaptation policies to date.

1.1.3.8 International commitments

International commitments have been a major driving force behind EU climate policies. The joint emission reduction commitment of the EU-15 under the **Kyoto Protocol** was and is still probably one of the most decisive drivers to develop and implement European climate policies for the time up to 2012. This commitment also constitutes the basis of the 6EAP's objectives concerning climate protection (Article 5 (1)), as the wording of the provisions underlines. Also the text of the overall aim in Article 2 (2) of the 6EAP has a clear link to Article 2 of the UNFCCC ('prevent dangerous anthropogenic interference with the climate system'...), though the specification of dangerous climate change to 550 ppm and the 2°Celsius target is specific to the 6EAP.

In the case of biofuels, the **Convention on Biological Diversity** has played a role as the debate on the sustainability of biofuels and internationally harmonized sustainability criteria has an international dimension, with the EU acting as a strong stakeholder within the discussions.¹⁵⁴ The **international trade regime** also played, and continues to play, an important role with regard to the definition and strengthening of sustainability criteria for biofuels. During the negotiations around the Renewable Energy Directive, it was largely felt that the EU's sustainability criteria for biofuels are too strict and could lead to tensions with large producer countries, such as Brazil, which had threatened to challenge the Directive before the World Trade Organisation (WTO). Even after the adoption of the Directive many issues remain to be settled, and could still face a challenge before the WTO. For example, the EU has to define the geographical range of concepts such as 'highly biodiverse grassland' and 'severely degraded land'. Moreover, the Commission will have to report on how and if it intends to tackle the impact of indirect land-use change on greenhouse gas emissions by the end of 2010.¹⁵⁵

1.1.3.9 Summary

The ambition of EU climate policies can mainly be traced back to the EU's international commitments under the Kyoto Protocol. Moreover, increased public awareness and interest in the topic has been a major driving force behind the adoption of ambitious EU climate policies. This is reflected in the shift in public awareness of the issue in 2007 due to a number of relevant events and the adoption of more ambitious EU climate policies around

¹⁵³ Confirmed by several experts, Telephone Interviews, September 2010.

¹⁵⁴ COP 9 Decision IX/2 Agricultural biodiversity: biofuels and biodiversity, <http://www.cbd.int/decision/cop/?id=11645>.

¹⁵⁵ EurActiv (2009): 'Biofuels, Trade and Sustainability. Article of 29 July 2009', Available at: <http://www.euractiv.com/en/trade/biofuels-trade-sustainability/article-171834>.

the same time, compared to relatively limited progress in the years between 2002 and 2007. Economic developments have also regularly contributed to greenhouse gas emission trends.

The other EU strategy with a significant influence on EU climate change policies has been the high level political decision on the 20-20-20-targets in 2007 and the 2009 Climate and Renewable Energy Package. However, this only accounts for mitigation policies. With regards to adaptation policies – which constitute the second out of two pillars of climate policy -, no other strategy had influence on the adoption of policies. The Climate and Renewable Energy Package can therefore be considered to be one of the major drivers – again besides the increased public awareness from 2007 – for EU adaptation policies.¹⁵⁶

1.1.4 Assessment of the policy mix and approach of the 6EAP

Measures that contribute considerably to the aim and specific objectives of the 6EAP

The mix of measures and tools adopted – especially in the context of the EU Climate and Renewable Energy Package - generally seem to be a good start to contribute to the aim of Article 2. However, the challenge is much bigger and goes far beyond 2012 or 2020, and the aim of Article 2 cannot be achieved by the adopted measures alone; the EU will have to step up action and other countries will have to make ongoing contributions. While the mix of legally binding regulations, Directives and decisions adopted by the EU seem comparably ambitious in many respects, areas improvement can be identified, e.g. CHP, energy efficiency and transport. With regard to the 6EAP, a higher level of ambition and precision (e.g. with regard to more quantitative targets) could have been useful to achieve the climate objectives. By repeating only the ‘status quo’ of political will and discussion at its time, the 6EAP was not to drive ambition. However, it might have helped to force consensus – also by the Parliament – on the status quo. This might have helped to defend this line of ambition and build on it. A good example is the 2°C target that had already been supported by the Environment Council (Environment) in 1996, but was affirmed with the adoption of the 6EAP (see Article 2, paragraph 2 6EAP) by all institutions in the co-decision procedure.

Lack of quantitative targets in 6EAP

The impact of the 6EAP on these measures and trends is difficult to quantify. The 6EAP abstained from introducing new quantitative targets and merely affirmed already existing targets¹⁵⁷, (though admittedly the 6EAP may have strengthened the targets by their inclusion). The requirements for priority actions are often rather vague. In most cases, no specific legal guidelines are provided. Most priority actions do not formulate specific requirements or actions. Furthermore, they are often only general encouragements, as reflected in the language introducing the actions (e.g. using non-committal verbs like ‘encourage’ or ‘promoting’).

¹⁵⁶ Stakeholder consultation, interview.

¹⁵⁷ Sachverständigenrat für Umweltfragen (2008): Umweltgutachten 2008. Umweltschutz im Zeichen des Klimawandels S. 14.

6EAP did not foresee every development

In some cases, decision-makers could not foresee certain developments when adopting the 6EAP. Especially since 2007, EU climate policies have become far more ambitious than could have been expected in 2002 and some developments exceed the 6EAP's targets. Notably, the 6EAP did not call for a measure exceeding the **indicative** 12% target for 2010 for the share of renewable energy. In 2009, the EU increased its **renewables targets** to a binding, 20% target for 2020. Though one might argue that 12% until 2010 was still ambitious, the quality of the target (indicative vs. binding) was certainly not. Furthermore, alternative techniques to reduce greenhouse gas concentration such as CCS were not yet considered by the 6EAP. This shows the limits of the 6EAP to guide action in a rapidly changing context. The EU climate policy and the measures taken seem to have been driven mainly by other factors than the 6EAP.

Structural challenges of a 10 year program faces structural challenges

In the area of climate change, a comprehensive 10-year program faces mayor challenges when aiming to guide action in a dynamic area. If such a program wants to guide action and still remain relevant, it faces the problem that it may be difficult to anticipate issues like new scientific findings (e.g. the 4th Assessment Report of the IPCC), technological options (e.g. CCS), and various political dynamics (e.g. public attention, shifts in high level political attention). Therefore, It might have been helpful adjust the 6EAP in the context of its mid-term review in 2005.

Furthermore, the internal commitment to such a program over 10 years might diminish due to political changes during the period within the EU institutions themselves. Political identification is the highest shortly after the adoption of the programme, with a decreasing tendency.¹⁵⁸

Moreover, the adoption of quantitative targets in a certain field requires a strong political focus which is difficult to be delivered in the context of a comprehensive strategy.¹⁵⁹ The 6EAP and its 10-year timeframe must be understood as a medium-term strategy which guides efficient measures and provides a perspective for a relatively long time period

Climate change developed to be a much more dynamic area than what was originally anticipated in the 6EAP. The ambition set out in the 6EAP reflected the state of play in 2002, but was not going far beyond and certainly did not envisaged the public interest and political dynamic developing in the last few years. Its level of ambition was thus overshadowed by targets and actions taken a few years after its adoption. The 6EAP did not provide a framework to react to new and dynamic developments. It could have been useful to allow for adjustments on the context of the 6EAP's mid-term review.¹⁶⁰

¹⁵⁸ Stakeholder consultation, Brussels Workshop, September 2010.

¹⁵⁹ Stakeholder consultation, interview

¹⁶⁰ Stakeholder consultation, Brussels Workshop, September 2010.

1.1.5 Impact of the 6EAP on the adoption of measures

1.1.5.1 Impact of the 6EAP

The impact of the 6EAP on the adoption of measures cannot be easily assessed, especially due to the lack of quantitative targets and priority measures which were often only vaguely defined in many areas and a number of other important drivers and barriers, which affected the adoption of measures.

Overall, the impact of the 6EAP on EU climate policy is difficult to determine and was less significant than other major drivers. This may seem surprising, because the 6EAP attributes particular importance to climate change, its first environmental priority area. It is also considerably often mentioned in the horizontal areas of the 6EAP. In addition to naming climate change as the first of the 6EAP's four environmental priorities, the Programme aims at 'emphasising climate change as an outstanding challenge of the next 10 years and beyond' (Article 2 (2)).

However, at the time of the adoption of the 6EAP, the two main factors responsible for ambitious EU climate change policies - the desire to exert international leadership and the EU's international commitments under the Kyoto Protocol - were already in place. The 6EAP's special emphasis on climate policy reflected the emerging political status of climate policy, but its role was unusually limited under these circumstances.

The main EU climate change initiatives - the creation of the EU ETS and the EU Climate and Renewable Energy Package which aims to implement the 20-20-20-targets - were closely linked to the EU's external climate change ambitions and commitments. The EU ETS was proposed before the adoption of the 6EAP in the context of the ECCP and it seems almost certain that the same or very similar measures would have been adopted at the same time in the absence of the 6EAP.

Most participants in the online survey agreed that the 6EAP has not made a significant difference with respect to the implementation of relevant climate change measures, which they maintain would have been adopted regardless of the 6EAP.¹⁶¹ It was felt on the whole that the climate change agenda would have moved forward and evolved irrespective of the 6EAP due to the UNFCCC process and the independent commitments from Member States – as well as scientific findings, public interest and media attention. However, the 6EAP was felt to have facilitated the adoption of market-based instruments and increased the cooperation between civil society and business. Participants of the survey complained that there was too much of a focus on 'soft law' and voluntary approaches in the 6EAP.

Participants of the Brussels workshop¹⁶² agreed that the general level of ambition of the 6EAP on climate change was not very high. It was also noted that the 6EAP did not set a new level of ambition but rather reflected the existing ambition already set out in other

¹⁶¹ Stakeholder consultation, interview

¹⁶² Stakeholder consultation, Brussels workshop

documents and represented a collection of existing initiatives and targets. However, the 6EAP set out and reconfirmed a path for action.

However, institutionally it had an added value because its passing involved the main European institutions, including the Parliament. This is all the more relevant, as it was the one of the first Environment Action Programmes being passed as a formal decision, with the involvement of the Council and the Parliament.¹⁶³ The political commitment will likely be much higher, if such a programme is commonly agreed by the Council, the Parliament and the Commission.¹⁶⁴

In general, the 6EAP did not initiate the adoption of individual climate change related measures. For this, it would have had to be more concrete and ambitious. The 6EAP did mainly concentrate on broader and general targets to be achieved, including EU climate change policy. Therefore, it had at least additional impact on EU climate policies, especially in terms of integration them into other EU policies. The climate change section of Article 5 6EAP is broken down to all relevant sectors and it can be assumed that it did facilitate the adoption of measures in some cases, since it served as a guideline and justification for EU policy makers.

1.1.5.2 Impact of the 6EAP vis-à-vis other EU strategies and international commitments

As explained above, the Climate and Renewable Energy Package had a major impact on the thematic area. It constitutes the main political initiative on EU climate change policies of the last decade by scope and ambition, despite its shortcoming especially in the field of energy efficiency.

In addition to international commitments and EU striving for strategic leadership internationally, the Lisbon Strategy and the EU-SDS appeared to have had at least a supportive influence on EU climate change policy. On the one hand, the Lisbon Strategy provided support for lowering certain environmental ambitions which were considered to have a negative impact on economic competitiveness, for example with respect to aspects of the EU ETS. However, perhaps more importantly, the Lisbon Strategy also supported linking environmental and economic issues in a mutually beneficial way (though also driven by energy security concerns). It thereby created at least a favorable context for the 2007 European Council's 20-20-20 climate and energy goals. Similarly, the EU-SDS potentially facilitated the mainstreaming of climate change considerations into EU policy making.

¹⁶³ The 5EAP and the 6EAP were adopted according to Article 175 (3) TEU, which was introduced by the Treaty of Maastricht in 1992. Former Environment Action Programme were issued by the Commission only.

¹⁶⁴ Calliess, Christian. In: Calliess, Christian/ Ruffert, Matthias. EUV/EGV. Kommentar. 3. Edition, Article 175 TEU, para. 27.

1.2 Nature and Biodiversity

1.2.1 Achievement of objectives

1.2.1.1 Biodiversity

Relevant objectives

The biodiversity sub-area of the 6EAP and the identified priority policy measures falling under it are exceptionally broad, overlapping with many other sub-areas, aims, objectives and actions addressed in the 6EAP. This wide sub-area on biodiversity corresponds with the overall aims of the thematic area as described in Article 2 of the 6EAP and in section 1.2.1 of this report, regarding the protection and restoration of natural systems and their functioning in order to arrest biodiversity loss and desertification.

All the **objectives** described in Article 6 of the 6EAP pertain directly to biodiversity, although the first (Article 6(1)) can be seen as the overarching objective prompting actions in the area:

- ‘halting biodiversity decline with the aim to reach this objective by 2010 including prevention and mitigation of the impacts of invasive alien species and genotypes;’

Additional objectives of relevance are:

- ‘protection and appropriate restoration of nature and biodiversity from damaging pollution;
- conservation, appropriate restoration and sustainable use of marine environment, coasts and wetlands;
- conservation of species and habitats with special concern to habitat fragmentation;
- promotion of a sustainable use of the soil...;’

Article 6(2) sets out a number of specific **priority actions** of which the most pertinent are:

- Article 6(2a) on biodiversity, which incorporates efforts to ensure implementation and expansion Natura 2000 as well as various monitoring and assessment activities;
- Article 6(2f) regarding the integration of biodiversity concerns into a sustainable agricultural and rural development policy;
- Article 6(2g) relating to conservation of marine ecosystems and sustainable use of the seas.

Overview of measures

The EU has a relatively comprehensive biodiversity conservation framework and consequently in 2001, EU Heads of State and Government felt able to commit to halting the decline of biodiversity in the EU by 2010 and to restoring habitats and natural systems¹⁶⁵. At

¹⁶⁵ Conclusions of the Presidency, Göteborg European Council 15th and 16th June 2001.

the heart of this framework are the **Birds Directive** (2009/147/EC)¹⁶⁶ and **Habitats Directive** (1992/43/EEC)¹⁶⁷. These Directives provide basic legal protection of species and habitats, and define more specific conservation measures that must be taken for rare or otherwise threatened or important habitats and species of Community interest (i.e. those listed in the annexes of the directives). The Habitats Directive aims to maintain or restore such species and habitats to Favourable Conservation Status, whilst the Birds Directive has similar objectives for birds. To achieve these aims, Member States must identify, protect and appropriately manage sites that are of particular importance for habitats and species of Community interest, as Special Protection Areas (SPAs) under the Birds Directive and as Special Areas for Conservation (SACs) under the Habitats Directive. Together these sites comprise the Natura 2000 network. Actions are also required to protect species from unsustainable hunting and exploitation etc and to conserve species in the wider environment.

However, the Birds and Habitats Directives have relatively little direct influence over land and sea use practices (e.g. farming, forestry and fishing) and developments outside protected areas, and have limited financial resources. Therefore in practice overall biodiversity conservation very much depends on additional support from a range of **other interacting policies** (as described in this chapter and elsewhere in this report). These include the following:

- Rural Development Regulation (No. 1698/ 2005)¹⁶⁸ and the associated European Agricultural Fund for Rural Development (EAFRD),
- Common Fisheries Policy (Regulation No. 2371/2002)¹⁶⁹,
- Forest Action Plan (COM 2006/0302)¹⁷⁰,
- Framework directives and Thematic Strategies for soil, marine and aquatic environments, e.g. Water Framework Directive 2000/60/EC¹⁷¹,
- National Emission Ceilings Directive (2001/81/EC)¹⁷²,
- Environmental Impact Assessment Directive (85/337/EEC)¹⁷³ and Strategic Environmental Assessment Directive (2001/42/EC)¹⁷⁴.

¹⁶⁶ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. OJ L 206, 22.7.1992

¹⁶⁷ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. OJ L 20, 26.1.2010. This is a codified version of Directive 79/409/EEC

¹⁶⁸ Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). OJ L 277, 21.10.2005

¹⁶⁹ Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy. OJ L 358, 31.12.2002

¹⁷⁰ Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan {SEC(2006)748} (COM(2006)302)

¹⁷¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. OJ L 327, 22.12.2000

¹⁷² Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants. OJ L 309, 27.11.2001

¹⁷³ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment. OJ L 175, 5.7.1985

The only source of EU funding that is dedicated to the implementation of the Birds and Habitats Directives and related biodiversity conservation actions is from the Nature and Biodiversity component of the LIFE programme. The LIFE programme was first established in 1992 as the EU's financial instrument for the environment and nature conservation. The **LIFE+ Regulation**¹⁷⁵, which is the latest incarnation of the instrument, channels financial support to best practice, demonstration or other innovative environmental projects not eligible under other Community financing mechanisms, with projects corresponding to the 6EAP emphasised as particularly deserving of LIFE+ funding. The Regulation likewise fits into the Biodiversity Action Plan (BAP) (see below) as a mechanism to ensure adequate funding for biodiversity and Natura 2000 (Supporting Measure 1). The Nature and Biodiversity component of LIFE+ is particularly used to advance implementation of the Birds and Habitats Directives, principally through actions focused on Natura 2000 sites or specific species and habitats of Community interest. However, funding can also be used to build biodiversity monitoring and assessment capacity and to further the pursuit of better governance (e.g. encouraging participatory procedures). The total LIFE+ budget for the 2007-2013 financial perspective is €2.14 billion. Project action grants are assured at least 78% of the budget, with biodiversity projects receiving at least 50%. This equates to €120million per year for biodiversity initiatives.

The Nature and Biodiversity component of LIFE+ is clearly a key supportive measure for the Birds and Habitats Directives and the achievement of other biodiversity objectives, targets and actions set out in the 6EAP and the BAP. However, the LIFE funding programme was not designed to be the principal provider of funds for nature conservation in the EU. Instead, under the integrated funding model a range of instruments provide financial incentives for land use and management practices that help to maintain or restore habitats of high biodiversity value. Of these funding sources, the most important are the agri-environment and other similar measures under the European Agricultural Fund for Rural Development (EAFRD) (see section 1.2.1.4).

To stimulate and coordinate further actions and funding for biodiversity the European Commission produced a strategy to achieve its biodiversity target in a Communication in May 2006 on 'Halting Biodiversity Loss by 2010 – and Beyond: Sustaining ecosystem services for human well-being', which was accompanied by a detailed **EU Biodiversity Action Plan (BAP)**.¹⁷⁶ The strategy and BAP takes relevant 6EAP objectives into account, and acts as an overarching strategy document to guide and integrate actions across the field of biodiversity-related issues, both internal to the EU and interfacing with global and international governance levels. It adds few new measures, but instead amalgamates numerous targets

¹⁷⁴ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment. *OJ L 197, 21.7.2001*

¹⁷⁵ Regulation (EC) No 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission statement *OJ L 149, 9.6.2007, p. 1–17*

¹⁷⁶ CEC (2006): COMMUNICATION FROM THE COMMISSION: HALTING THE LOSS OF BIODIVERSITY BY 2010 — AND BEYOND Sustaining ecosystem services for human well-being, (COM(2006)216), and Commission staff working document - Annexes to the Communication from the Commission - Halting the loss of biodiversity by 2010 - and beyond - Sustaining ecosystem services for human well-being - Technical annex, (SEC(2006)621)

and measures, many of which pre-date the BAP. Thus, it focuses on redoubling efforts to implement intended actions, such as the designation of protected areas and support for appropriate management practices (e.g. through agri-environment measures). In total, 150 actions are incorporated in the BAP.

One important new commitment under the BAP of particular relevance to the Article 6(1) objective of the 6EAP was the development of an EU strategy on **invasive alien species** (IAS). Consequently, in December 2008 the Commission adopted a Communication 'Towards an EU strategy on invasive species'¹⁷⁷ which outlines potential policy options for an EU strategy and initiated a wide discussion on its possible scope and content. An EU Strategy for IAS is expected to be adopted in 2011/early 2012.

Overall, it is clear that the Birds and Habitats Directives and the subsequent influence of the 6EAP and BAP have led to significant biodiversity conservation achievements (especially regarding the establishment of the terrestrial components of the Natura 2000 network). However, despite these achievements, the Commission's full-term assessment of the BAP¹⁷⁸ acknowledged that the EU has failed to achieve its target of halting the loss of biodiversity (see further analysis below).

Nevertheless, the EU remains committed to conserving biodiversity. In fact concern over biodiversity appears to be strengthening in recent years due to growing recognition of the **socio-economic importance of natural ecosystems**. The benefits that ecosystem services provide are increasingly acknowledged in EU policy-making and a number of initiatives have been launched at national and international levels to identify and quantify their values more precisely. The mid-term review of the 6EAP also concluded that 'the scale of the challenge faced means that additional approaches are needed and most importantly a way has to be found to make it economically interesting to protect bio-diversity. Appealing to nature's intrinsic value is not going to be enough on its own'¹⁷⁹. In March 2007, in Potsdam, environment Ministers of the G8 countries and the five major newly industrialising countries (G8+5) proposed a study on 'The economic significance of the global loss of biological diversity'. This study, inspired by the Stern Review on the Economics of Climate Change (2006), forms a part of the wider G8 'Potsdam Initiative' that seeks to step up biodiversity conservation efforts worldwide in order to achieve the 2010 biodiversity target and beyond. The study proposal was subsequently endorsed by G8+5 leaders at the Heiligendamm Summit in June 2007, and led to the launch of the **TEEB (The Economics of Ecosystems and Biodiversity) initiative**. In addition to providing financial support for the TEEB initiative, the European Commission has launched several studies to feed into the initiative, such as on the costs of policy inaction.

¹⁷⁷ CEC (2008): Communication from the Commission - 'Towards an EU strategy on invasive species', (COM(2008)789), 3/12/2008

¹⁷⁸ CEC (2010): Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions. The 2010 Assessment of Implementing the EU Biodiversity Action Plan (COM(2010) 548)

¹⁷⁹ CEC(2007): Communication from the Commission, on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007)225, 30/04/2007

These initiatives have resulted in an increasing recognition of the economic value of biodiversity and ecosystem services in the policy process. In messages¹⁸⁰ adopted at recent Presidency events on a post-2010 biodiversity target, the importance of biodiversity for economic prosperity is emphasised, and the newly agreed target and vision on biodiversity post-2010 clearly recognises the benefits provided by biodiversity for human well-being. As agreed by the Council in March 2010¹⁸¹ the EU biodiversity target is now 'To halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss'. The European Commission is currently preparing a Communication outlining its **future biodiversity strategy** for achieving this target and vision.

Contribution of measures to achievement of 6EAP objectives

The current monitoring of biodiversity in Europe is not sufficient to draw a robust picture of the status and trends of all taxa groups and habitats, but it is clear that the objective of halting the loss of biodiversity by 2010 has been missed¹⁸². Recent monitoring of the status of habitats and species in accordance with the requirements of the Habitats Directive (under Article 17), and other data in the form of the SEBI 2010 indicators¹⁸³ is sufficient to permit some general conclusions.

The SEBI 2010 indicators show that despite progress in some areas, the **general trend** of most indicators directly relevant to the BAP and 6EAP objectives and actions continues to be **negative**. For example, whilst the decline in common farmland bird species may have been stabilised (see further discussion below), there are signs of a recent decline in common forest species and alarming downward trends of grassland butterflies attributable both to agricultural intensification, progressive decline in grasslands, and abandonment (Figure 3).

The extent of many habitats of high biodiversity importance, such as mires, heathland and some coastal habitats is declining, although woodland and open water areas are expanding (Figure 4).

Figure 3: Population index of grassland butterflies in Europe (1990=100).

¹⁸⁰ Message from Athens, 2009, http://ec.europa.eu/environment/nature/biodiversity/conference/pdf/message_final.pdf; Message from Ghent, 2010, http://www.eutrio.be/files/bveu/media/documents/Message_from_Ghent_for_Biodiversity_post-2010_EN.pdf

¹⁸¹ Environmental Council Conclusions 7536/10, March 2010, and CEC, (2010). Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions. Options for an EU vision and target for biodiversity beyond 2010 (COM(2010) 4 final)

¹⁸² CEC, (2010) Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions. The 2010 Assessment of Implementing the EU Biodiversity Action Plan (COM(2010) 548 final)

¹⁸³ EEA (2010) Progress towards the European 2010 biodiversity target. EEA Report no. 4/2009

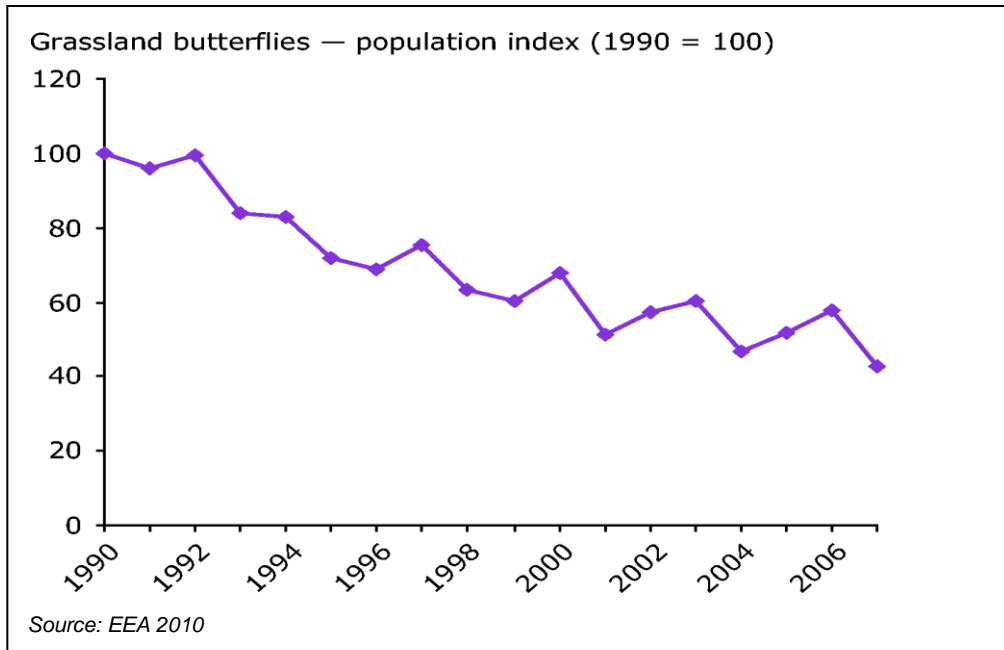
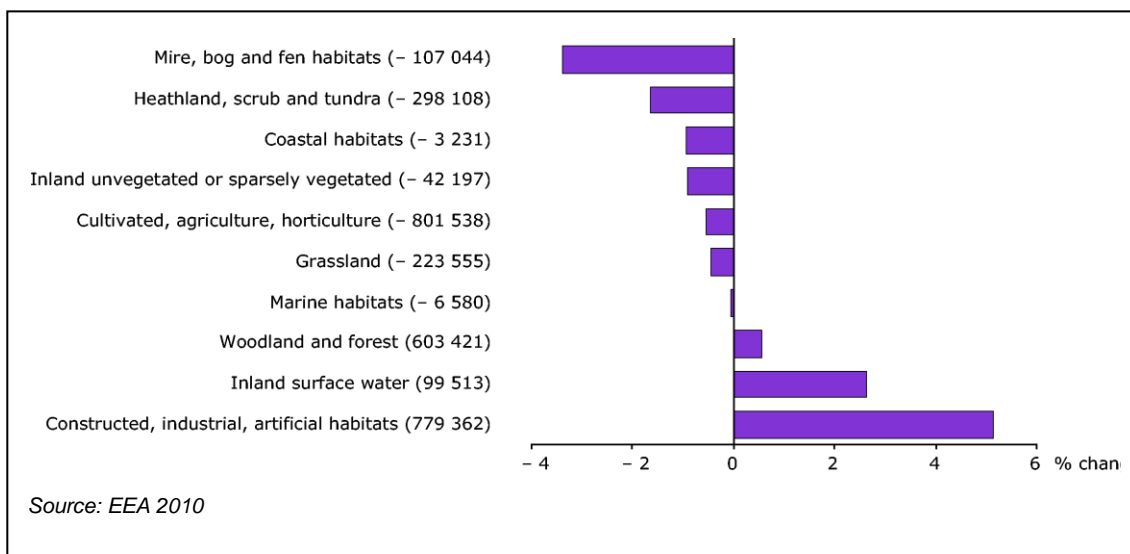


Figure 4: Land cover area change 1990-2000



There has recently been good progress in **designating terrestrial Natura 2000** sites under the Habitats and Birds Directives, with 17% of the EU land territory now covered, although some new Member States are behind in meeting the required designation¹⁸⁴. Meanwhile, Natura 2000 site establishment in the marine sphere is significantly below requirements¹⁸⁵. However, of particular concern is the **condition of most habitats and species of Community interest in Natura 2000 sites**. Monitoring by Members States in accordance with Article 17 of the Habitats Directive reveals that in terrestrial ecosystems between 40 and

¹⁸⁴ EEA (2010) Progress towards the European 2010 biodiversity target, EEA Report no 4/2009

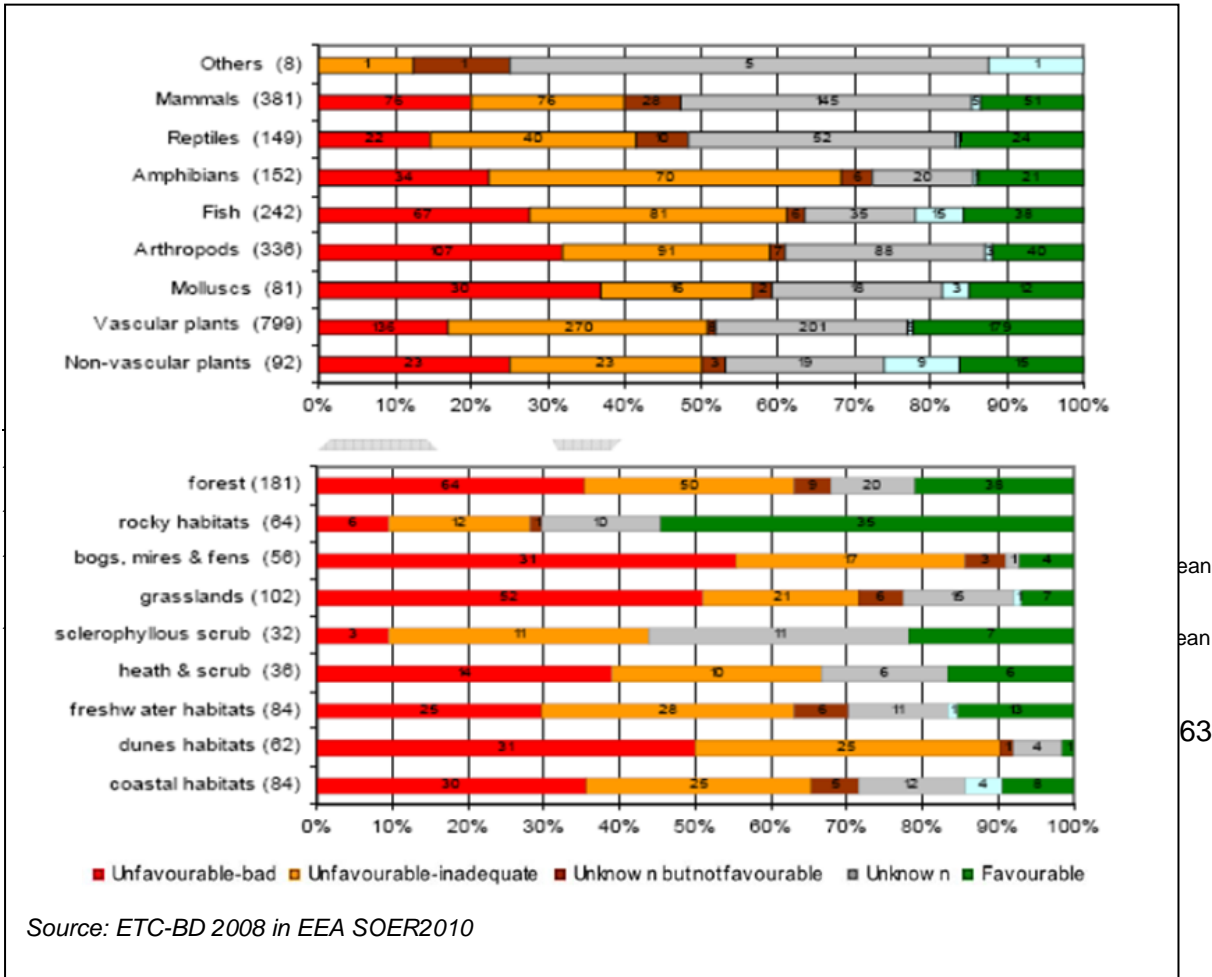
¹⁸⁵ EEA (2010) Progress towards the European 2010 biodiversity target, EEA Report no 4/2009

85% of habitats and 40 and 70% of species of Community interest have unfavourable conservation status (Figure 5). This indicates there is still significant work to be done with respect to implementation of the priority actions identified in the 6EAP both within the protected area network and in the wider environment.

Progress has been seen in reducing levels of **acidification and freshwater eutrophication** (relating to BAP objective 2). This is suggestive of positive impacts on environmental quality from the Nitrates Directive, the Urban Waste Water Treatment Directive and National Emission Ceilings Directive; however, terrestrial eutrophication from nitrogen deposition remains a problem. This is increasingly from the release of ammonia in intensive agriculture and livestock farming in particular¹⁸⁶, which is deposited on nitrogen poor habitats via precipitation.

Threats from **invasive alien species** also remains a particular concern, despite the 6EAP and BAP objectives (BAP objective 5). Policy measures and strategies on invasive species are still under development, despite being due in 2010 according to the 2008 Communication¹⁸⁷. An EU Strategy on invasive alien species is now expected to be presented in 2011. Natural and semi-natural land is under pressure from abandonment and urban expansion, whilst transport infrastructure development and urban sprawl contribute to continuing **habitat fragmentation**¹⁸⁸ (BAP objective 5, target A4.3). Furthermore, objectives targeting **sustainable use of resources** are not being met. In particular pressures on fisheries are unrelenting (BAP objective 3), suggesting that further biodiversity measures in the marine environment are needed (see section below). Similarly, the effectiveness of agri-environment schemes (BAP objective 2) need to be strengthened if negative biodiversity trends are to be halted or reversed in agricultural habitats (see section below).¹⁸⁹

Figure 5: Conservation status of species (top) and habitats (bottom) of European interest in 2008 (number of assessments per group shown in brackets)



Source: ETC-BD 2008 in EEA SOER2010

Given that the BAP is very broad and comprises various other measures, of which many already existed prior to the adoption of the BAP, it is not really possible to assess the extent to which the BAP per se has contributed to or impeded progress on the objective of halting biodiversity loss. Whilst it is supposed that the existence of the BAP has boosted the profile and political advocacy surrounding certain issues, the generally weak progress and lack of determined and effective action suggest the material impact of the BAP has been marginal. Most successes can be attributed to the implementation of existing measures (notably the Habitats and Birds Directives) or developments in other policy sectors (e.g. aspects of CAP reform like the strengthening of rural development and cross compliance provisions (see below). For the most part, available measures that are used to assess progress on the BAP stem from existing legislative instruments that entail obligatory reporting by Member States¹⁹⁰ such as Article 17 reporting in the Habitats Directive and Article 18 reporting in the Water Framework Directive. Where progress has been seen, therefore, it can reasonably be attributed to measures other than the BAP. The Habitats and Birds Directives in particular have led to positive steps forward in conservation, progress expressed by the advances in establishment of the Natura 2000 network and its expansion across new Member States. Similarly, recoveries seen in bird species targeted under the Birds Directive, such as the white-tailed eagle (*Haliaeetus abicilla*) attest to its impact. Consequently there is evidence that the Birds Directive has provided positive and significant conservation benefits for birds in the EU¹⁹¹. In particular the species that are the focus of Directive (i.e. those listed in Annex I) have seen greater population trend improvements since 1990 than other species within the EU-15, and this pattern is not evident for the two groups outside the EU-15. Nonetheless, as pointed out by stakeholders consulted in the context of this study¹⁹², it is possible that through bridging different measures, linking them strategically and strengthening reporting activities, the BAP enabled or boosted the progress seen relative to what may otherwise have been achieved. Furthermore it introduced coherence to biodiversity measures in the wider countryside (beyond Natura 2000 sites) and helped inject biodiversity concerns into other policy sectors.

In relation to the 6EAP priority action of promoting **research on biodiversity**, a number of initiatives have been launched at national and international levels to assess the socio-economic importance of natural ecosystems, including in particular the TEEB (The Economics of Ecosystems and Biodiversity) initiative. The mid-term review of the 6EAP also concluded that ‘the scale of the challenge faced means that additional approaches are needed and most importantly a way has to be found to make it economically interesting to protect bio-diversity’¹⁹³. In addition to providing financial support for the TEEB initiative, the

¹⁹⁰ Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010) Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

¹⁹¹ Donald P.F., Sanderson F.J., Burfield I.J., Bierman S.M., Gregory R.D. and Wliczky Z. (2007) International conservation policy delivers benefits for birds in Europe. *Science* 317:810-813.

¹⁹² Stakeholder consultation, Brussels workshop.

¹⁹³ CEC (2007), Communication from the Commission on the Mid-term review of the Sixth Community.

European Commission has launched several supporting studies to feed into the initiative. Efforts have also been made to improve **monitoring and assessment mechanisms**¹⁹⁴ and a proposal for a system of environmental accounts is currently being discussed by the European Parliament and the Council¹⁹⁵. These developments have resulted in an increasing recognition of the economic value of biodiversity and ecosystem services in the policy process and the newly agreed EU target and vision on post-2010 biodiversity policy¹⁹⁶ clearly recognises the benefits provided by biodiversity for human well-being.

LIFE+ is a development of earlier LIFE programmes which preceded the 6EAP (LIFE I: 1992-1995, LIFE II: 1996-1999, LIFE III: 2000-2006). Whilst it can be said that LIFE+ did not spring from the 6EAP, the two are intimately connected, with the 6EAP providing broad guidance on which projects and programmes should receive funding grants. As the only dedicated EU fund for the environment and biodiversity specifically established to support those undertakings which do not qualify under other financial instruments yet which generate added value for the EU, the LIFE programme can be viewed as *the* financial instrument associated with the series of Environmental Action Programmes¹⁹⁷. The relationship between the two can therefore be articulated as mutualistic, each reinforcing and propelling the other.

Whilst it is too early to gauge the impacts on biodiversity of measures funded under LIFE+, projects established under the previous LIFE programmes have been highly successful, contributing to improvements in the condition of many Natura sites and habitats and species of Community interest through management and restoration efforts. The actual impact on biodiversity overall cannot be discerned on the basis of available data, although project monitoring itself is robust. LIFE projects are typically effective and resource efficient, with their success grounded in good conception, management and monitoring, the involvement of nature conservation organisations with high levels of commitment and expertise in the field, and finally the meaningful involvement of stakeholders, which facilitates implementation and long-term project effectiveness. The mid-term evaluation of the LIFE+ Regulation¹⁹⁸ reports very positively on the Nature and Biodiversity component, which as well as continuing to be a key mechanism in the implementation of biodiversity objectives is leading to the achievement of more structured and integrated projects and greater use of networking and experience sharing. However, the success enabled by LIFE+ is very concentrated, concerns a small proportion of all conservation projects and focuses on certain species and habitats within the bounds of the Natura 2000 network as dictated by the eligibility criteria of the LIFE+

¹⁹⁴ EEA (2010), EU 2010 Biodiversity Baseline, Technical report No 12/2010.

¹⁹⁵ Proposal for a Regulation of the European Parliament and of the Council on European environmental economic accounts, (COM(2010)132).

¹⁹⁶ Environmental Council Conclusions 7536/10, March 2010, and CEC, (2010). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Options for an EU vision and target for biodiversity beyond 2010 (COM(2010)4).

¹⁹⁷ Medhurst J., Franckx L. and Schoeters K.(2010) Mid-term evaluation of the implementation of the LIFE+ Regulation – Final Report. GHK, with Arcadis and VITO.

¹⁹⁸ Medhurst J., Franckx L. and Schoeters K.(2010) Mid-term evaluation of the implementation of the LIFE+ Regulation – Final Report. GHK, with Arcadis and VITO.

Regulation. The absolute impact on biodiversity in Europe and contribution to the 2010 objective is therefore likely to be slight.

1.2.1.2 Accidents and disasters

Relevant objectives

Article 6(2b) of the 6EAP on accidents and disasters calls for:

- ‘Promoting Community coordination to actions by Member States in relation to accidents and natural disasters by, for example, setting up a network for exchange of prevention practices and tools;
- developing further measures to help prevent major accident hazards (in particular those arising from pipelines, mining, marine transport of hazardous substances and developing measures on mining waste;’

Overview of measures

A number of initiatives have been adopted in relation to the prevention of accidents and natural disasters, including a number of focal areas that are not specifically mentioned in the 6EAP and reflect changes in policy priorities due to increased risks related to flooding, water scarcity and forest fires. Some of the key measures adopted include the following:

The **Communication on the prevention of natural and man-made disasters**¹⁹⁹ adopted in February 2009 aims to create a Community approach to reducing the impact of natural and man-made disasters within the EU. The Communication focuses on developing the knowledge base on disaster prevention (by building an inventory of information on disasters, sharing best practices, exchanging information, developing Community guidelines on hazard and risk mapping, and research); improving linkages between relevant actors and policies (through increased training and awareness activities, improving early warning tools and setting up a European network of Member State representatives); and improving the effectiveness of existing policy instruments with regard to disaster prevention (by efficient targeting of Community funds and taking disaster prevention into account in reviews of relevant EU legislation). The Commission is currently exploring mechanisms for regular reviews of Member State prevention and preparedness policies²⁰⁰.

European civil protection legislation on preparedness and response was strengthened in 2007 with the adoption of a reinforced **Community Civil Protection Mechanism** (Council Decision 2007/779/EC) and **Civil Protection Financial Instrument** (Council Decision 2007/162/EC). These instruments aim to facilitate cooperation on the provision of civil protection assistance in the event of major emergencies which require a rapid response. The Community Civil Protection Mechanism has a number of tools which aim to facilitate

¹⁹⁹ CEC, (2009), Communication from the Commission - A Community approach on the prevention of natural and man-made disasters, (COM(2009)82)

²⁰⁰ CEC (2010), Towards a stronger European disaster response: the role of civil protection and humanitarian assistance, (COM(2010)600)

adequate preparedness and an effective response to disasters including the Monitoring and Information Centre and the Common Emergency Communication and Information System.

The Communication on an **EU Strategy for supporting Disaster Risk Reduction in developing countries**²⁰¹ aims to assist in reducing the risk and impact of natural disasters in 'high-risk' countries. Priority areas for action include: strengthened political dialogue with developing countries on Disaster Risk Reduction (DRR); integration of DRR in EU and developing countries' policy and action and EU support for developing countries' national risk reduction planning, policies and investments; and development of regional action plans on DRR for disaster-prone regions, to develop existing EU DRR projects and programmes, and to complement existing initiatives such as the Global Climate Change Alliance (GCCA). The implementation plan of the EU DRR Strategy is expected to be adopted in late 2010.

A series of disasters in the summer of 2010 led to calls for further coordination of Community action in relation to disaster response and in October the Commission presented proposals to further **reinforce the EU's disaster response capacity**²⁰². The central idea underlying the Communication is that Europe needs to move away from an ad hoc response to disasters to one which is pre-planned, predictable and immediate. At present, the deployment of EU assets is based on voluntary offers of assistance and there is an inevitable degree of improvisation with decisions sometimes being delayed in some cases. In order to ensure key assets can be mobilised swiftly and deployed instantly, the Communication proposes to develop a European Emergency Response Capacity (comprising *inter alia* of reference scenarios, mapping of Member States' civil protection assets, contingency plans, reinforced transportation arrangements and a voluntary pool of Member States' resources on standby for participation in European response operations) and an Emergency Response Centre as a new platform for more effective coordination of EU disaster response operations.

In 2003, a Community scheme for a harmonised and long-term **monitoring of European forest ecosystems** for the period of 2002-2006 was adopted (Regulation (EC) No 2152/2003). In the context of the Forest Focus Regulation, a European Forest Fire Information System (EFFIS) was established to provide information for the protection of forests against fire in Europe. In addition, the 2006 Forest Action Plan (COM(2006)302) provides further policy support for EU level actions on preventing forest fires (see section 1.2.1.6). Since the expiry of the Forest Focus Regulation in 2006, monitoring needs have been carried out and financed in the context of LIFE+ funding for 2007-2013 (Regulation (EC) No 614/2007).

Directive 2007/60/EC on the **assessment and management of flood risks** aims to reduce the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods. It requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and

²⁰¹ CEC (2009b), Communication on an EU Strategy for Supporting Disaster Risk Reduction in Developing Countries, (COM(2009)84)

²⁰² CEC (2010), Towards a stronger European disaster response: the role of civil protection and humanitarian assistance, (COM(2010)600)

humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.

A number of measures have also been adopted that relate to the 6EAP's priority actions on **accident hazards** including the **Seveso II Directive** on the control of major-accident hazards involving dangerous substances adopted in 1996 and amended in 2003 to cover risks arising from storage and processing activities in mining (Directive 2003/105/EC) and the Directive on the **management of waste from extractive industries** adopted in 2006 (Directive 2006/21/EC) which aims to provide for measures, procedures and guidance to prevent or reduce the adverse effects of the management of waste from the extractive industries on the environment and human health. A proposal to revise the Seveso II Directive was presented by the Commission in December 2010²⁰³. The revision aims to align the Directive to changes to the EU system of classification of dangerous substances, strengthen requirements relating to public access to information on the safety of industrial installations and improvements to the way information is collected and managed, and introduce stricter standards for inspections of installations.

With regards to the 6EAP priority action on developing further measures to help prevent **major accident hazards from pipelines**, the Commission had previously reviewed pipeline safety and had for example set up groups of experts in this area²⁰⁴. However, the 6EAP left the nature of the 'further measures' to be taken open, and given that high quality, non-binding recommendations developed at international level (UNECE²⁰⁵, OECD²⁰⁶) are already available and as the pipeline sector is further developing and changing (LNG, CO₂), no legislative proposals for pipelines at EU level have been made to date. The Commission will however revisit the issue in 2011 with a study examining the case for possible action.

Contribution of measures to achievement of 6EAP objectives

Other than a reference to the 6EAP in Council Conclusions²⁰⁷ on the **Communication on disaster prevention**, in particular Article 5(3) on adaptation to climate change, Article 6(2b) on accidents and disasters and Article 6(2c) on a Soil Thematic Strategy; the 6EAP was not explicitly referred to in the political debate. However, there has been increasing recognition that climate change has been a key factor contributing to the increased frequency and magnitude of extreme meteorological events and the link between climate change, more frequent natural disasters, and environmental degradation is stated in the Communication

²⁰³ CEC (2010), Proposal for a Directive of the European Parliament and of the Council on control of major-accident hazards involving dangerous substances, (COM(2010)781), 21/12/2010

²⁰⁴ Commission Decision of 11 June 2003 setting up a group of experts to advise the Commission on a strategy for dealing with accidents in the transport sector (2003/425/EC)

²⁰⁵ UNECE Safety Guidelines and Good Practices for Pipelines ECE/CP.TEIA/2006/11), http://www.unece.org/env/documents/2006/teia/ECE_CP.TEIA_2006_11%20E.pdf

²⁰⁶ OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response, pipeline chapter (p.170), <http://www.oecd.org/dataoecd/10/37/2789820.pdf>

²⁰⁷ Council of the European Union, (2009), Council Conclusions on a Community framework on disaster prevention within the EU, 15394/09, 12 November 2009

itself and in the opinions of the EU institutions on the Communication^{208,209,210}. The influence of climate change has also been used to make the case for EU action in the area²¹¹. Thus, environmental aspects, in particular climate change have been an influential factor in the debate on the Communication.

The proposals set out in the Communication on disaster prevention are likely to meet the 6EAP's objectives relating to improved coordination of Member State action on accidents and natural disasters. In particular, the establishment of a network of Member State representatives should improve cooperation among competent authorities and provide a forum for the exchange of prevention practices and tools and the development of recommendations on policy coordination measures. The network should also make it possible to apply best practice in the event of disasters. The development of guidelines and lessons learnt could have immediate benefits at a relatively limited cost at EU and national level²¹², while the creation of an inventory of information would improve the exchange of information and would make it possible to draw up risk maps, as provided for in the floods Directive.

Despite these potential positive impacts on coordination, the Communication has been criticised for not advancing further measures (other than the proposed network) that specifically aim to step up cross-border exchange of information, experience and good practices²¹³. Further action has been called for including the development of guidelines on minimum standards for hazard-specific disaster prevention, initiatives for disaster prevention including proposals for instruments to review disaster prevention actions, e.g. through sharing experiences and best practices²¹⁴, and for legislative instruments similar to the floods Directive to promote the adoption of an EU policy on water scarcity, drought and adaptation to climate change²¹⁵. Furthermore, although the 6EAP objectives fall under the nature and biodiversity thematic area, the proposals in the Communication mainly deal with threats to

²⁰⁸ EESC, (2009), Opinion of the EESC on the Commission Communication - A Community approach on the prevention of natural and man-made disasters, NAT/438, 1/10/2009

²⁰⁹ Committee of the Regions, (2009), Opinion of the Committee of the Regions on A Community approach on the prevention of natural and man-made disasters, DEVE-IV-042, 5-9 October 2009

²¹⁰ European Parliament, (2010), European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI))

²¹¹ CEC, (2009a), Commission Staff Working Document, Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man-made disasters, Impact Assessment, (SEC(2009)202)

²¹² CEC, (2009a), Commission Staff Working Document, Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man-made disasters, Impact Assessment, (SEC(2009)202)

²¹³ Committee of the Regions, (2009), Opinion of the Committee of the Regions on A Community approach on the prevention of natural and man-made disasters, DEVE-IV-042, 5-9 October 2009

²¹⁴ Council of the European Union, (2009), Council Conclusions on a Community framework on disaster prevention within the EU, 15394/09, 12 November 2009

²¹⁵ European Parliament, (2010), European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI))

the environment in general and rarely specifically address biodiversity related concerns. Taking biodiversity aspects into consideration would be important, given that moderate natural disturbances (e.g. flooding and fire) form an integral part of the functioning of several ecosystems (e.g. the existence of several species) and the mitigation of natural hazards may also have negative effects on biodiversity.

1.2.1.3 Soil protection

Relevant objectives

Soil issues are introduced into the 6EAP with the statement that ‘soil is a finite resource that is under environmental pressure’ (specified in recital 22). Action is explicitly required to protect soils under:

Article 6(1) of the 6EAP, which focuses on action on nature and biodiversity and sets out the objective of the ‘promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification’ and;

Article 6 (2c) expressly requires the delivery of a *thematic strategy on soil protection* as one of a number of priority actions to be undertaken in order to deliver the 6EAP’s nature and biodiversity objectives. Under this Article the Soil Thematic Strategy is required to address ‘the prevention of, *inter alia*, pollution, erosion, desertification, land degradation, land-take and hydrogeological risks taking into account regional diversity, including specificities of mountain and arid areas’.

Addressing the question of soil protection at the EU level was, therefore, one of the objectives of the 6EAP with, at least, the initial means of doing so specified as the adoption of a Thematic Strategy.

While action on soils was prescribed in the 6EAP in order to deliver objectives under the nature and biodiversity heading, the interactivity between soils and other environmental media, i.e. air and water, mean that effective soil protection could also contribute to the delivery of other 6EAP objectives²¹⁶. This includes contributing to: climate change mitigation specifically reducing emissions in other sectors and particularly within agriculture (specified in Article 5(2v) of the 6EAP); supporting adaption to climate change (specified in Article 5(3) of the 6EAP); and aiding delivery of the sustainable use and high quality of water (required under Article 7(2e) of the 6EAP).

Overview of measures

The EU has adopted two key strategic policy documents relating to the protection of soils: Towards a Thematic Strategy for Soil Protection²¹⁷; followed by the final **Thematic Strategy**

²¹⁶ European Parliament, Policy Department Economic and Scientific Policy (2008) Land degradation and desertification, drafted by the Institute for European Environmental Policy, available at: http://www.ieep.eu/publications/pdfs/briefingsonclimate/land_degdesert.pdf?PHPSESSID=1c587208100ffd64890e60533d7aa635

²¹⁷ CEC (2002), COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS: Towards a Thematic Strategy for Soil Protection, (COM(2002)179)

for Soil Protection²¹⁸. The former in essence scoped out the state of the challenge in terms of protecting soils in Europe, setting out the basis for the final Soil Thematic Strategy. The overall objective of the Soil Thematic Strategy is the protection and sustainable use of soil. Under the Thematic Strategy there is a twin focus on preventing further degradation and preserving its functions; and restoring degraded soils to a level of functionality consistent with at least the current and intended use. The Thematic Strategy was built around four pillars for action: the development of framework legislation aimed at the protection and sustainable use of soils; the integration of soil protection into national and community policies; closing recognised knowledge gaps; and increasing public awareness.

During the development of the Soil Thematic Strategy the need for a more holistic EU policy approach to soil protection was identified (originally, a number of different policy documents focused largely on research and the monitoring of soils quality were envisaged). Largely in response to calls from stakeholders and experts involved in the development of the Thematic Strategy, a **proposal for a Directive establishing a framework for the protection of soil**²¹⁹ was presented alongside the Thematic Strategy. This was intended as the primary legislative measure aimed at delivering the desired protection and restoration of Europe's soils. The proposed Directive sets out legislative action to address soil protection in Europe focused largely on the identification of areas at risk of loss of soil function, their protection and remediation. Proposed in 2006, this measure has been blocked during co-decision by a minority of Member States.

Prior to the adoption of the Soil Thematic Strategy, EU policy did not address soil issues in an integrated manner. However, given the multifaceted nature of soil's interactions with water, biodiversity, land management, climate change mitigation and adaptation, the EU acquis has impacted on soil management issues indirectly. The 6EAP objective for the protection of soils, i.e. the 'promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification', if broadly interpreted, can be considered to encompass a wide range of activities both aimed at addressing land that is already degraded and importantly preventing the ongoing deterioration of soil functions during use. As a consequence it should provide justification for action to combat the vast majority of environmental issues pertaining to soils. The following list of EU laws and policies, while not aimed at delivering soil protection directly, have or will have an indirect affect on soil management in Europe.

In the **water field**, the Water Framework Directive (2000/60/EC), with its emphasis of river basin management to deliver good status of water bodies, interacts closely with soil protection. Many mechanisms for improving water quality are related to soil management especially the leaching of nutrients, contaminants and erosion of soils. Other examples of water focused EU laws that also act to protect soils, particularly the contamination of soils, include the Nitrates Directive (91/676/EEC) and Groundwater Directive (2006/118/EC).

²¹⁸ CEC (2006): COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS : Thematic Strategy for Soil Protection, (COM(2006)231)

²¹⁹ CEC (2006): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for the protection of soil and amending Directive 2004/35/EC, (COM(2006)232)

Moreover, the requirement under the Flood Risk Management Directive (2007/60/EC) to consider flood risk also touches on issues of soil compaction, soil sealing and the loss of soil structure, all of which can increase the intensity of flood events.

Land management and the degradation of soils are often closely linked to **industrial activities, waste management and agricultural activities**. As a consequence, measures that require better environmental management in these fields also indirectly require the protection of soils. For example the Integrated Pollution Prevention and Control Directive (2008/1/EC) requires that the permits of the installations covered by it include appropriate requirements ensuring protection of the soil and groundwater, while the National Emissions Ceilings Directive (2001/81/EC) requires reductions in air emissions potentially helping to protect against land contamination and/or its acidification. Similarly the Waste Framework (2006/12/EC revised as 2008/98/EC), Landfill (99/31/EC) and Mining Waste (2006/21/EC) Directives all require better management of waste materials limiting the leaching of contaminants and reducing soil contamination from these activities. Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market, Directive 128/2009/EC establishing a framework for Community action to achieve the sustainable use of pesticides, and the Sewage Sludge Directive (86/278/EEC) also actively limit the availability of contaminants in the environment, and more specifically the application to land.

In the **climate** field, the importance of soil in mitigation and adaptation policy is rising up the agenda, although as yet this is not formally addressed in an integrated way within EU legislation. The White Paper on Adapting to Climate Change (COM (2009)147) recognises the importance of soil functions. Moreover, the Renewable Energy Directive (2009/28/EC) recognises the importance of protecting land with high carbon stores by excluding such land from the production of crops to produce biofuels and bioliquids within sustainability criteria specified in Article 17 of the Directive.

Other EU measures potentially require more proactive efforts to protect soils. Specifically the Liability Directive (2004/35/EC) sets out rules in terms of liability and restoration of land in the event of a contamination. In the agricultural sector, certain aspects of soil protection are integrated into cross compliance which sets a legal reference level for farmers receiving direct payments (in detail below).

[Contribution of measures to achievement of 6EAP objectives](#)

The **Soil Thematic Strategy** is the key policy measure at the EU level that currently deals in an integrated way with soil protection issues. The Strategy primarily focuses on explaining the need for the actions that emerge within its conclusions, i.e. the need for EU level legislative action to address soil protection in the form of a proposal for a Framework Directive on soil protection. In terms of meeting the objectives of the 6EAP related to soil, the adoption of the Soil Thematic Strategy meets the objective under Article 6(2c), i.e. the **requirements to adopt a Thematic Strategy on soil protection**. Moreover, through the extensive stakeholder consultation process that supported the development of the Soil Thematic Strategy and the coverage of the 'Towards' document, the key priorities to be considered, i.e. prevention of, *inter alia*, pollution, erosion, desertification, land degradation, land-take and hydrogeological risks were considered within the process to develop the Thematic Strategy. Dedicated working groups were established on contamination, erosion,

research, monitoring, organic matter and biodiversity, which were overseen by an advisory group. Although desertification was not explicitly covered in these discussions, desertification itself is considered to be the long-term result of the interaction of different land degradation processes, which can be accelerated under severe drought conditions and can occur under very diverse climatic conditions. The UN Convention to Combat Desertification defines this as the land degradation in arid, semi-arid, and sub-humid areas due to anthropogenic activities. Therefore, while dedicated work was not conducted on this, the focus in particular on organic matter decline and erosion could be considered to address this issue indirectly²²⁰.

The Soil Thematic Strategy was intended to be a vehicle to deliver the higher order objective under Article 6(1) of the 6EAP of the '**promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification**'. With regard to three of the four pillars of the Strategy, the objective has been largely met. Under the first pillar, involving the integration of soil protection into national and community policies, efforts have been made on the integration of aspects of soil protection in the relevant EU policies, such as the 2008 reform of the CAP ('Health Check') and the 2010 review of the IPPC Directive. Synergies between soil aspects and other environmental objectives have been part of the focus in the ongoing implementation of the Nitrates Directive, as well as in the Rural Development Programmes 2007 – 2013. At national levels, several Member States included relevant soil actions, such as the remediation of contaminated sites, in the programme of measures funded under the Cohesion and Structural funds in the period 2007 – 2013. Also at national levels, the GAEC standards, particularly those relevant to soil erosion, have been adopted by Member States, although the standards display varying level of ambition. As an example of integration of soil concerns in response to the 6EAP, the new industrial emissions Directive 2010/75/EU²²¹ is a case in point. The new legal text presents an important change in the requirements relating to the necessity to ensure protection of soil when an industrial operation is discontinued, which were too vague to achieve an actual change in practice in the legal text of the previous Directive (see below).

Under the second pillar of the Thematic Strategy involving work on closing knowledge gaps, a number of studies undertaken by DG RTD, DG ENV and under the LIFE+ programme have considerably improved the existing body of knowledge in the area of soil protection. This includes a number of studies covering such issues as soil biodiversity, sustainable agriculture and soil conservation, existing information on interrelations between soil and climate change, soil protection aspects in programmes of measures adopted by Member States, etc²²². A significant piece of work directly stimulated by the adoption of the Strategy

²²⁰ For a discussion on how soil protection addresses the issue of desertification, see Bowyer, C., et al, (2009), Land degradation and desertification, Study for European Parliament's Committee on the Environment, Public Health and Food Safety, Contract reference number: IP/A/ENVI/FWC/2006-172/LOT1/C1/SC20, http://www.ieep.eu/publications/pdfs/briefingsonclimate/land_degdesert.pdf

²²¹ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJL 334/17, 17/12/2010

²²² Turbé, A. et al (2010) Soil biodiversity: functions, threats and tools for policy makers. Report for the European Commission, DG ENV; Schils, R. et al, (2008) CLIMSOIL: Review of existing information on the interrelations between soil and climate change; Joint Research Council (2009) Sustainable Agriculture and Soil Conservation. Available at

under the 6EAP, is soil sampling taken under the LUCAS project (Land Use and Cover Area Frame Sample Survey) by the Joint Research Centre of the European Commission and Eurostat²²³. The LUCAS project was initially set to obtain harmonised data at EU level only on land use and land cover and agri-environmental features, as well as providing a common methodology and a generic in situ data collection platform. In 2009 it was extended to include EU-wide soil sampling. This data will be used for analysis of the quantity of organic matter and more generally the carbon dynamics in soil, for updating the European soil database and soil map, as input for the European soil erosion model and for the assessment of acidification processes. However more efforts are needed despite the actions under the 6EAP. This relates to the lack of harmonised information at EU level concerning soil conditions in this highly challenging field, linked with uncertainties involved in measurements characterising soil conditions, complexities in developing a sufficiently robust suite of indicators to facilitate soil monitoring, and incompleteness and inconsistency of the elements of soil monitoring in place in various Member States. As a result, the existing information base is piecemeal (e.g. estimates on soil erosion under the PESERA project, soil organic matter under the JRC LUCAS projects, data on contaminated sites collected by the EEA etc). This information is not updated and non-harmonised. Soil monitoring is therefore one of the clear knowledge gaps that have not been closed under the 6EAP. This leads to difficulties in undertaking more robust, evidence based impact assessments for soil under specific sectoral policies. Overall, however, with regard to the second pillar of the Soil Strategy, it can be argued that 6EAP objective has been materialised.

Under the third pillar of the Strategy, aimed at increasing public awareness, a number of achievements are also undisputed. The adoption of the Soil Strategy, prompted by the 6EAP, led to several EU-wide stakeholder conferences on soil related issues, attended by scientists, Member States' representatives, civil society and other stakeholders. This rising public awareness has been one of the decisive factors in deepening stakeholders' engagement in processes leading to the above mentioned legislative changes.

In light of the above mentioned successes, the failure of the process in relation to the adoption of the legal proposal for the Soil Framework Directive to date is a serious barrier to be taken into account in assessing the soil related goals of the 6EAP. Due to the fact that the legal proposal is blocked in the Council by a blocking minority group of Member States, its potential to stimulate a more pronounced shift in soil management practices in the EU has not come to fruition. The fact that a structured and integrated legal framework for coherent actions to protect Europe's soils has not been put in place under the 6EAP, unfortunately lessens the impacts of other efforts taken under the Soil Thematic Strategy, without making them insignificant either.

Were the **proposed Soil Framework Directive** to be adopted, it would potentially have a

<http://soco.jrc.ec.europa.eu/documents/EUR-23820-web.pdf>; Hudec, B. et al (2007) Evaluation of soil protection aspects in certain programmes of measures adopted by Member States; Report for the European Commission, DG ENV.

²²³ Eurostat, (ongoing) LUCAS: Land use and Cover Area Frame Sample Survey; a pilot project launched following [Decision 1445/2000/EC](#) of 22 May 2000 on the application of aerial-survey and remote-sensing techniques to the agricultural statistics; JRC (ongoing) LUCAS – soil sampling: progress reports available at <http://eusoils.jrc.ec.europa.eu/projects/Lucas/>.

significant impact on soil protection and retention of soil functions in Europe. In particular, in its current form, the Directive would require, as a minimum, the identification of soils at the greatest risk of loss of soil functions and actions to address this. The effectiveness of action and oversight would, however, be dependent upon the final form of the Directive and this in turn would be dependent on the level of ambition within the final compromise text agreed by the Council and Parliament. The coverage of the proposed Directive text, set out by the Commission, is more focused on addressing past damage rather than taking proactive steps to wholesale improve the management of Europe's soils or protect valuable soils. The original proposed text is likely to aid the prevention of further degradation of Europe's most high risk soils, but the Directive alone would be unlikely to deliver the wholesale sustainable use of Europe's soils.

Given the incomplete legal framework for soil action at the EU level, measures under a number of EU policies have to be taken into account when addressing actual shifts in soil management under the 6EAP. Without the coherent legal framework, and before the completion of a coherent soil database with sufficient sampling analysis, the relative contributions of specific **sectoral measures** in improving (or worsening) the state of Europe's soil cannot be definitively ascribed to these sectors and any assessment is based on a range of different policy data tools and concepts. Therefore the following assessment of policy measures should be understood as an overview rather than an in-depth ranking of impacts.

First of all, a considerable knock-on impact on soil of the measures aimed at the protection of surface and ground waters under the **Water Framework Directive** has been demonstrated by some recent studies, particularly when the measures entail land management and agriculture. Such a knock-on impact may be reinforced in future when the river basin management plans (RBMPs) are implemented. The potential impact of the implementation of the RBMPs on soils derives from the emphasis within the RBMPs on the examination of local factors that impact on the quality and quantity of water, which it is assumed will lead to findings on the aspects of surface water contamination associated with soils and the role of soil as a vector for flows into surface water bodies²²⁴.

Secondly, changes that took place in the regulation of practices impacting on soil in the industry sector since 2002 are also of significant importance when assessing the influence of the 6EAP. The relevant policies are the IPPC Directive, Liability Directive and EU requirements for the better management of waste and waste treatment activities (although effectiveness of implementation varies according to Member State). One specific example to demonstrate the role of the 6EAP in the regulatory progress with an expected impact on efficiency of actual measures involving soils can be found in the proposal for a Directive on **industrial emissions**, subsequently adopted in 2010²²⁵. The requirements of the previous legal text regarding the necessity to ensure the protection of soil when an industrial operation

²²⁴ Joint Research Council (2009) Sustainable Agriculture and Soil Conservation. Available at: <http://soco.jrc.ec.europa.eu/documents/EUR-23820-web.pdf>

²²⁵ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJL 334/17, 17/12/2010

is discontinued (Art.3 and 9 of Directive 96/61/EC), were too vague to enforce changes in actual practices, and have been considerably clarified in the new legal text. In an explicit reference to the Soil Thematic Strategy, thereby implicitly referring to the 6EAP, the new Directive requires that a baseline report is established by the operators to provide the specific information necessary to determine the state of soil and groundwater contamination when starting an operation. This will enable operators to make a quantified comparison with the state upon definitive cessation of activities.

Furthermore, a range of measures which impact on the protection of **agricultural soils** under the CAP have to be taken into account even though a complete assessment of the relevance of the 6EAP is unfeasible at present. This is because, firstly, such an assessment would need to investigate jointly the benefits and the negative impacts of agricultural practices across the EU, both of which would require a longer time series of data than can be yielded from assessments and monitoring outputs under the Soil Strategy as well as under the current Rural Development Regulation. Secondly, given the high variation in agronomic, bio-physical and environmental conditions across the EU, and given the fact that soil impacts from land management and agriculture occur at the very interface between natural processes and human activity, assessment of agricultural soils involves some challenges, complexities and uncertainties never met in assessments of industrial sectors. Important elements of soil protection have become built in, undoubtedly as part of the accelerating dynamic of environmental integration in agricultural policy partly stimulated by the 6EAP, and integrated into cross compliance which sets out a legal reference level for farmers receiving direct payments (Article 5 of Council Regulation 1782/2003/EEC). As part of cross-compliance, farmers are obliged to maintain all agricultural land in Good Agricultural and Environmental Condition (GAEC). This entails compliance with compulsory standards relating to soil erosion and maintenance of soil organic matter and, where optional standards have been set by Member States, with standards on soil structure. These standards are specified at national level. The national approach to developing soil measures under GAEC reflects the variations in farming systems, soil and climatic conditions. But due to varying level of ambitions by Member States, it is also one of the main reasons why the robustness of soil protection on agricultural soil under GAECs varies widely across the EU²²⁶. Additional information on aspects of soil protection in agricultural policy is provided in the following section.

1.2.1.4 Integration of biodiversity considerations in agricultural policies

Relevant objectives

Article 6 (2f) of the 6EAP sets out the following objectives of relevance to agriculture:

'Promoting the integration of biodiversity considerations in agricultural policies and encouraging sustainable rural development, multifunctional and sustainable agriculture through:

²²⁶ Alliance Environnement (2007) Evaluation of the Application of Cross Compliance as Foreseen under Regulation 1782/2003, a report for the European Commission. Available at http://ec.europa.eu/agriculture/eval/reports/cross_compliance/index_en.htm

- Encouraging full use of current opportunities of the Common Agricultural Policy and other policy measures;
- Encouraging more environmentally responsible farming, including, where appropriate, extensive production methods, integrated farming practices, organic farming and agro-biodiversity, in future reviews of the CAP, taking account of the need for a balanced approach to the multifunctional role of rural communities;'

Overview of measures

There are two main measures concerning the Common Agricultural Policy (CAP) that have the potential to contribute to the objectives of the 6EAP.

The **European Agricultural Fund for Rural Development (EAFRD) Regulation**²²⁷ lays down the general rules governing Community support for rural development, pertaining to the aims of rural development as set out in the Community Strategic Guidelines for Rural Development²²⁸. As such, the EAFRD Regulation sets out the priorities and measures of the fund which contribute to improving the competitiveness of agriculture and forestry, the rural environment and quality of life, and management of economic activity in rural areas. The strategic priorities for Rural Development Policy for 2007-2013 include the following:

- Improving the competitiveness of agriculture and forestry through training and advisory services, modernisation and innovation in agriculture, and developing high-quality food chains.
- To protect and enhance the environment and countryside, with particular emphasis on three priority areas: biodiversity and the preservation and development of high nature value farming and forestry systems and traditional agricultural landscapes; water; and climate change.
- Improving the quality of life in rural areas and encouraging diversification, by the creation of employment opportunities and conditions for growth and promoting training, information and entrepreneurship to encourage rural vitality.
- Building local capacity so that rural communities are able to determine their local needs and then take responsibility for developing and implementing the solutions themselves.

These strategic priorities form the basis for all national and regional Rural Development Programmes (RDPs). The second priority is the most relevant to the objectives of the 6EAP.

Council Regulation (EC) No 73/2009 provides rules for direct payments for farmers and includes cross compliance and specific support options under Article 68. The cross compliance mechanism links direct payments to farmers with compliance with environment, food safety, animal and plant health requirements. The two key elements of cross compliance are statutory management requirements (SMRs) and the obligation of Good Agricultural Environmental Conditions (GAEC). The first of these refers to legislative

²²⁷ Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

²²⁸ Council Decision of 20 February 2006 on Community strategic guidelines for rural development (programming period 2007 to 2013) (2006/144/EC)

standards, while the second refers to a range of standards related to soil and water protection and biodiversity which are imposed on farmers in receipt of the direct payments.

Article 68 gives Member States an element of flexibility in the way they spend direct payments by allowing them to divert up to 10% of the national ceiling of Pillar 1 payments into national envelopes, which can be used for a variety of purposes. A majority of Member States have chosen to use Article 68 to introduce sector specific payments to support production in the dairy sector for example. Some Member States, including Italy, Portugal, Denmark, Spain and France intend to use the payment to introduce new agri-environment type measures which would support environmental activities in line with 6EAP objectives.

Contribution of measures

Within **Regulation (EC) No 73/2009**, cross-compliance and Article 68 are the two measures most likely to contribute to the environmental objectives of the 6EAP. These two measures have developed out of a broader dynamic of environmental integration in agricultural policy, from an incipient concern with farmland habitats and landscapes in the 1980s to a fuller and more strictly legislated environmental integration after 2003. Table 1 documents the contribution of the CAP Reforms in 2003 and 2008 to raising environmental performance of the EU agriculture, while setting them in the context of the previous reforms.

Table 1: Elements of CAP Reforms that have influenced the environmental performance of agriculture

Year	Key reforms (Regulation No.)	Environmental measures
1985	Council Regulation EEC 797/85	Provisions allowing Member States to introduce zonal schemes designed to protect the farmland habitats and landscapes of Environmentally Sensitive Areas from the threat of agricultural intensification. (Art 19)
1987	Council Regulation EEC 1760/87	Permitted Member States operating 'Article 19' schemes to claim up to 25% of the cost of payments from the CAP budget.
1992	MacSharry Reforms – introduction of Regulation 2078/92	<p>Agri-Environment measure became more central to the CAP as one of a number of 'accompanying measures'. It was made compulsory for all Member States to implement agri-environment schemes which provided payments for 'using agricultural land which are compatible with protection and improvement of the environment, the countryside, the landscape, natural resources, the soil and genetic diversity' (Article 1c).</p> <p>Article 1e introduced provisions for the (voluntary) long-term set-aside of agricultural land for reasons connected with the environment</p> <p>Introduction of headage payments for livestock, including the Beef Special Premium (BSP) and the Suckler Cow Premium (SCP)</p>
1999	Agenda 2000 – Introduction of Council Regulation 1259/1999	<p>Range of environmental and socio-economic measures brought together under the 'Rural Development Regulation', and given a more prominent role within the CAP as the 'Second Pillar'.</p> <p>Modulation introduced on a voluntary basis</p> <p>The basis of support for Less Favoured Area (LFA) payments on livestock farms moved from headage to area.</p>
2003	2003 CAP Mid-Term Review – Introduction of Council Regulation 1782/2003	<p>Introduction of:</p> <ul style="list-style-type: none"> • Decoupling of main support payments in Pillar 1; several variations and timescales permitted • cross-compliance • Article 68 – up to 10% of decoupled payments able to be used for 'specific types of farming and quality production' • Modulation becomes compulsory for EU-15 (3%

		<p>in 2005 rising to 5% from 2007)</p> <ul style="list-style-type: none"> • UK, FR, DE allowed to continue to administer voluntary modulation to honour existing commitments until January 2007
2005	Introduction of the European Agricultural Fund for Rural Development (EAFRD) – Council Regulation 1698/2005	Builds on the Rural Development Regulation, organising measures under 3 axes supporting ‘competitiveness’; the environment; and quality of life. Member States required to spend a minimum of 25% of their budget on land management, including environmental measures under Axis 2.
2008	<p>CAP ‘Health Check’ –</p> <p>Council Regulation 73/2009 – replacing Council Regulation 1782/2003;</p> <p>Council Regulation 74/2009 – amending Council Regulation 1698/2005</p>	<ul style="list-style-type: none"> • Abolition of set-aside • Further decoupling required for majority of sectors apart from suckler cows, sheep and goats • Article 69 on ‘specific types of farming and quality production’ made more flexible – becomes Article 68 ‘support for specific areas’ • Extension of cross-compliance requirements • Compulsory modulation – higher standard rates (up to 10% in 2012), plus a progressive element introduced (higher rates for larger farms). Extended to EU-10 for first time, and Romania/Bulgaria from 2012 • Requirement to target additional modulation receipts to ‘new challenges’ of biodiversity, water management, renewable energies and the dairy sector

Source: adapted from Hart, K. and Baldock, B. (2010), Impact of CAP reforms on the environmental performance of agriculture. A report to the OECD from IEEP

From this information it is apparent that biodiversity concerns, under the general headline of environmental performance of agricultural policy, have gained increasing attention in the CAP reforms since the 1980s. Increasing emphasis has also been placed on setting up a regulatory baseline in relation to the environment, including the tools for enforcing compliance with the Bird and Habitats Directives in the agricultural sector. Table 2 sets out the elements of the regulatory baseline introduced as part of the 2003 reform, including cross-compliance, as well as environmental standards introduced as part of previous reforms. Making cross compliance requirements a condition for farmers’ receipt of direct payments helps to improve compliance with basic standards enshrined in EU legislation such as the Birds and Habitats Directives, helps to avoid land abandonment and to ensure that agricultural land is maintained in good agricultural and environmental condition. Member States have the authority to reduce or withhold direct payments made under the CAP if the farmer fails to comply with any of these requirements.

Table 2: The development of environmental conditionality within the CAP

Date	Type of Support	Sectors	Conditionality
1992 MacSharry CAP Reform Implemented from 1994	Livestock headage payments; Set-aside.	Beef cattle and sheep	'Appropriate Environmental Measures' Member States given the option to attach 'environmental measures' to receipt of payments. Maximum Stocking Densities Recipients of beef payments required to comply with maximum stocking densities.
		Arable	Member States to apply appropriate measures to ensure set-aside is managed with a view to protecting the environment.
1999 Agenda 2000 CAP Reform Implemented from 2000	Direct Payments based mainly on crop area or livestock numbers	All those in receipt of direct payments.	'Environmental Protection Requirements' Member States to introduce appropriate environmental measures, which could include: General mandatory environmental requirements. Specific environmental requirements constituting a condition for direct payments. Member States were permitted to introduce penalties (reduction or withdrawal of payments) for not complying with environmental requirements.
		Farmers benefiting from the Less Favoured Area (LFA) Compensatory Allowance or an agri- environmenpaym ent.	'Usual Good Farming Practice' Farmers benefiting from either payment were obliged to 'apply usual good farming practice compatible with the need to safeguard the environment and maintain the countryside, in particular by sustainable farming'
2003 Mid Term Review/ Fischler Reform Implemented from 2005	Decoupled Direct Payments	All those in receipt of direct payments under the Single Payment Scheme and Single Area Payment Scheme	'Cross Compliance' Farmers receiving direct payments required to respect: Statutory Management Requirements (SMRs). Standards for Good Agricultural and Environmental Condition (GAEC). Direct payment is reduced or withdrawn if the farmer is found to be non-compliant with SMRs or GAEC.

Source: Hart, K. and Baldock, B. (2010), Impact of CAP reforms on the environmental performance of agriculture. A report to the OECD from IEEP

While the EU and national legislative requirements relating to biodiversity apply to all land and the actors responsible for its management, irrespective of whether it is farmed or in receipt of public money, the GAEC standards, which include a number of varied biodiversity elements under both the compulsory and the optional standards, in contrast, only apply to agricultural land in receipt of the direct payment, and thus are more limited in their coverage. Table 3 sets out the issues covered by GAEC, underlining the minimum maintenance of features that are specific to biodiversity protection.

Table 3: Framework of issues and standards for Good Agricultural and Environmental Condition (GAEC)

Issue	Compulsory standards	Optional standards
Soil erosion: Protect soil through appropriate measures	Minimum soil cover	Retain terraces*
	Minimum land management reflecting site-specific conditions*	
Soil organic matter: Maintain soil organic matter levels through appropriate practices	Arable stubble management*	Standards for crop rotations**
Minimum level of maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats	Retention of landscape features, including, where appropriate, <i>hedges, ponds, ditches trees in line, in group or isolated and field margins**</i>	Minimum livestock stocking rates or/and appropriate regimes**
		<i>Establishment and/or retention of habitats**</i>
	Avoiding the encroachment of unwanted vegetation on agricultural land*	Prohibition of the grubbing up of olive trees*
	Protection of permanent pastures**	Maintenance of olive groves and vines in good vegetative condition*
<i>Protection and management of water: Protect water against pollution and run-off, and manage the use of water</i>	<i>Establishment of buffer strips along water courses (implemented by 2012)*</i>	
	<i>Where use of water for irrigation is subject to authorisation, compliance with authorisation procedures</i>	

Source: Annex III of Council Regulation (EC) No 73/2009

Note: Standards shown in italics were added in 2009. Standards marked by (*) are partly aimed to increase farm biodiversity protection and avoid biodiversity damage, and the standards marked (**) have a considerable potential for biodiversity protection.

Due to the relatively short time period that has elapsed since the introduction of cross-compliance in 2005, there is currently limited information available to assess the performance and impact of **cross compliance** on the environment. Its introduction has undoubtedly expanded the area of land subject to basic environmental management requirements and been more concrete and specific in biodiversity related requirements. Awareness of environmental requirements, including the Birds and Habitats Directives, has increased and some Member States have extended the baseline of environmental standards considerably, utilising their capacity to determine 'Good Agricultural and Environmental Conditions' to some degree according to national or regional priorities²²⁹. However, while farmers argue that cross compliance has brought about an excessive 'administrative burden', environmental organisations have argued that the potential of the cross compliance mechanism to deliver environmental benefits has not been maximised²³⁰. The Court of Auditors has found problems of enforcement and underlined the lack of monitoring and evaluation²³¹. Other evaluations of cross compliance²³², have shown that in addition to the SMRs, the majority of standards implemented as part of GAEC only require farmers to comply with pre-existing environmental standards. Therefore, cross compliance is likely to have had a relatively limited impact on any changes to environmental conditions as it tends to require compliance with existing legislative baselines. However, there is a large variety both in the biodiversity conditions and the nature of the GAEC conditions relevant to biodiversity between Member States, so the contribution to environmental change due to this measure will differ across regions of the EU 27.

The objectives of 6EAP specific to biodiversity and environmental integration in the CAP were to some extent hampered by the fact that, until 2008, there was no earmarking of funds under the CAP for specific environmental actions. The 2008 CAP Health Check, implemented from 2009, introduced the concept of earmarking funds to 'new challenges'. The revised Strategic Guidelines for the EAFRD thus highlight the need 'to reinforce the efforts with regard to the Community priorities in the field of climate change, renewable energy, water management, [and] biodiversity'²³³ and that 'operations related to these Community priorities are further strengthened in the rural development programmes'²³⁴. The

²²⁹ Hart, K. / Baldock, B. (2010): Impact of CAP reforms on the environmental performance of agriculture. A report to the OECD from IEEP

²³⁰ BirdLife International (2009): Through the green smokescreen: How is CAP cross compliance delivering for biodiversity?

²³¹ ECA (European Court of Auditors) (2005): Special report N0 08/2005 Is Cross Compliance and Effective Policy?

²³² Alliance Environnement (2007): Evaluation of the application of cross compliance as foreseen under Regulation 1782/2003, Report prepared for DG Agri

²³³ Council Decision of 19 January 2009 amending Decision 2006/144/EC on the Community strategic guidelines for rural development (programming period 2007 to 2013), OJ L 30, 31/1/2009

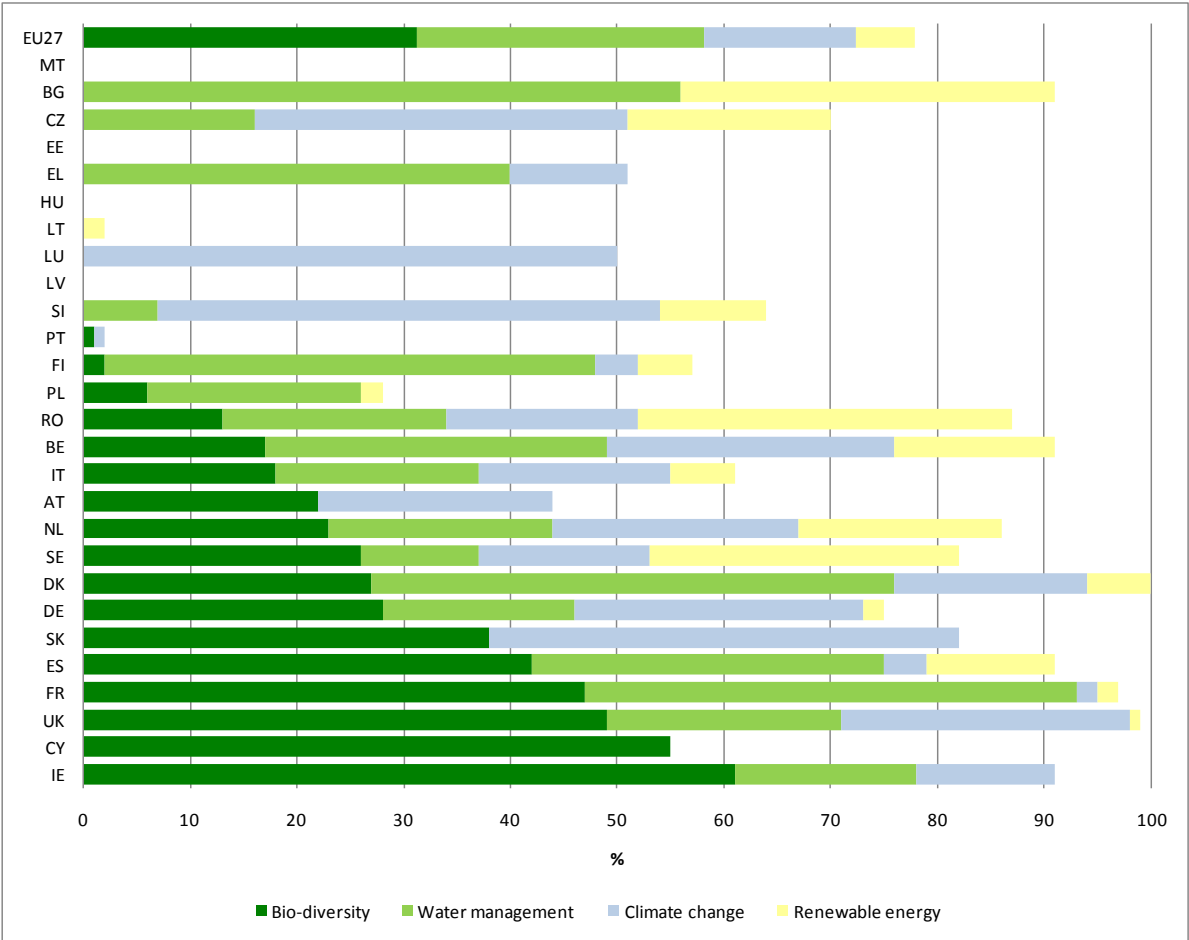
²³⁴ Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31/1/2009

preamble to the revised EAFRD Regulation (EC) No 74/2009²³⁵ states that Europe continues to experience 'serious problems in relation to water scarcity and droughts', that 'protecting biodiversity remains a major challenge, which is further increased by climate change and water demand' and that Member States will need to 'examine all possible ways of reducing greenhouse gas emissions [...] in the future the agriculture sector will be called upon to step up its emission reduction efforts as part of the EU global climate change strategy'.

This earmarking of funds has been the first step to a more focused environmental action in agricultural policy. Information in Figure 6 shows that, for the EU as a whole, the largest proportion of the Health Check funds will be concentrated on biodiversity (31%) and water management (27%), with measures focused on climate change priorities accounting for 14% of the total amount of additional funding. However, these overall figures mask some significant differences between Member States. For example, biodiversity has not been prioritised by the majority of new Member States, with eight of the twelve not using the additional funds to target biodiversity at all. Indeed some new Member States (Malta, Estonia, Hungary and Latvia) have chosen not to allocate funding to any of the environmental challenges, while Lithuania and Portugal allocated less than 5% of their additional resources, choosing instead to prioritise broadband coverage and dairy restructuring. However, biodiversity is the main focus (over 30%) of the additional funding in Member States such as Slovakia, Spain, France, the UK, Cyprus and Ireland. Water management is seen as a particular priority in countries such as Bulgaria, Greece, Finland, Denmark, France, Belgium and Spain, with climate change activities prioritised in a number of the new Member States, such as the Czech Republic, Slovenia and Slovakia as well as some of the EU-15, such as Luxembourg, Belgium, Germany and the UK.

²³⁵ Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31/1/2009

Figure 6: Overall distribution of CAP Health Check and EERP funds (€4.95 billion) between priorities, based on approved RDP modifications



Source: IEEP own calculations based on data within DG Agriculture’s Press Release IP/10/102: Rural development: €5 billion in total injected into rural development programmes following last vote on Health Check and Recovery package changes

Note: These figures do not include national co-financing

Article 68 is also of potential relevance to biodiversity objectives of 6EAP, however the impact of Article 68 on the environment is too early to predict. Initially, along with establishing decoupled direct payments, the 2003 CAP Reform introduced this provision to allow for some flexibility into the way Member States targeted direct payments, by enabling EU-15 Member States plus Malta and Slovenia to divert up to 10% of their Pillar 1 budget to provide ‘special support’ to particular sectors for a variety of purposes, including protecting and enhancing the environment²³⁶. Due to the lack of reporting requirements there is very little published information on the outcomes of this measure, and a survey carried out in 2008 indicated that support to that date did not appear to have achieved significant environmental benefits²³⁷.

²³⁶ This flexibility was provided under Article 69 of Council Regulation 1782/2003

²³⁷ Hart, K. / Eaton, R. (2008): Options for using national envelopes in the UK as part of Common Agricultural Policy reform. report to the Land Use Policy Group. London: Institute for European Environmental Policy.

However, since the 2008 CAP Health Check, Member States have more flexibility in the way in which decoupled payments could be used, and the applicability of the provision was extended to all Member States²³⁸. From a biodiversity perspective, it is important to note that up to 3.5% of Pillar 1 payments can be used to support specific types of farming which contribute to the protection or enhancement of the environment, or to improving the marketing and/or quality of agricultural products, while up to 10% of Pillar 1 payments can be used to fund additional agri- environment measures. Most Member States, however, use the provision for other purposes than environmental protection. Biodiversity benefits are likely to occur in a small number of member States (e.g. Italy, Portugal, Denmark, Spain and France) who are intending to introduce new agri-environment type measures under Article 68 or to introduce payments to support specific types of production which are judged important for the environment, notably organic farming or extensive grazing (for example Ireland, France, the Netherlands, Poland, Portugal and Finland)²³⁹. In relation to the biodiversity objectives of the 6EAP, these schemes are expected to have some benefits. However, as no reporting, monitoring or evaluation requirements have been set for this measure, evidence on the biodiversity outcomes will be difficult to identify. If negative environmental consequences occur, they may well not be revealed.

The **abolition of set-aside** as part of the 2008 CAP Health Check is likely to be unhelpful to the biodiversity related objectives of 6EAP. It has to be borne in mind that this reform step was underpinned by an argument that mandatory set-aside was not initiated for environmental reasons in the EU, and was introduced purely as a supply control measure. Due to decoupling of subsidies from production in the CAP Health Check, the justification for set-aside as a production control measure was effectively removed and set-aside was abolished. In practice it has had a significant environmental impact, however, particularly in those Member States where large areas of land have been subject to set-aside obligations, for example Germany, England and Spain²⁴⁰. The main benefits have included the introduction of wildlife habitat into the farmed landscape, increasing heterogeneity and providing habitat and feed sources for farmland birds²⁴¹, the reduction of diffuse pollution as a result of reduced inputs such as pesticides and fertilisers and actively buffering watercourses from nutrient leaching, the prevention of soil erosion and improving soil

²³⁸ 'Special support' can be provided under specific circumstance laid out under Article 68 of Council Regulation 73/2009

²³⁹ Hart K, Rayment M, Lee H (2010): Achieving a Transition Away from CAP Direct Payments, Paper for the LUPG, IEEP, London

²⁴⁰ Institute for European Environmental Policy (2008): *The Environmental Benefits of Set-Aside in the EU, A summary of evidence*. Report for the UK Department for the Environment, Food and Rural Affairs.

²⁴¹ Colston, A. / Perring, F. (eds) (1995): *Insects, plants and set-aside*. London: Botanical Society of the British Isles; Bracken, F. and Bolger, T (2006) *Effects of set-aside management on birds breeding in lowland Ireland*. *Agriculture, Ecosystems and Environment* 117 (2006) 178-184; Hodge, I., Reader, M., Revoredo, C., Crabtree, B., Tucker, G. & King, T. 2006. *Project to assess future options for set-aside. Final Report for the Department for Environment, Food and Rural Affairs*. Cambridge: University of Cambridge, Department of Land Economy; Sotherton, N.W. 1998. Land use changes and the decline of farmland wildlife: An appraisal of the set-aside approach. *Biol. Conserv.* 83: 259–268; Curry, D. 2008. *Final Report of High Level Group on set-aside*. London: Defra.

structure and fertility²⁴², and contributing to climate change mitigation and adaptation. The nature of the environmental impacts associated with set-aside depend on a variety of factors, including whether set-aside is rotational; whether the land remains bare or vegetation is allowed to naturally regenerate or is sown during the fallow period; where it is located within the farm and whether it is applied as whole fields or as part-fields (in blocks or strips); and the way in which set-aside is managed, for example if herbicides are used to control weeds or vegetation is cut²⁴³.

In terms of the **contribution of Regulation (EC) No 73/2009 to the achievement of relevant aims and objectives of the 6EAP**, a number of indicators²⁴⁴ can be used to estimate changes to the environmental conditions laid out in the 6EAP. The changes that have taken place in relation to the relevant objectives set out in Article 6 of the 6EAP within the agricultural context are listed below:

Halting the decline of biodiversity: This objective has clearly not been met in the agriculture sector. Ongoing changes in agricultural practices have had well documented and widespread significant impacts on biodiversity in Europe over recent decades²⁴⁵. In particular, the remaining areas of High Nature Value farmland (i.e. semi-natural and other species-rich farmland habitats) are threatened by intensification or abandonment²⁴⁶. Furthermore, monitoring by Member States in accordance with Article 17 of the Habitats Directive reveals that a very low proportion of habitat types of Community interest that are associated with agriculture (i.e. predominantly extensively grazed grassland) have a Favourable Conservation Status (only 7%, compared to 21% for 'non-agricultural' habitats²⁴⁷). This is despite their protection in Natura 2000 sites, their recognised importance in the EAFRD²⁴⁸, and the availability of agri-environment and Natura conservation measures.

There are also widespread declines in more common species across the wider farmed countryside. Of these, perhaps the best quantified have been those affecting common farmland birds, as their populations are relatively well monitored. Consequently common

²⁴² Boellstorff, D. and Benito, G. (2005): *Impacts of set-aside on the risk of soil erosion in central Spain*. *Agriculture, Ecosystems and Environment*, 107 (2-3): 231-243; Oréade-Brèche (2002) *Evaluation of Community Measures on Set-Aside*, Report to DG Agriculture.

²⁴³ Institute for European Environmental Policy (2008): *The Environmental Benefits of Set-Aside in the EU, A summary of evidence*. Report for the UK Department for the Environment, Food and Rural Affairs.

²⁴⁴ The indicators used come from a variety of sources including the IRENA operation and the SEBI 2010.

²⁴⁵ Stoate, C., Baldi, A., Beja, P., Boatman, N.D., Herzog, I., van Doorn, A., de Snoo, G.R., Rakosy, L., & Ramwell, C. (2009): *Ecological impacts of early 21st century agricultural change in Europe – A review*. *Environmental Management*, 91, 22-46.

²⁴⁶ IEEP / Alterra (2010): *Reflecting environmental land use needs into EU policy: preserving and enhancing the environmental benefits of 'land services': soil sealing, biodiversity corridors, intensification / marginalisation of land use and permanent grassland*. Final report to the European Commission, DG Environment on Contract ENV.B.1/ETU/2008/0030. Institute for European Environmental Policy / Alterra Wageningen UR, London / Wageningen.

²⁴⁷ European Commission (2009): *Composite Report on the Conservation Status of Habitat Types and Species as required under Article 17 of the Habitats Directive* Brussels, Report from the Commission to the Council and the European Parliament, 13.7.2009 (COM(2009)358).

²⁴⁸ Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

farmland bird have been used to develop a Common Farmland Bird Indicator, which forms part of the set of indicators that are used by the EEA to monitor the status of biodiversity in the EU²⁴⁹. The indicator clearly shows that there has been a substantial decline in farmland populations to about 50% of their 1980 baseline level. Although there is a suggestion from the combined data that the rate of decline may have decreased in recent years, examination of regional trends indicate that the declines are continuing unchecked in all regions other than southern Europe. It is also important to remember that these trends relate to common farmland birds and that population declines in rarer threatened farmland species appear to be unabated and are therefore of particular concern²⁵⁰. As shown in Figure 3 (above), similar downward trends in grassland butterfly populations have been observed, with declines of 40% since 1990.

Protection of nature and biodiversity from damaging pollution: It is difficult to determine what changes have occurred with regards to this condition as some of the indicators are associated with unclear trends, e.g. levels of pesticide in soil and levels of nitrate and pesticide contamination show neither clear upward or downward trends. However, it is clear that overall consumption of pesticides is on the rise, while the use of most mineral fertilisers has fallen in the majority of Member States (between 1990 and 2001)²⁵¹. A report from the EEA published in 2007²⁵² anticipated a considerable increase in mineral fertilizer use in the new Member States, but that use would remain lower in the EU-15 in absolute terms.

The conservation and appropriate restoration of areas of significant landscape value: Landscape is inherently difficult to measure. No clear overall changes to this 6EAP condition can be found. While some cultural landscapes have been maintained, associated with an increase in the area under extensive agriculture in the EU²⁵³, there have been changes in cropping and livestock patterns, with increases in the share of arable land at the expense of permanent pasture and permanent crops resulting in changes to the character of the landscape. General indicators pertaining to the overall state of the landscape reveal both improvements and declines in the condition, suggesting that trends may be spatially variable²⁵⁴.

The promotion of a sustainable use of the soil: Trends in the state of soils are spatially dependant as both positive and negative trends can be found in relation to soil erosion risk

²⁴⁹ <http://biodiversity-chm.eea.europa.eu/information/indicator/F1090245995>

²⁵⁰ BirdLife International (2004): Birds in the European Union: a status assessment. BirdLife International, Wageningen, The Netherlands.

²⁵¹ EEA (2005): IRENA Indicator fact sheet, IRENA 08 – Mineral fertiliser consumption, European Environment Agency: Copenhagen

²⁵² EEA (2007): Fertilizer consumption – Outlook from EEA (Outlook 023), European Environment Agency: Copenhagen.

²⁵³ EEA (2005): IRENA Indicator fact sheet, IRENA 15 – Intensification/extensification, European Environment Agency: Copenhagen

²⁵⁴ EEA (2005): IRENA Indicator fact sheet, IRENA 35 – Impact of agriculture on landscape diversity, European Environment Agency: Copenhagen

(by water)²⁵⁵ and soil quality (as measured by soil organic carbon content)²⁵⁶ (see section 1.2.1.3 for further discussion on soil).

Regarding the contribution of the **European Agricultural Fund for Rural Development (EAFRD) Regulation** (EC) No. 1698/2005 to the biodiversity objectives of 6EAP, certain measures within the four Axes of the **EAFRD** are more important than others. The measures contributing to the biodiversity objective include the following:

Axis 1 measures 111 and 114 (vocational training and advice): This measure can help produce changes to environmental conditions as the training of farmers can lead to improved skills in relation to nutrient management, management of farmland for biodiversity and can help engender longer term behavioural change.

Axis 2 measure 213 (Natura 2000 payments): The agricultural Natura 2000 measure provides support to compensate for the additional costs of undertaking appropriate management on agricultural Natura 2000 sites in order to ‘maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest’. This contributes to the effective management of Natura 2000 sites and related changes in environmental conditions.

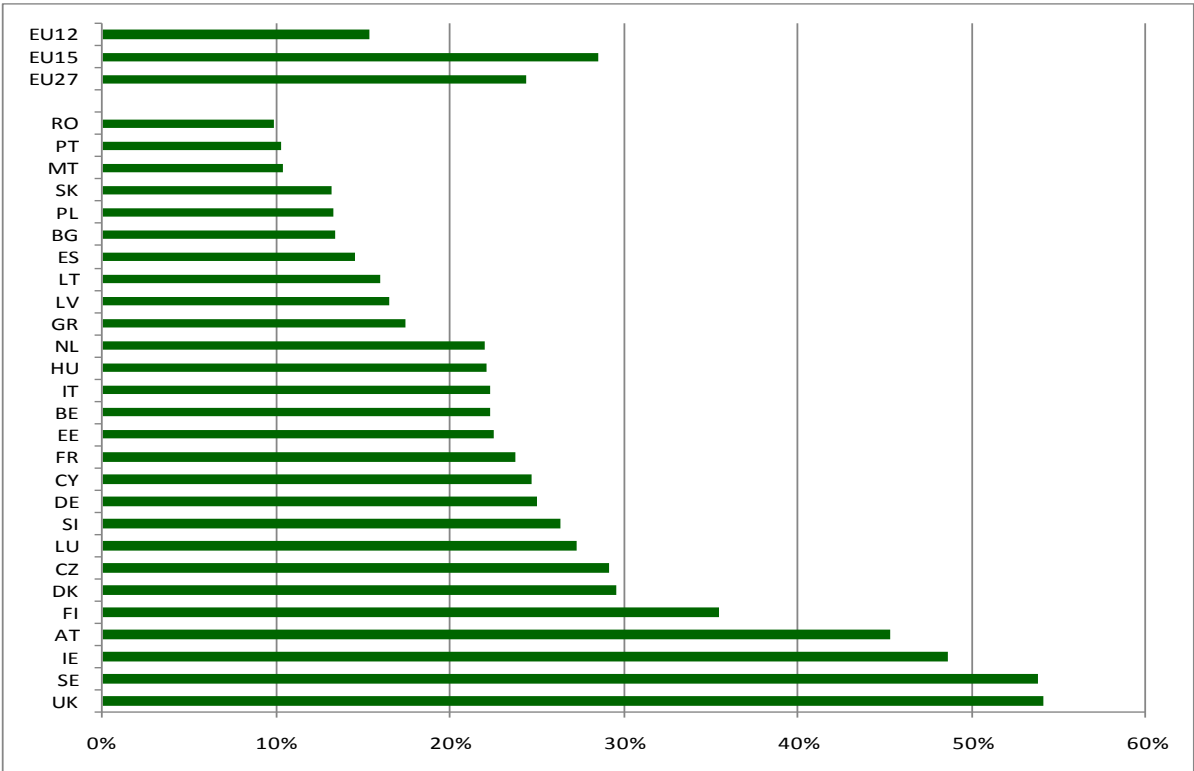
Axis 2 measures 211 and 212 (natural handicap payments): The two natural handicap measures aim to provide compensation to farmers for the natural disadvantages they face in relation to their productive capacity due to climate, topography, etc within areas designated as Less Favoured Areas (LFAs). They compensate farmers for the additional production costs and income forgone associated with farming agricultural land in handicapped areas. They also go some way to supporting farmers to maintain sustainable farming systems in these areas. Much of the farmland within LFAs is of High Nature Value. The maintenance of extensive farming practices in this way, therefore, helps deliver the conditions stated above, in particular those relating to landscape and biodiversity.

Axis 2 measure 214 (agri-environment payments): The agri-environment measure is the only compulsory measure within the EAFRD and therefore is implemented in all Member States. It encourages more environmentally responsible farming as called for in Article 6(2f) of the 6EAP by paying farmers for activities that go beyond mandatory standards so as to encourage them to introduce or maintain production methods compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity. Figure 7 shows the importance of this measure in individual Member States in terms of proportion of total public rural development expenditure allocated to this measure.

²⁵⁵ EEA (2005) IRENA Indicator fact sheet, IRENA 23 – Soil erosion, European Environment Agency: Copenhagen.

²⁵⁶ EEA (2005) IRENA Indicator fact sheet, IRENA 29 – Soil quality, European Environment Agency: Copenhagen.

Figure 7: Proportion of total public rural development expenditure for the Agri-Environment measure by Member State (214)



Source: European Network for Rural Development, (2010), Analytical report: a pan-European overview of how Member States approach the delivery of environmental and social public goods through the 2007 – 2013 Rural Development programmes. Report by IEEP for the European Network for Rural Development, Thematic Working Group 3 - Public goods and public intervention.

Note: IEEP calculations based on programmed expenditure within individual RDPs for 2007-13, including additional Health Check and EERP funds.

Biodiversity and the preservation and development of high nature value farming and forestry systems and traditional agricultural landscapes is one of the three priority areas of agri-environment schemes, besides water; and climate change²⁵⁷. Examples of the management practices that are incentivised by agri-environment schemes in Member States under the Rural Development Programmes 2007 – 2013 for delivering on the biodiversity objective in particular, (which often aim to provide multiple benefits including soil and water protection as well), include the following: maintenance and introduction of extensive grazing practices and of extensive arable management, maintenance and management of natural features, establishing buffer strips and field margins against field edges, management of wetlands and river meadows, maintenance of traditional orchards, reversion of arable to grassland, creation of wetlands, establishing no spray zones within arable fields, etc²⁵⁸. Some of the

²⁵⁷ Council Decision of 20 February 2006 on Community strategic guidelines for rural development (programming period 2007 to 2013) (2006/144/EC)

²⁵⁸ Information based on expert screening of the 88 RDPs, 2007-2013. ENRD (2010) Analytical report: a pan-European overview of how Member States approach the delivery of environmental and social public goods through the 2007 –

schemes have been specifically designed to target biodiversity, for example to protect High Nature Value farmland in Romania and Bulgaria, or to improve the conservation status of rare species (e.g. the conservation of farmland birds in Poland and the Czech Republic). For some Member States, improving water quality or soil functionality is the key priority for their agri-environment scheme (e.g. Finland, Greece, Hungary, Czech Republic), whereas in others, the sustainable management of natural resources has been added to the existing landscape and biodiversity objectives (e.g. Austria, Sweden, France, Ireland, England)²⁵⁹.

Payments for integrated farming practices and organic farming, both of which are mentioned in the 6EAP, are among the key types of management incentivised through agri-environment schemes. The agri-environment measure is the most significant measure within Axis 2 in terms of the budgetary resources allocated to it, accounting for a quarter of total programmed expenditure for the 2007-2013 programming period.

The **extent of biodiversity benefits delivered through agri-environment measure** in practice is the subject of much debate²⁶⁰. The difficulties inherent in quantifying the environmental benefits are the factor in much of the uncertainty about the benefits²⁶¹. Studies of the agri-environment measure have however shown that its implementation has achieved benefits for biodiversity, or at least reduced the rate of biodiversity loss. This is mostly because many schemes support existing low intensity systems, extensification of production and reduction of agrochemical inputs²⁶². Beneficial impacts on maintenance, restoration and recreation of landscape features, the maintenance of habitat mosaics, the reversion of arable land to grassland, the maintenance of extensive grassland, and the prevention of land abandonment in some cases have been attested to in other recent studies²⁶³. By contrast, there is much less information on their impact on soil and water quality. However clearly, actions requiring reductions in inputs, the use of cover crops on arable land, appropriate arable rotations, reversion of arable into grassland, organic

2013 Rural Development programmes. Report for European Network for Rural Development, Thematic Working Group 3 - Public goods and public intervention.

²⁵⁹ Organisation for Economic Co-operation and Development (OECD), 2008. *Environmental performance of agriculture since 1990*. Paris: OECD Publications. RDPs 2007–13. Hart K, 2010, Different approaches to agri-environment schemes in the EU-27, in 'Agri-environment Schemes – what have they achieved and where to we go from here?', *Aspects of Applied Biology*, pp.3-7.

²⁶⁰ See for example Kleijn, D. & Sutherland, W.J. (2003) How effective are European agri-environment schemes in conserving and promoting biodiversity? *Journal of Applied Ecology*, 40, 947-969

²⁶¹ ECA (European Court of Auditors) (2005) Special report N0 08/2005 Is Cross Compliance and Effective Policy?; Kleijn, D., et al (2006) Mixed biodiversity benefits of agri-environment schemes in five European countries, *Ecology Letters*, vol. 9 pp. 243-254; CSL and CCRI (2008) *A review of environmental benefits supplied by agri-environment schemes*, Report Prepared for Land Use Policy Group: London

²⁶² EPEC (European Policy Evaluation Consortium) (2004) *Impact assessment of rural development programmes in view of post 2006 rural development policy*, Report Prepared for DG Agriculture and Rural Development: Brussels; Oréade-Brèche (2005) *Evaluation of agri-environmental measures*, Report Prepared for DG Agriculture and Rural Development: Brussels; Kleijn, D., et al (2006); CSL and CCRI (2008) *A review of environmental benefits supplied by agri-environment schemes*, Report Prepared for Land Use Policy Group: London

²⁶³ Oréade-Brèche (2005) *Evaluation of agri-environmental measures*, Report Prepared for DG Agriculture and Rural Development: Brussels

agriculture and the introduction of buffer strips of varying widths alongside water courses delivered benefits for soil and water where these have been identified²⁶⁴.

However, there continue to be difficulties in accurately measuring the actual impacts of the agri-environment schemes and other Rural Development measures on biodiversity, soil and water. The lack of coherent data series over time is a limiting factor. In addition, different policy measures have been in place for differing lengths of time and this has an effect on how far environmental outcomes may be attributed to their actions. For example, the LFA measure has been in place since 1975 (although the nature of its objectives and implementation has changed over time). The agri-environment measure has been in place since 1985, and compulsory in the EU since 1992, whereas the Natura 2000 measure was only introduced in 2007. Advice and training measures have been available under Pillar 2 of the CAP since 2000. Therefore, the more established measures have the potential to have had a greater impact on bringing about environmental changes as they have been operating over a longer period of time.

The Common Monitoring and Evaluation Framework (CMEF), aimed at enabling the measurement of environmental outcomes and introduced as part of the 2003 CAP reform, has considerably strengthened the monitoring and evaluation in place and provides a good foundation for the systematic monitoring of the outputs and impacts of rural development measures across the EU-27 Member States that are likely to contribute to 6EAP. Despite some issues that have hampered its full mobilisation for measuring the successes and failures in delivering the objectives of 6EAP in the agricultural sector, it does allow environmental and biodiversity objectives of individual EAFRD measures in the RDPs 2007 – 2013 to be quantified and reviewed, thus building a good basis for measuring successes and failures in delivering on these targets at the end of the programming period. **Table 4** documents such targets relating to the area under successful environmental management, including biodiversity. Water, soil and climate change, as well as avoidance of marginalisation have also been taken into account.

²⁶⁴ Primdahl, J., Peco, B., Schramek, J., Andersen, E. and Onate, J.J. (2003): Environmental effects of agri-environment schemes in Western Europe, *Journal of Environmental Management*, vol. 67 pp.129–138, EPEC (European Policy Evaluation Consortium) (2004): *Impact assessment of rural development programmes in view of post 2006 rural development policy*, Report Prepared for DG Agriculture and Rural Development: Brussels; Agra CEAS (2005) *Synthesis of rural development mid-term evaluations Lot I EAGGF Guarantee*, Report Prepared for Commission of the European Union: Brussels; JRC (2009a): *Final report on the project 'sustainable agriculture and soil conservation (SoCo)'*, European Commission Joint Research Centre: Brussels; Oréade-Brèche (2005): *Evaluation of agri-environmental measures*, Report Prepared for DG Agriculture and Rural Development: Brussels.

Table 4: Result indicator targets for the area under successful management for different environmental media through Axis 2 measures for the EU-27 for 2007-2013

	Area of land under successful land management (million hectares)	Proportion of land under successful land management (as% of UAA)
Biodiversity	48.4	26.5
Avoidance of marginalisation	54.6	29.9
Water Quality	36.1	21.5
Soil Quality	25.9	14.2
Climate Change	19.7	10.8

Source: DG Agriculture and Rural Development data, 2009.

Note: These figures are likely to be an underestimate as data are missing for a few Member States.

From the biodiversity perspective, the issues in the present CMEF relate to availability and accuracy of some of the baseline data provided as well as significant inconsistencies in the indicator target figures put forward by Member States. In addition, important environmental issues such as landscape character, but also water availability, soil organic matter, and soil biodiversity are not covered by the indicators. Some of these limitations are due to the challenges in developing robust and scientifically based indicators where complex interactions need to be measured. In other cases challenges are related to lack of data and to insufficient resources for data collection at the national level. There is also a need for more emphasis to be placed on establishing the counterfactual in evaluations in order to identify what has occurred on farms not participating in a measure as well as on the need for the objectives of schemes and measures to be articulated and specified more clearly.

1.2.1.5 Sustainable use of the seas and conservation of marine ecosystems

Relevant objectives

Article 6 (2g) sets out the 6EAP objectives relating to the marine environment as follows:

'promoting sustainable use of the seas and conservation of marine ecosystems, including sea beds, estuarine and coastal areas, paying special attention to sites holding a high biodiversity value through:

- promoting greater integration of environmental considerations in the Common Fisheries Policy (CFP), taking the opportunity of its review in 2002;
- a thematic strategy for the protection and conservation of the marine environment taking into account, inter alia, the terms and implementation obligations of marine Conventions, and the need to reduce emissions and impacts of sea transport and other sea and land-based activities;
- promoting integrated management of coastal zones;

- further promote the protection of marine areas, in particular with the Natura 2000 network as well as by other feasible Community means;'

Overview of measures

In 2002, the reform of the Common Fisheries Policy (CFP) led to the adoption of **Regulation (EC) No 2371/2002 on the conservation and sustainable exploitation of fisheries resources under the CFP**²⁶⁵. This Regulation sets out broad objectives and measures that the Community should take to protect and conserve living aquatic resources, provide for their sustainable exploitation, and minimize the impact of fishing activities on marine ecosystems. The Regulation also calls for the progressive implementation of an ecosystem approach to fisheries management and seeks to promote a longer-term approach to fisheries management by introducing the possibility of adopting multi-annual recovery and management plans which aim to maintain and bring stocks within safe biological limits.

In 2002, the Commission also published an **Action Plan on the integration of environmental protection requirements into the CFP**²⁶⁶. This plan listed a number of guiding principles and 20 targets to secure environmental integration in the sector, including the setting up of long-term management plans for the most important and the most vulnerable fish stocks and the setting up of 'no take zones', as well as incentives for stimulating practices adding value to environmental integration. The plan has been used as a menu for developing CFP measures that mitigate environmental impacts. By May 2006, more targets had not been met (25%) than those that had been fully met (20%)²⁶⁷. To date most progress has been made in meeting the targets relating to:

- implementing Community Action Plans to manage sharks and protect seabirds;
- consulting stakeholders on environmental initiatives;
- adopting a strategy for distant water fisheries;
- participating in international fora to improve understanding of marine ecosystems; and
- reviewing of the data collection regulation to include collection of data in support of the ecosystem-based approach to management.

On 24 October 2005, the Commission adopted the **Thematic Strategy on the protection and conservation of the marine environment**²⁶⁸. The overall objective of the Strategy is 'to protect and restore Europe's oceans and seas and ensure that human activities are carried out in a sustainable manner'. The main component of the Thematic Strategy was a proposal

²⁶⁵ Regulation (EC)No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy, OJ L 358, 31.12.2002, p. 59

²⁶⁶ CEC (2002): Communication from the Commission setting out a Community Action Plan to integrate environmental protection requirements into the Common Fisheries Policy. (COM(2002)186)

²⁶⁷ RIVO, CEFAS, IEEP, HCMR and LEI (2006) *Indicators of Environmental Integration*. Tender Reference No FISH/2004/12.

²⁶⁸ CEC (2005): Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005

for a new Framework Directive (then called the Marine Strategy Directive (MSD))²⁶⁹. In 2008, Directive 2008/56/EC establishing a framework for Community action in the field of marine environmental policy - the **Marine Strategy Framework Directive (MSFD)**²⁷⁰ was adopted. The Directive establishes a framework within which Member States are to take necessary measures through Marine Strategies to achieve or maintain good environmental status in the marine environment by 2020 at the latest.

The EU level policies which most explicitly relate to **Integrated Coastal Zone Management (ICZM)** are a Communication on 'Integrated Coastal Zone Management: A Strategy for Europe' and Recommendation 2002/413/EC on the implementation of ICZM in Europe²⁷¹. The Communication²⁷² explains how the Commission will work to promote ICZM through the use of Community instruments and programmes. The Recommendation outlines strategic approaches and principles that Member States should follow in undertaking national ICZM stocktaking and developing national strategies for ICZM.

The EU **Integrated Maritime Policy (IMP)**²⁷³ provides the most joined-up policy framework for the development of EU policies affecting maritime areas and promoting integrated management of coastal zones. It covers all policy areas and stresses the MSFD as its 'environmental pillar'. The main objectives of the policy are to enable economic development without compromising the environment; utilize available knowledge and innovation; deliver a high quality of life in coastal regions; raise the visibility of maritime affairs and create an international leadership role for the EU. The IMP has been taken forward by a number of publications from the Commission including a Communication providing guidelines on integrated maritime governance (COM(2008)395); three working documents on maritime surveillance at the EU level; Communication (COM(2008)791) setting out a 'roadmap' for marine spatial planning in the EU, which stresses the need for effective marine spatial planning (MSP) not only to take account of the diverse development interests in marine areas (such as shipping and maritime transport, offshore energy, ports development, fisheries and aquaculture), but also climate impacts and the need to consider all of these issues within an ecosystem-based approach; and Communication (COM(2008)534) setting out a European Strategy for Marine and Maritime Research, which aims 'to overcome fragmentation of the European marine and maritime research landscape by capacity building, increased integration across traditional research sectors and increased cooperation of all actors in this area'. The Integrated Maritime Policy has also been taken forward in the

²⁶⁹ CEC (2005a): Proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive), (COM(2005)505), 24/10/2005,

²⁷⁰ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

²⁷¹ CEC (2002a): Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe, *OJ L 148*, 6.6.2002, p. 24–27

²⁷² Communication from the Commission to the Council and the European Parliament on Integrated Coastal Zone Management: a Strategy for Europe (COM/2000/547), adopted 27 September, 2000

²⁷³ CEC (2007): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – An Integrated Maritime Policy for the European Union, (COM(2007)575), 10/10/2007

context of the development of policies affecting various regions in which the EU has an interest, namely the Atlantic, Baltic Sea, Black Sea, the Mediterranean Sea, the Arctic Region, and the outermost regions.

The EU has also taken **action to implement the Birds and Habitats Directives** including initiatives to protect sensitive habitats (e.g. the closure of cold water coral reefs off the west coast of Ireland - Regulation (EC) No 1533/2007); technical measures to reduce the incidental by-catches of sea mammals (Regulation (EC) No 812/2004); the ban on destructive fishing practices (Regulation (EC) No 734/2008); instruments to combat IUU fishing (Regulation (EC) No 1005/2008) and implementing Regulation (EC) No 1010/2009); and an eel recovery plan (Regulation (EC) No 1100/2007).

Contribution of measures to achievement of 6EAP objectives

Greater integration of environmental considerations in the CFP: The 2002 Regulation provided, for the first time, a clear legal basis for measures designed purely to reduce the impact of fishing on the environment. The Regulation included the more explicit recognition of the need for sustainable exploitation of marine living resources, applying both the precautionary principle and an ecosystem-based approach to management. As a result of a number of changes made in 2002, the CFP now contains an increased commitment to ensuring integration of environmental concerns in EU fisheries management. Thus, the 6EAP objective of integrating environmental considerations in the CFP, capitalizing on the 2002 reform, has been achieved in part. However despite the changes made during and since the 2002 reform of the CFP, the objective of ensuring economically, environmentally and socially sustainable exploitation of resources has not been met overall²⁷⁴. This is largely due the imbalance between high fishing effort and pressure to catch some key species and low available resources. This is further exacerbated by the fact that the current regime cannot deliver reductions in fishing effort because complex derogations offset any reductions in fishing achieved. The resulting overfishing has led to a situation where 26% of fish stocks are below safe biological limits²⁷⁵. There is also pressure to greatly reduce levels of by-catch, eliminate the discarding of non-target fishing species, and avoid the damage to habitats which currently arises from several types of fishing gear, in particular dredging and beam trawling²⁷⁶. The pressure to manage fisheries sustainably and responsibly is growing. The Commission's Green Paper on the reform of the CFP published in April 2008 highlighted the shortcomings of the current CFP and the need for critical changes in the reform of the CFP in 2012²⁷⁷. Further integration of environmental principles in the CFP post-2012 are expected,

²⁷⁴ CEC (2009): Commission Communication - Green Paper - Reform of the Common Fisheries Policy, (COM (2009)163)

²⁷⁵ Sissenwine (2010): An overview of the state of stocks. Presentation made at the 'State of European Fish Stocks in 2010', European Commission, Brussels, 14 September 2010

²⁷⁶ Lutchman, I, Grieve, C, Des Clers, S and De Santo, E (2009): Towards a Reform of the Common Fisheries Policy in 2012 – A CFP Health Check, 80pp. IEEP, London; Lutchman, I. Van den Bossche, K. And Zino, F. (2008) Implementation of the CFP – An evaluation of progress made since 2002. Institute for European Environmental Policy, London.

²⁷⁷ CEC (2009): Commission Communication - Green Paper - Reform of the Common Fisheries Policy, (COM (2009)163)

including the adoption of more long term management plans and measures to ensure that fish stocks are fished to their maximum sustainable yield (MSY) by 2015.

Thematic strategy for the protection and conservation of the marine environment: The 6EAP objective in this regard was met with the adoption of the Marine Thematic Strategy in October 2005. In terms of taking account of the terms and implementation of marine Conventions, the Thematic Strategy maintains that its development 'has already contributed significantly to enhancing the coordination of marine protection efforts, in particular with regional seas conventions' (including the Helsinki Commission on the Protection of the Baltic Sea; the Oslo and Paris Conventions on the Protection of the Northeast Atlantic; the Barcelona Convention on the Protection of the Mediterranean Sea) and one of the aims of the Thematic Strategy is to build on progress already made through existing institutions, policies and conventions (e.g. IMO and UNCLOS)²⁷⁸. The Marine Strategy Framework Directive (MSFD) is the main mechanism taking forward the Marine Thematic Strategy. The Directive only came into effect in July 2008 (deadline for transposition was 15 July 2010), thus it is still too early to tell what the impact of the Directive will be in terms of meeting the relevant 6EAP objectives. When implemented, the MSFD can be expected to make a significant contribution to meeting the relevant environmental objectives of the 6EAP, in particular those outlined in Article 5, Articles 2(2), 2(3) and 2(4) of the Decision. Once the indicators of good environmental status (GES) have been determined by Member States, they will be required to monitor and report on their efforts to bring ecosystems back into line with and to maintain GES. This will contribute to increasing the scientific knowledge of the marine environment, and may potentially help to raise public awareness of the state of the marine environment. However, there are limitations to the Directive, and issues that it cannot address which will have to be addressed through other instruments, such as the CFP.

Promoting integrated management of the coastal zones: Part of the strategic approach set out in Recommendation 2002/413/EC on the implementation of **ICZM** in Europe is the 'protection of the coastal environment, based on an ecosystem approach'. Given the non-binding nature of the Recommendation, implementation is uncertain²⁷⁹. During 2006 and the beginning of 2007 the Commission reviewed experience in implementing the ICZM Recommendation, and concluded that the potential of the Recommendation is not yet fully exploited (only 13 Member States were reported to have been implementing the principles set out in the Recommendation). The Commission therefore concluded that the 6EAP objective in this regard had only partly been met²⁸⁰.

The **Integrated Maritime Policy (IMP)** has, on paper, promoted integrated management of coastal zones, and it has made some steps to achieving it in practice, such as making moves to establish integrated research and integrated marine spatial planning systems. For

²⁷⁸ CEC (2005): Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

²⁷⁹ Lutchman, I, Van den Bossche, K and Zino, F (2008): Implementation of the CFP -An evaluation of progress made since 2002. Institute for European Environmental Policy, London.

²⁸⁰ CEC (2007): Commission Communication on the evaluation of the Integrated Coastal Zone Management (ICZM) in Europe, (COM(2007)308), 07/06/2007.

example the Commission is currently analysing input from stakeholders and developing ideas for further development of maritime spatial planning, which should be presented in the course of 2010. To explore maritime spatial planning further, the Commission has launched projects on cross-border cooperation. With respect to research, the Commission is in the process of testing a European Marine Observation and Data Network, to improve the availability of high quality data on the sea-basin scale at the EU level.

Further promote the protection of marine areas: Although some marine protected areas have been established under the Natura 2000 network, the number is very low compared to terrestrial sites, and the marine part of the network is still under development. Currently only about 6% of Sites of Community Importance (SCIs) and 10% of Special Protection Areas (SPAs) are marine sites²⁸¹. Thus the 6EAP objective in this regard has only partially been achieved.

1.2.1.6 Forests

Relevant objectives

Although forestry is not explicitly addressed by the overall aims in Article 2(1) of the 6EAP or by its specific objectives on nature and biodiversity as outlined in Article 6(1), the conservation and restoration of forest ecosystems and sustainable forest management play an important role when referring to protecting, conserving, restoring and developing the functioning of natural systems, specific targets such as halting the loss of biodiversity, and the conservation of species and habitats with special concern to preventing habitat fragmentation.

In this regard, Article 6(2h) of the 6EAP sets out the following priority actions for forestry as an important sub-area for achieving the overall aims and specific objectives with regards to nature and biodiversity:

- 'Implementing and further developing strategies and measures on forests in line with the forest strategy for the European Union, taking account the principle of subsidiarity and biodiversity considerations, incorporating the following elements:
- improving existing Community measures which protect forests and implementing sustainable forest management, inter alia, through national forest programmes, in connection with rural development plans, with increased emphasis on the monitoring of the multiple roles of forests in line with recommendations adopted by the Ministerial Conference on the Protection of Forests in Europe and the United Nations Forum on Forests and the Convention on Biodiversity and other fora;
- encouraging the effective coordination between all policy sectors involved in forestry, including the private sector, as well as the coordination of all stakeholders involved in forestry issues;
- stimulating the increase of the market share for sustainably produced wood, inter alia, through encouraging certification for sustainable forest management and encouraging labelling of related products;

²⁸¹ EEA (2010): Distribution of Natura 2000 sites across EU Member States.

- continuing the active participation of the Community and of Member States in the implementation of global and regional resolutions and in discussions and negotiations on forest-related issues;
- examining the possibilities to take active measures to prevent and combat trade of illegally harvested wood;
- encouraging consideration of climate change effects in forestry;

In addition to the objectives set out in the nature and biodiversity thematic area, forestry is also affected by specific targets set out with regard to natural resources and waste in Article 8(1). More specifically this refers to the objective of

‘aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use’.

Overview of measures

Given the principle of subsidiarity, the Community has limited competence in forestry policy. However, it contributes to safeguarding the multifunctional role of forests through a variety of instruments in different sectoral policies. The following policy instruments can be considered as the most important measures adopted in the EU since 2002 in this sub-area:

The EU Forest Action Plan (FAP)²⁸² aims to support and enhance the sustainable management and multi-functional use of forests by providing a framework for coordinating forest-related actions at Community and Member State level, including the Common Agriculture Policy (CAP) and the Birds and Habitats Directives. The FAP sets out 18 key actions around objectives such as the improvement of long-term competitiveness and protection of the environment, contribution to quality of life and improved coordination and communication in Member States and the Commission. Although referring to various aspects of the relevant priority actions of the 6EAP, the main focus of the FAP lays within those priority actions addressing effective coordination and active participation of the Community, Member States and stakeholders at the regional, national and international level. The FAP builds on the Forestry Strategy of the EU²⁸³ which set out common principles reflecting the multi-functionality of forests.

In March 2010, the Commission published a Green Paper on **forest protection and information: preparing forests for climate change** together with an accompanying background paper²⁸⁴. The purpose of the Green Paper is to engage stakeholders in a debate on the EU's approach to forest protection and the provision of information and to gather information for the development of future policy options, considering the expiration of the FAP in 2011.

²⁸² CEC (2006): Communication from the Commission to the European Parliament and the Council on an EU Forest Action Plan (COM(2006)302), 15/06/2006.

²⁸³ COUNCIL RESOLUTION of 15 December 1998 on a forestry strategy for the European Union (1999/C 56/01).

²⁸⁴ CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66) and accompanying staff working paper (SEC(2010)163).

As part of the discussion on the role of forests in climate change mitigation, the Communication on **deforestation and forest degradation**²⁸⁵ was published with the aim of forming the basis of the EU's position to reach a post-Kyoto agreement in the context of UN Framework Convention on Climate Change (UNFCCC) negotiations. As part of the package a proposal for a Regulation on illegal logging was put forward.

The new Regulation laying down the obligations of operators who place timber and timber products on the market²⁸⁶ specifically refers to the 6EAP priority action of preventing and combating the trade of illegally harvested wood. The Regulation aims at minimising the risk of illegally logged timber and timber products entering the Community market by the establishment of a system of due diligence and thus reducing the Community's impact on deforestation and forest degradation globally. It complements existing actions envisaged by the FLEGT (Forest Law Enforcement Governance and Trade) Action Plan²⁸⁷ (see section 1.5).

In addition to the above mentioned initiatives, the **Rural Development Regulation** (EC) No 1698/2005²⁸⁸ represents an important instrument facilitating the implementation of relevant forest objectives and activities. It guarantees financial support regarding the competitiveness of the forest sector, improvement of environmental conditions (e.g. Natura 2000 and forests) and the quality of life. The financing of forest measures is also covered by the **Life+ Regulation** (EC) No 614/2007²⁸⁹, which can cover projects on forest monitoring or the implementation of the two nature Directives. The **Birds** (2009/147/EC)²⁹⁰ and **Habitats Directives** (92/43/EEC)²⁹¹ are responsible for ensuring the conservation and restoration of forest species and habitats of Community interest, and are thus a core instrument for halting the loss of species and habitats linked to forest ecosystems, as envisaged by the Communication on halting biodiversity loss by 2010²⁹² and the 6EAP. The **Water Framework**

²⁸⁵ CEC (2008): Communication from the Commission - Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM(2008)645), 17/10/2008.

²⁸⁶ European Parliament (2010): Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

²⁸⁷ Commission of the European Communities (2003): Communication from the Commission to the Council and the European Parliament – Forest Law Enforcement, Governance and Trade (FLEGT) Proposal for an EU Action Plan, (COM(2003)251), 21/05/2003.

²⁸⁸ Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 277, 21.10.2005, p. 1–40

²⁸⁹ Regulation (EC) No 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission statement *OJ L 149, 9.6.2007, p. 1–17.*

²⁹⁰ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds OJ L 20, 26.1.2010, p. 7–25.

²⁹¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora OJ L 206, 22.7.1992, p. 7–50.

²⁹² Commission of the European Communities, (2006b) Communication from the Commission – Halting the Loss of Biodiversity by 2010 and beyond: Sustaining ecosystem services for human well-being, (COM(2006)216), 26/05/2006.

Directive (2000/60/EC)²⁹³ aims to maintain or restore good ecological status in aquatic ecosystems, including alluvial forests, and thus helps to preserve the multiple role of forests (e.g. water quality).

Contribution of measures to achievement of 6EAP objectives

Existing reports on the conditions of forest ecosystems in Europe²⁹⁴ indicate that Europe's forest area has been slightly increasing in most countries between 1990 and 2005, amounting to an annual increase of 800,000 ha per year (0.4%) in the EEA region. The latest assessment of global forest resources of the Food and Agriculture Organisation²⁹⁵ underlines the trend, referring to an increase of 0.36 in forest coverage in Europe (excluding the Russian Federation) between 2000 and 2010. The total annual felling remained well below the net annual increment between 1990 and 2005 in the EEA region, indicating that less wood is harvested than accumulated in European forests.

However, the area of plantations has also grown over the last decades²⁹⁶ from 10.9 million hectares in 1990 to 13.3 million hectares in 2005 in the EEA region²⁹⁷. On the other hand, the rate of loss of primary forest remained more or less stable between 2000 and 2010²⁹⁸, though losses have occurred in Eastern European countries with a comparatively extensive area of primary forests such as in Estonia and Slovenia. Semi-natural forests still represent the dominant forest type in Europe, amounting to 87% of Europe's forest area in 2005, but slightly decreasing over the last decade²⁹⁹. These figures suggest that a larger part of the increase in forest coverage resulted from planting or deliberate seeding, mainly on former agricultural land, rather than being based on natural re-growth³⁰⁰. Although Europe's forest area has been growing and it is increasingly being managed sustainably, according to the European Common Forest Bird indicator³⁰¹, populations of common forest species have declined by 31% in Northern and 35% in Southern Europe while they remained stable in Western and Eastern Europe between 1980 and 2005. In 2009, IUCN estimated that 27% of mammals, 10% of reptiles and 8% of amphibians related to forest are threatened with

²⁹³ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy OJ L 327, 22.12.2000, p. 1–73.

²⁹⁴ European Environment Agency (EEA), 2008. European forests- Ecosystem conditions and sustainable use. EEA Report No 3/2008, Copenhagen; European Environment Agency (EEA), 2010. 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen.

²⁹⁵ FAO – Food and Agriculture Organisation, (2010), Global Forest Resources Assessment (FRA) 2010

²⁹⁶ FAO – Food and Agriculture Organisation, (2010), Global Forest Resources Assessment (FRA) 2010

²⁹⁷ European Environment Agency (EEA), 2008. European forests- Ecosystem conditions and sustainable use. EEA Report No 3/2008, Copenhagen

²⁹⁸ FAO – Food and Agriculture Organisation, (2010), Global Forest Resources Assessment (FRA) 2010

²⁹⁹ EEA (2010): 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen

³⁰⁰ Ministerial Conference on the Protection of Forests in Europe (Forest Europe), 2007. State of Europe's forests 2007. The Forest Europe Report on Sustainable Forest Management in Europe. Jointly prepared by the Forest Europe Liaison Unit Warsaw, UNECE and FAO. Ministerial Conference on the Protection of Forests in Europe, Warsaw.

³⁰¹ EBCC/RSPB/BirdLife/Statistics Netherlands, in (EEA), 2010. 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen

extinction in the EU³⁰². In addition, reporting under the Habitats Directives shows that 52% of forest species and 63% of forest habitats of Community interest have an unfavourable conservation status³⁰³.

Consequently, although objectives such as ensuring that the extraction of timber resources does not exceed the carrying capacity of forest ecosystems in Europe as set out in Article 8(1) of the 6EAP have been achieved; an increased level of intensified forestry measures such as drainage of wetlands, use of fertilisers or the use of non-native tree species cause the continuing decline in forest biodiversity and the failure to meeting the specific objectives of the 6EAP. Furthermore, the continuing fragmentation of forest habitats in south-western and north-eastern Europe between 1990 and 2006³⁰⁴ strongly impacts the achievement of related targets. How this relates to the success or failure to address the 6EAP priority actions related to forestry is analysed below:

According to the mid-term evaluation of the implementation of the EU FAP in 2009³⁰⁵, a number of Member States have applied the FAP in developing their **national forest programmes (NFP)**, e.g. to check national agendas and priorities. Figure 8 provides an overview of NFP implementation, and demonstrates that programmes in many countries are implemented. The role the FAP played in this regard remains to be questioned, the influence of international and national initiatives being more decisive (see section 1.5). Progress with regards to the objective of increasing coordination of monitoring the impact of the FAP on the development of an EU Forest Monitoring System is considered modest³⁰⁶. In addition, an analysis of the uptake of funding for forest-environment measures and for the protection of Natura 2000 forests in the context of Member States Rural Development Programmes indicates very low levels of expenditure³⁰⁷ and questions the successfulness of the FAP in integrating the protection of the multiple roles of forests into policy areas such as the Common Agriculture Policy (CAP).

³⁰² EEA (2010): 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen

³⁰³ EEA (2010): 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen

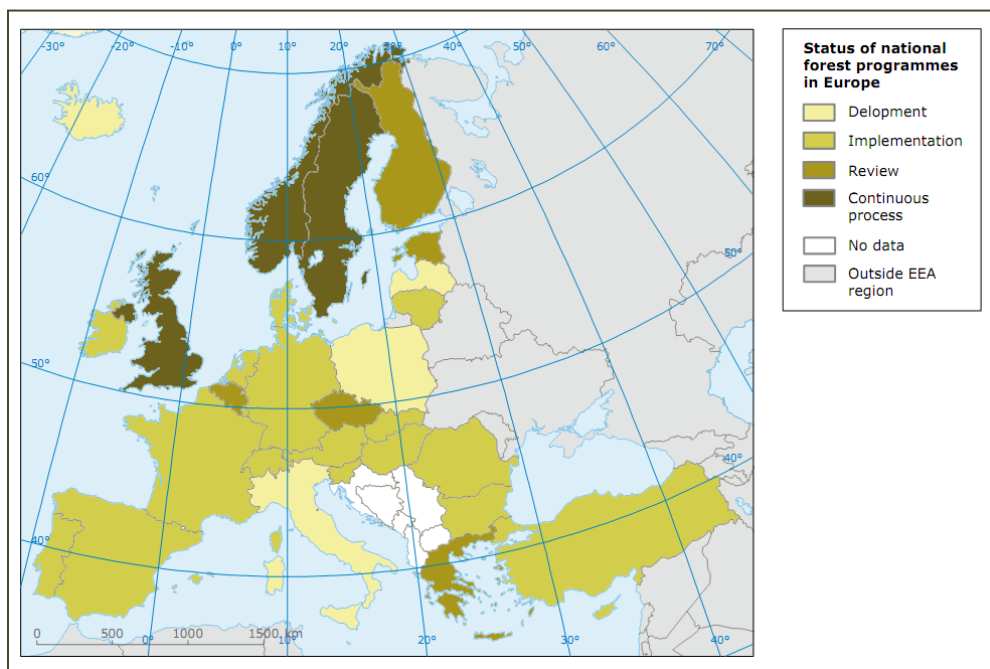
³⁰⁴ EEA(2010): 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen

³⁰⁵ Pelli, P., et al., (2009). Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI-2008-EVAL-07

³⁰⁶ Pelli, P., et al., (2009). Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI-2008-EVAL-07

³⁰⁷ CEC, (2010), Communication from the Commission–Commission staff working document accompanying the 2010 assessment of implementing the EC biodiversity action plan (SEC(2010)1163), Consolidated profile

Figure 8: Status of national forest programmes in Europe



Source: EEA 2008

Nonetheless, according to the mid-term assessment, the FAP was responsible for some progress in areas such as increased coordination across different policy areas, more coherent action within the Commission and more implementation in the Member States. Although emphasising that the EU FAP has contributed to a more co-ordinated approach for forest-related actions in the EU, the assessment also admits that the steps taken do not represent major changes in practices. It also states that the effects of the FAP on long-term goals such as competitiveness, enhancing and protecting the environment, and contributing to the quality of life are too early to assess. Thus, the impact of the FAP on achieving objectives such as halting the loss of biodiversity in forest ecosystems or maintaining and enhancing healthy forest ecosystems have not yet been evaluated³⁰⁸.

A study carried out to explore which environmental challenges might necessitate a Community approach to protect European forests from harmful impact³⁰⁹ emphasizes that the wide spread of forest protection measures across different policy sectors still remains a major point of conflict and has not been solved by the FAP. Although increased coordination seems to have taken place, a still inconsistent and fragmentary approach has restrained the effectiveness of the **coordination** and thus its ability to meet the objectives of the 6EAP.

One of the key actions of the FAP encourages the use of **wood and other forest products from sustainably managed forests**, although not explicitly addressing the objective of

³⁰⁸ Pelli, P., et al., (2009). Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI-2008-EVAL-07

³⁰⁹ Winkel, G, et al, (2009) EU Policy Options for the Protection of European Forests against harmful impacts. Albert-Ludwigs Universitaet Freiburg & Ecologic, Berlin

enhancing certification and labelling of the 6EAP. The subject was therefore not addressed by the mid-term evaluation. Consequently, the impact of the FAP in this regard is difficult to assess, but can likely be considered to have not been substantial. Furthermore, the mid-term assessment admits that the FAP does not effectively support the EU contribution to **forest-related international processes** due to the limited extent to which information on approaches at the Member State level is available. This in particular refers to international processes related to climate change³¹⁰.

Given the increased importance of **climate change**, the interest in the role of forests regarding climate mitigation and adaptation has increased. In light of the limited contribution of the FAP to these discussions and the fact that the FAP will expire in 2011, in March 2010 the Commission released a Green Paper on forest protection and information: preparing forests for climate change paper together with an accompanying background paper³¹¹. One of the aims of the Green Paper is to gather relevant information for the development of future policy options. In this regard, the paper is part of the follow up process to the White Paper on adapting to climate change, but is also in line with the call of the 6EAP to encourage consideration of climate change effects in forestry. As part of the discussion on the role of forests in climate change mitigation, the Commission Communication on deforestation and forest degradation (COM(2008)645) was published with the aim to form the basis of the EU position to reach a post-Kyoto Protocol agreement in the context of UN Framework Convention on Climate Change (UNFCCC) negotiations.

The most recent Global Forest Resources Assessment³¹² of the Food and Agriculture Organisation (FAO) shows that forest loss remains significant in Africa and South America, amounting to 3.4 and 4.0 million ha/year respectively between 2000 and 2010. According to recent studies, current **deforestation** and other related land use changes causes roughly 12 to 15% of global CO₂ emissions³¹³. Considering the latter, the Communication on deforestation emphasized the importance of strengthening existing EU policies which help to promote sustainable forest management, including the enforcement of the FLEGT Action Plan as well as the need to endorse additional legislation to combat illegal logging.

The EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT)³¹⁴, sets out a process and package of measures by which the Commission proposed to address the growing problem of **illegal logging** and related trade. One of the key measures proposed is a licensing scheme for the prevention of illegal logging and related trade coming into the EU. The licensing scheme was to be implemented as part of the Voluntary Partnership

³¹⁰ Pelli, P., et al., (2009). Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI-2008-EVAL-07

³¹¹ CEC, (2010), Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66) and accompanying staff working paper (SEC(2010)163)

³¹² FAO – Food and Agriculture Organisation, (2010), Global Forest Resources Assessment (FRA) 2010

³¹³ Commission of the European Communities, (2010), Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66)

³¹⁴ Commission of the European Communities, (2003) Communication from the Commission to the Council and the European Parliament – Forest Law Enforcement, Governance and Trade (FLEGT) Proposal for an EU Action Plan, (COM(2003)251), 21/05/2003

Agreements (VPAs) negotiated with a number of countries. The VPA approach is voluntary and although promising for some, its limitations have been recognized (see section 1.5). As outlined by the proposal on a regulative instrument addressing illegal logging³¹⁵, subsequently published as part of the package on deforestation and forest degradation to complement the FLEGT action plan, the timeframe of the implementation of VPAs and the risk of circumvention and laundering were cited as the main reasons for which the VPA approach had failed to successfully prevent and combat trade of illegally harvested wood. A final agreement on the new regulation laying down the obligations of operators who place timber and timber products on the market was reached in 2010³¹⁶. The impact of the measure still remains to be determined and will depend on enforcement of the requirements of the Regulation.

1.2.1.7 Genetically Modified Organisms (GMOs)

Relevant objectives

The **overall aims** of the 6EAP concerning biodiversity as stated in Article 2(2) are 'protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting the loss of biodiversity, including diversity of genetic resources, both in the European Union and on a global scale'. The release of GMOs into the environment may³¹⁷ have a negative impact on wild flora and the diversity of genetic resources. Of the **specific objectives** for action on nature and biodiversity stated in Article 6(1) of the 6EAP, the protection of nature from damaging pollution (if GMOs are considered as causing such pollution) and the conservation of species and habitats are relevant. The **priority actions** for GMOs set forth in Article 6 (2i) of the 6EAP are as follows:

- 'developing the provisions and methods for risk assessment, identification, labelling and traceability of GMOs in order to enable effective monitoring and controls of health and environmental effects;
- aiming for swift ratification and implementation of the Cartagena Protocol on Biosafety and supporting the build up of regulatory frameworks in third countries where needed through technical and financial assistance.'

³¹⁵ Commission of the European Communities, (2008), Proposal for a Regulation of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (COM(2008)644).

³¹⁶ European Parliament (EP), (2010), Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

³¹⁷ The environmental effects of GMOs remain controversial. For opposing views on the potential effects of GMOs on biodiversity and the environment at large see, Vogel, Benno: Agro-Gentechnik und Naturschutz - Auswirkungen des Anbaus von gentechnisch veränderten Pflanzen auf die biologische Vielfalt, NABU, Berlin, 2005 and Graham Brookes & Peter Barfoot, GM crops: global socio-economic and environmental impacts 1996-2006, PG Economics Ltd, Dorchester, 2006, <http://www.pgeconomics.co.uk/pdf/globalimpactstudyjune2008PGEconomics.pdf>.

Overview of measures

The main³¹⁸ GMO-related measures adopted in the timeframe of the 6EAP include the following:

A number of measures have been adopted concerning the **identification, traceability, labelling and risk assessment** of GMOs, including Regulation (EC) No 1830/2003 concerning the traceability and labelling of GMOs and the traceability of food and feed products produced from GMOs³¹⁹ and an implementing Commission Regulation³²⁰. Regulation (EC) No 1829/2003 on genetically modified food and feed³²¹ was adopted along with two additional Commission Regulations³²² and a Commission Recommendation³²³. Although Directive 2001/18/EC on the deliberate release into the environment of GMOs³²⁴ (DRD) was adopted before the 6EAP; the deadline for transposition of the Directive took place during the timeframe of the 6EAP. The Commission also published a Recommendation on national measures to ensure the coexistence of GM crops with other forms of agriculture³²⁵ and recently presented a legislative proposal which would allow Member States to take national measures on GMOs on non-scientific grounds³²⁶.

Another important development concerning risk assessment which took place before the 6EAP was the establishment of the **European Food Safety Authority (EFSA)** in January

³¹⁸ Some other acts of lesser relevance which complement the main pieces of legislation were also adopted during this time.

³¹⁹ Regulation 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, *OJ L 268*, 18.10.2003, p. 24-28.

³²⁰ Commission Regulation (EC) No 65/2004 of 14 January 2004 establishing a system for the development and assignment of unique identifiers for genetically modified organisms, *OJ L 10*, 16.1.2004, p. 5–10.

³²¹ Regulation 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed *OJ L 268*, 18.10.2003, p. 1-39.

³²² Commission Regulation (EC) No 641/2004 of 6 April 2004 on detailed rules for the implementation of Regulation (EC) No 1829/2003 of the European Parliament and of the Council as regards the application for the authorisation of new genetically modified food and feed, the notification of existing products and adventitious or technically unavoidable presence of genetically modified material which has benefited from a favourable risk evaluation, *OJ L 102*, 7.4.2004, p. 14-25 and Commission Regulation (EC) No 1981/2006 of 22 December 2006 on detailed rules for the implementation of Article 32 of Regulation (EC) No 1829/2003 of the European Parliament and of the Council as regards the Community reference laboratory for genetically modified organisms, *OJ L 368*, 23.12.2006, p. 99-109.

³²³ Recommendation 2004/787/EC from the Commission of 4 October 2004 on technical guidance for sampling and detection of genetically modified organisms as or in products in the context of Regulation (EC) No 1830/2003, *OJ L 348*, 24.11.2004, p. 18-26.

³²⁴ Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, *OJ L 106*, 17.4.2001, p. 1–39.

³²⁵ Commission Recommendation of 23 July 2003 on guidelines for the development of national strategies and best practices to ensure the coexistence of genetically modified crops with conventional and organic farming, *OJ L 189*, 29.07.2003, p.36-47.

³²⁶ Proposal for a Regulation of the European Parliament and of the Council amending Directive 2001/18 EC as regards the possibility for the Member States to restrict or prohibit the cultivation of GMOs in their territory, 13.7.2010, COM (2010)375 final.

2002. EFSA was entrusted with the task of issuing scientific opinions on GMOs³²⁷ and subsequently issued a guidance document on how to conduct GMO risk assessments (which has been modified several times³²⁸). Since 2008, the Commission and the Environment Council³²⁹ have repeatedly called on EFSA to revise its guidelines for environmental risk assessment. EFSA published the new guidelines in October 2010.³³⁰

With regards to **monitoring**, a Council Decision was taken in October 2002, including some guidance on post-market monitoring plans.³³¹ In addition, a GMO-Monitoring Working Group was established in 2004. Moreover, the EFSA Guidance on the environmental risk assessment of genetically modified plants includes recommendations on post-market environmental monitoring.

The **Cartagena Protocol on Biosafety**, a protocol to the Convention on Biological Diversity, was approved by the EU in June 2002³³² and entered into force in 2003. Regulation (EC) No 1946/2003 on trans-boundary movements of GMOs³³³ was adopted to implement the Protocol.

Contribution of measures to achievement of 6EAP objectives

To date, 38 GMOs have been approved as food or feed³³⁴ in the EU and 12 GMOs have been approved under the DRD or its predecessor, Directive 90/220/EC.³³⁵ Important steps have been taken with regard to the 6EAP **priority actions on GMOs** and the EU has acted broadly in conformity with what was required in the 6EAP. Provisions and methods for risk assessment of GMOs have been set forth in the DRD and a guidance document on environmental risk assessment has been produced by EFSA. Provisions on the identification, labelling and traceability of GMOs are contained mainly in Regulation (EC) No 1830/2003. The Cartagena Protocol on Biosafety has been approved, and Regulation (EC) No 1946/2003 adopted for its implementation. In terms of the extent to which the EU has

³²⁷ See Art. 22, 23 of Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, OJ L 31, 1.2.2002, pp. 1-24.

³²⁸ Guidance document of the Scientific Panel on Genetically Modified Organisms for renewal of authorisations of existing GMO products lawfully placed on the market, notified according to Articles 8 and 20 of Regulation (EC) No 1829/2003, adopted on 24 September 2004 and last updated 22 May 2008, <http://www.efsa.europa.eu/de/scdocs/scdoc/99.htm>.

³²⁹ Council Conclusions on Genetically Modified Organisms (GMOs), 2912th Environment Council Meeting Brussels, 4 December 2008.

³³⁰ EFSA, Guidance on the environmental risk assessment of genetically modified plants, 21 October 2010, <http://www.efsa.europa.eu/en/scdocs/scdoc/1879.htm>.

³³¹ Council Decision of 3 October 2002 establishing guidance notes supplementing Annex VII to Directive 2001/18/EC of the European Parliament and of the Council on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EE, OJ L 280/27, 18.10.2002, p. 27-26. In addition, Commission Decision of 13 October 2009 establishes standard reporting formats for presenting the monitoring results.

³³² See Council Decision 2002/628/EC of 25 June 2002, OJ L 31.7.2002, p. 48-49.

³³³ Regulation (EC) No 1946/2003 of the European Parliament and of the Council of 15 July 2003 on trans-boundary movements of genetically modified organisms, OJ L 287, 5.11.2003, p. 1-10.

³³⁴ See the list at http://ec.europa.eu/food/dyna/gm_register/index_en.cfm.

³³⁵ See the list at http://ec.europa.eu/food/food/biotechnology/authorisation/2001-18-ec_authorised_en.pdf.

supported the build-up of biosafety regulatory frameworks in third countries, based on the list of capacity building projects on the CBD website³³⁶, it seems that other organizations, notably UNEP and the GEF, have been most active in this regard at a global scale. However, several capacity building measures have been financed or carried out by the EU, for example in pre-accession Lithuania (2003)³³⁷ and in China³³⁸ (2003-2011).

The picture is, however, more complex with regard to the achievement of the 6EAP's wider biodiversity objectives and the effectiveness of provisions and methods for risk assessment, identification, labelling and traceability of GMOs required by the 6EAP³³⁹. It is important to note a number of points in this regard: the area of land use for GM crop cultivation in the EU today is relatively small compared to some other countries, GM crops are only cultivated in a few Member States and cultivation only started relatively recently, the majority of GM products placed on the European market are destined for animal feed and originate from imports³⁴⁰, and the overall number of GMOs approved for either marketing or cultivation is relatively limited. Thus, any statement on the effectiveness of the current regulatory system and its contribution to the objectives of the 6EAP reflects the current situation in which GMOs are not widely consumed, produced or marketed within the EU. With this caveat in mind, the different aspects of the EU GMO regime are discussed below.

The **identification and traceability** of GMOs are addressed in particular by Regulation (EC) No 1830/2003 and associated implementing measures. The **labelling of GMOs** is addressed by Regulation (EC) No 1830/2003 and the DRD. Regulation (EC) No 1830/2003 contains a system for the traceability of GM food and feed throughout the food chain. Commission evaluations³⁴¹ of Regulation (EC) No 1830/2003 in 2006³⁴² and 2008³⁴³ maintained that there

³³⁶ <http://bch.cbd.int/database/activities/>.

³³⁷ <http://bch.cbd.int/database/record-v4.shtml?documentid=691>.

³³⁸ <http://bch.cbd.int/database/record-v4.shtml?documentid=8430>.

³³⁹ It should be noted that two comprehensive assessments of the EU legislative framework on GMOs have been commissioned by DG SANCO and DG Environment: http://ec.europa.eu/food/food/biotechnology/evaluation/gmo_eval_intro_en.htm. These assessments will certainly be more in-depth than what can be done in the present context. Only the interim report for the environmental risk assessment appeared to have been published by December 2010.

³⁴⁰ Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final, p. 3.

³⁴¹ The basis for the 2006 evaluation was interviews conducted with the member states competent authorities, laboratories as well as NGOs and business associations. The majority of the interviewees were from member states' authorities; slightly more business than NGO representatives were interviewed. For the 2008 evaluation, only member states authorities and two industry associations provided their input via a questionnaire. Both reports note the respondents' statements that experience with the functioning of the rules is limited.

³⁴² Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM (2006) 197 final.

³⁴³ Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and

are no major problems concerning implementation of the provisions on identification, traceability and labelling of GMO, no serious infringements were reported by Member States, and EU industries have adapted to the relevant requirements relatively well in most cases given prior experience with similar requirements. Minor problems reported related to the lack of awareness among operators of documentation requirements, cases of incorrect labelling and some lack of clarity on the interpretation of the labelling rules. Several Member States have reported enforcement problems concerning products derived from GMOs, which do not contain any identifiable GMO-material, but still have to be labelled³⁴⁴. Implementation of Recommendation 2004/787/EC on sampling and detection has been criticised as being costly and time-consuming. The Recommendation is not uniformly applied by Member States, and some Member States have called for binding legislation.³⁴⁵ Some NGOs have criticised the fact that products (e.g. milk) derived from animals fed with GMOs do not have to be labelled under the Regulation. There has also been at least one instance where the Commission took an emergency measure regarding a non-authorized GMO.³⁴⁶ Nonetheless, despite some minor problems, there does not seem to be wide-spread criticism of the system for the identification, traceability and labelling of GMOs as being ineffective or inappropriate and EU provisions appear to be appropriately designed and applied effectively, thus satisfying the requirements of the 6EAP.

The rules for **assessing the potential environmental risks** associated with the cultivation of GMOs are contained in the DRD³⁴⁷. EFSA has also issued guidelines in this regard. Both the Member States and EFSA are involved in reviewing risk assessments submitted as part of the authorisation process or conducting risk assessments themselves, with the division of work depending on whether authorisation is sought for marketing purposes or for cultivation, and whether the GMO assessed is destined for use as feed or food. The risk assessment is the central piece of the authorization process, determining in large part whether or not a GMO is admitted to the market or for cultivation. Although there has not been wide-spread criticism on the legal rules on risk assessment, the way in which risk assessments are carried out and the previous EFSA guidelines have been the subject of significant criticism³⁴⁸.

feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final.

³⁴⁴ Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final.

³⁴⁵ Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM (2006) 197 final, p. 7.

³⁴⁶ Commission Decision of 23 August 2006 on emergency measures regarding the non-authorized genetically modified organism LL RICE 601 in rice products, OJ L 230, 24.8.2006, pp. 8-10.

³⁴⁷ See in particular Art. 4 para. 2, Annex II of the DRD.

³⁴⁸ The Commission has published two assessment reports on the DRD, in 2004 and 2007. Both reports are, however, relatively short. Both contain references to annexes with a more detailed discussion of issues such as environmental risk assessment or implications for the diversity of European eco-systems, but these annexes do not seem to have been published. The reports may be obtained from http://europa.eu/legislation_summaries/agriculture/food/128130_en.htm.

Since the adoption of the current legal framework on GMOs, seven Member States have prohibited or restricted the cultivation of certain GMOs authorised at EU level.³⁴⁹ Member States have based their measures on different provisions contained in the EU regulatory framework for GMOs, mostly, however, on Article 23 of the DRD, which allows a Member State to prohibit or restrict the use of an authorised GMO on its territory if in the light of new or additional scientific knowledge it has detailed grounds for considering that the GMO constitutes a risk to human health or the environment. EFSA has regularly rejected the claim that such new or additional scientific knowledge existed, which has led the Commission to conclude that the national measures were not compatible with Community law.³⁵⁰ While a detailed analysis of the reasons for the adoption of national bans is beyond the scope of this study, these measures may reflect doubts among certain Member States as to whether GMOs really do not pose any health or environmental risks³⁵¹, thus implying a criticism of the current system for risk assessment. Moreover, the fact that both the Commission and the Environment Council have asked EFSA to revise its guidelines for environmental risk assessment indicates a certain discontent with the previous guidelines. Some NGOs have also been very critical of the risk assessments conducted by EFSA, describing EFSA's risk assessment as flawed.³⁵² It remains to be seen whether the revised environmental risk assessment guidelines will be more acceptable.

Concerning the **monitoring of GMOs**, a monitoring plan is to be part of any pre-marketing notification according to Article 13 of the DRD and the consent for placing GMOs on the market of GMOs according to Article 19 of the DRD. Annex VII of the DRD sets forth some requirements for such plans. However, these guidelines are rather broad. While the EFSA guidance is more specific, it is not legally binding. Moreover, there are no legal provisions harmonising GMO monitoring data between Member States. All these factors cast some doubt as to whether the current EU GMO regulatory framework is sufficient for ensuring effective GMO monitoring, as stipulated in the 6EAP.

Thus while there appears to be a general view that current EU rules on the identification, traceability, labelling and risk assessment of GMOs are satisfactory, implementation is problematic in some regards.³⁵³

³⁴⁹ See the overview in the Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the freedom for Member States to decide on the cultivation of genetically modified crops, COM(2010) 380 final, 13.7.2010.

³⁵⁰ Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the freedom for Member States to decide on the cultivation of genetically modified crops, p.3.

³⁵¹ Paula Rey García, Directive 2001/18/EC on the Deliberate Release into the Environment of GMOs: an Overview and the Main Provisions for Placing on the Market, *Journal For European Environmental and Planning Law*, Vol 2006 No. 1, p. 11.

³⁵² See Greenpeace, EFSA's risk assessment on GMOs - case studies and lessons learnt, May 2006, <http://www.greenpeace.org/raw/content/eu-unit/press-centre/policy-papers-briefings/EFSA-RA.pdf>; Greenpeace, The EU GMO environmental risk assessment needs reforming, September 2008, <http://www.greenpeace.org/raw/content/eu-unit/press-centre/policy-papers-briefings/Reform-of-EU-GMO-risk-assessment.pdf>.

³⁵³ Thus, an interim report resulting from the ongoing assessment of the EU regulatory framework on GMOs concludes that 'overall, most consultees were generally satisfied with the principles, provisions and requirements specified in the

Concerning the contribution of the measures discussed above to the **biodiversity objectives of the 6EAP**, one can say that no large-scale negative impacts of GMOs on EU biodiversity have been proven to date. Even critics of the release of GMOs into the environment do not claim otherwise, but rather state that such effects may occur or may be detected in the future³⁵⁴. However, this does not *eo ipso* mean that the above GMO measures have contributed positively to the 6EAP biodiversity objectives. Taking into consideration the relatively small area where GMOs are currently cultivated, the small number of GMOs approved for cultivation and marketing, the measures taken by several Member States, the fact that the risk assessments conducted by EFSA are far from uncontroversial, and given that the long-term effects of a large-scale cultivation of GMOs are largely unknown and unpredictable³⁵⁵; one can assume that the measures taken by the EU are one factor among many to have prevented scientifically demonstrated environmental damage so far. This does not mean that they are ineffective, but that the real test cases are still to come.

1.2.2 Drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the nature and biodiversity thematic area. Some factors have helped achieve objectives and improve environmental conditions (drivers), whereas other factors have undermined or prevented progress (barriers). The main drivers and barriers that have affected the attainment of 6EAP objectives in this thematic area, as identified through our research and stakeholder consultation, are set out below.

Changes in the thematic area

A number of changes have taken place since the adoption of the 6EAP in 2002 that have changed the overall perception, main discourses and political profile of this thematic area, including shifts in political priorities, developments in the knowledge base and natural events.

Despite repeated pronouncements in support of the **BAP** and action on biodiversity (e.g. World Summit for Sustainable Development 2002, European Council June 2004, European Parliament Resolution 2007), there was no formal endorsement of the BAP by the European Council³⁵⁶. It seems that the political will and public support for biodiversity protection has not been sufficient to drive policy change and pursue action on this agenda³⁵⁷. However, this

legislative framework but had concerns with its implementation.' This statement related to the DRD and Regulation 1829/2003, see GHK, Interim Report: Evaluation of the EU legislative framework in the field of cultivation of GMOs under Directive 2001/18/EC and Regulation(EC) No 1829/2003, November 2009, p. 1.

³⁵⁴ Cotter, Jane: GM insect-resistant (Bt) maize in Europe: A growing threat to wildlife and agriculture, Greenpeace, Genetic Engineering Briefing Pack, March 2009, <http://www.greenpeace.to/publications/Bt-maize-in-Europe-2009.pdf>.

³⁵⁵ This assessment is the one of the German Federal Agency for Nature Protection (BfN), see BfN, Monitoring der Auswirkungen gentechnisch veränderter Organismen, Monitoring der Auswirkungen gentechnisch veränderter Organismen, http://www.bfn.de/0315_gvo_monitoring.html

³⁵⁶ Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010) Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

³⁵⁷ Stakeholder consultation, Brussels workshop.

appears to be changing in recent years, with growing high-level political interest in biodiversity protection, stimulated *inter alia* by developments in the knowledge base and increasing recognition of linkages with other policy areas (in particular the economy). The TEEB (The Economics of Ecosystems and Biodiversity) initiative together with various Commission funded studies³⁵⁸ have resulted in an increasing recognition of the economic value of biodiversity and ecosystem services in the policy process. The importance of biodiversity for economic prosperity is increasingly being emphasised, and the newly agreed target and vision on biodiversity post-2010³⁵⁹ clearly recognises the benefits provided by biodiversity for human well-being.

More generally, the rising awareness of **soil issues**, linked to the climate debate and more generally their role in delivering ecosystem services, has helped promote the more extensive consideration of soil issues³⁶⁰. There is now greater understanding of soils interactions with the need to sequester carbon, manage land in a way that enables adaption to climate change and ensure the protection of water both in terms of quality and quantity. Integrating soil considerations into these wider priorities has acted as a driver to promote better soil protection. The increasing importance of climate change has also led to increased attention by policy makers to the role of **forests** in climate mitigation and adaptation efforts, and may influence the type of measures adopted in this area in the future.

In the area of **agricultural policy**, changes related to decoupling of subsidies from production in the CAP Health Check led to the removal of the justification for set aside as a production control measure and then to the abolition of set aside. Despite the fact that mandatory set aside was not initiated for environmental reasons in the EU, in practice it has had a significant environmental impact. The loss of set-aside thus had an important consequence for biodiversity, particularly in Member States with large arable sectors. In addition, more general economic changes, such as the steep increase in price of cereals in 2008, has highlighted the vulnerability of certain agri-environment measures to fluctuating opportunity costs with a possibly negative impact on the uptake of these measures by farmers, and a potential concomitant negative impact on the actual delivery of these schemes on the intended environmental benefits³⁶¹. Beyond the consequence of reducing the chance of Rural Development programmes delivering against their environmental targets, this can undermine the trust of farmers in environmental schemes more generally and further aggravate the uptake of these schemes.

While the main driver behind the development of the **Marine Thematic Strategy** was the 6EAP, more generally the Thematic Strategy was driven by the growing desire for integration in ocean governance in the face of increasing threats (in number and severity) to the marine

³⁵⁸ DG Environment, (2010), The economics of ecosystems and biodiversity web pages, http://ec.europa.eu/environment/nature/biodiversity/economics/teeb_en.htm, Accessed on 06/01/2011.

³⁵⁹ Environmental Council Conclusions 7536/10, March 2010, and CEC, (2010). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Options for an EU vision and target for biodiversity beyond 2010 (COM(2010) 4 final).

³⁶⁰ CEC, (2006), Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for the protection of soil and amending Directive 2004/35/EC, (COM(2006)232).

³⁶¹ Defra, Natural England (2008) UK Environmental Stewardship Review of Progress.

environment. The Thematic Strategy cites ‘the pace of degradation of biodiversity, the level of contamination by dangerous substances and the emerging consequences of climate change’ as well as depleted fish stocks and harmful algal blooms leading to the destruction of marine life as some such threats³⁶². The Strategy was born out of a need to enhance the coordination of marine protection efforts, to build on progress made through existing institutions, policies and conventions, and to take action to make further progress. The idea was to have a strong EU policy on marine protection to complement and bolster the existing patchwork of institutional arrangements³⁶³.

Despite the strengthening of European civil protection legislation on preparedness and response in 2007, subsequent events (increased occurrence of disasters, e.g. floods, droughts and forest fires, the growing vulnerability of European citizens to disasters, cross-border impacts of disasters, and the considerable damages and costs associated with disasters) led to a recognition and increasing political will and public support for increased coordination and cooperation on **disaster prevention** at the EU level.

Aspects of decision-making procedures

Processes to develop policy put forward in the 6EAP, in particular the stakeholder consultation process related to the development of the Thematic Strategies, as well as the formal decision-making procedures to agree EU legislation, have been important factors influencing the final form of specific pieces of legislation and hence affecting the attainment of certain 6EAP objectives in this thematic area.

The open and extensive stakeholder engagement process to support the development of the **Soil Thematic Strategy** led directly to the identification of the need for an integrated framework Directive to address the question of soil protection. Previously it had been anticipated that the soil Thematic Strategy process would result in a number of more focused policy outputs. The ambition of the proposed framework Directive therefore, originated from the stakeholder process – although the ultimate content of the dossier, if agreed, will depend heavily on any compromise reached in the European Council and Parliament negotiations. In this instance, the EU decision-making process has acted as a barrier to progress, with a blocking minority group of Member State governments blocking the progress of the proposed framework Directive. This legislative blockage is motivated by two more fundamental barriers to the EU action on soil. The first is that protecting soils has always been closely linked to land use and land use change and thus the scope for EU action in this area is limited. The second is linked to fears among some Member States that a new soil Directive would be complex and costly to implement, thus raising the administrative burden and costs to important target groups.

The stakeholder processes instigated by the 6EAP in certain instances have also had implications for the development of future policy in some areas. For instance, as a

³⁶² CEC, (2005), Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

³⁶³ CEC (2005) Communication from the Commission - Thematic strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

consequence of the process to develop the Soil Thematic Strategy, experts in the field across Europe were brought into closer contact and this process provided a coordinated information base and understanding that has subsequently been built upon. Since 2006, soil issues have risen up the policy agenda rapidly given the wider acceptance of their role in delivering climate change mitigation and the consequences of releasing stored carbon from soils as a consequence of land use change. The community of soil experts in Europe has been more prepared and integrated as a consequence of the Thematic Strategy discussions enabling better ongoing engagement on these issues.

The main EU processes that had a bearing on the scope of the **agriculture** measures assessed above were related impact assessments, inter-service consultation processes, and negotiations at the Agriculture Council and EU Council. Although the European Parliament has been able to offer its opinion on agriculture policy proposals, until the ratification of the Lisbon Treaty it did not have a formal role in the decision-making process. Decisions to limit the financing of the EAFRD during the European Council meeting on the 2007-13 Financial Perspectives forced some Member States to scale back their intended delivery of measures. The negotiation process relating to Council Regulation (EC) No 73/2009³⁶⁴ (in particular lobbying by environmental interest groups) during which cross compliance was introduced as a compulsory measure considerably increased the environmental ambition of the Regulation. Pressure from environmental stakeholders and various Member States during the 2008 CAP Health Check resulted in the introduction of the new GAEC standards on 'water protection and management' and 'habitats'. The stakeholder consultation process throughout the 2003 and 2005 reforms of the CAP has also played a significant role in increasing the ambition of the adopted measures, in particular it had a significant impact on the environmental ambitions of the Rural development Programmes. During the process of the 2008 CAP Health Check reform, a complex interplay of interests being defended by agricultural authorities, farmers' associations and environmental organisations led, on the one hand, to abolishment of set-aside as a production control measure, with negative impacts on biodiversity, and, on the other hand to earmarking of funds to 'new challenges' delivering on environmental objectives for biodiversity, water, renewable energy, and climate, besides dairy restructuring. The inclusion of dairy restructuring among the new challenges in the closing phases of the Council debate partly watered down the proposal, as it enabled the Member States to downplay the urgency of environmental actions, including compensation of the negative impacts of loss of set-aside, and to instead prioritise the deployment of the additional funds in the dairy sector.

Stakeholder processes were also important in developing the **Marine Thematic Strategy**. The Commission, in its 'towards' Communication did not indicate that a broad legislative instrument would be forthcoming. However, consultations and stakeholder events in Denmark and the Netherlands not only generated the idea and support for a Directive, but also elaborated much of its content. The existence of a Marine Strategy Framework Directive and much of its content are thus a direct result of the processes set in place by the 6EAP and the analytical and consultation processes to develop the Marine Thematic Strategy. The

³⁶⁴ This Regulation repeals the earlier Regulation (EC) No 1782/2003.

subsequent decision-making processes also influenced the content of the MSFD, and *inter alia* led to a tightening of much of the text, deadlines for action and the inclusion of additional criteria in the determination of 'good environmental status' (GES).

Community decision-making procedures have also influenced the way in which the EU framework for **GMOs** has been formulated and their implementation. Calls for transparency and a robust risk assessment framework put in place by some Member States prior to the adoption of the DRD as well as the position of the European Parliament have been identified as important factors influencing the content of the DRD.³⁶⁵ Much of the criticism of the implementation of measures concentrates on the risk assessments carried out by EFSA,³⁶⁶ which is part of the EU's decision-making structure. Moreover, the national bans adopted by several Member States mean that the overall area where GMOs may be released into the environment within the EU remains smaller than it would be without these bans thus reducing the likelihood that environmental risks, which may be associated with the use of GMOs, materialise. Finally, it has also been noted that the widely diverging views among Member States on GMOs have led to the frequent application of the Community procedure provided for in the DRD, which involves both the Commission and the Council.³⁶⁷ This has the effect of slowing down authorization procedures.

In the case of forestry, the contribution of the **FAP** to the relevant objectives and priority actions of the 6EAP is perceived to be low due *inter alia* to the limited competence of the Community in forest policy. Resistance to a more integrated approach to forest policy is a result of the lack in political will by certain policy-makers, interest groups and Member States, linked to the fear that a Community approach would fail to take highly differing regional characteristics into account³⁶⁸. The development of the FAP was mainly supervised by the Standing Forestry Committee, including thematic working groups, and was thus significantly influenced by Member States. Recommendations made by the European Parliament³⁶⁹ and the Committee of the Regions³⁷⁰ to establish a legal basis for Community action on forests was not further explored during the consultation process. The adopted FAP recommends applying the open method of coordination (OMC) to national forest programmes, thus relying on the voluntary coordination of national programmes to ensure adequate protection of

³⁶⁵ Paula Rey García, Directive 2001/18/EC on the Deliberate Release into the Environment of GMOs: an Overview and the Main Provisions for Placing on the Market, Journal For European Environmental and Planning Law, Vol. 2006 No. 1, p. 5.

³⁶⁶ Some attribute the decisions of EFSA are, in turn, to the composition of the competent EFSA decisions-making body, see, for example, Greenpeace, The EU GMO environmental risk assessment needs reforming, September 2008, <http://www.greenpeace.org/raw/content/eu-unit/press-centre/policy-papers-briefings/Reform-of-EU-GMO-risk-assessment.pdf>.

³⁶⁷ Paula Rey García, Directive 2001/18/EC on the Deliberate Release into the Environment of GMOs: an Overview and the Main Provisions for Placing on the Market, Journal For European Environmental and Planning Law, Vol. 2006 No. 1, p. 11.

³⁶⁸ Winkel, G, et al., (2009) EU Policy Options for the Protection of European Forests against harmful impacts. Albert-Ludwigs Universitaet Freiburg & Ecologic, Berlin

³⁶⁹ European Parliament resolution on the implementation of a European Union forestry strategy (2005/2054(INI))

³⁷⁰ Opinion of the Committee of the Regions on the Communication from the Commission to the Council and to the European Parliament Reporting on the implementation of the EU Forestry Strategy (2006/C 115/19)

forests and implementation of sustainable forest management principles rather than opting for a more pre-subscribed approach as recommended by some EU institutions³⁷¹.

With regards to the new **regulation laying down the obligations of operators who place timber and timber products on the market**³⁷², as a result of amendments introduced by the Parliament, all operators in the supply chain, not only traders placing timber products on the Community market, will be obliged to put in place a system of 'due diligence' to ensure timber and timber products are tracked and 'reasonable assurance' can be provided regarding their legality. The Parliament's proposal for a minimum framework of penalties across Europe was rejected and Member States will instead be able to decide on the level of sanctions. Consequently, the effective enforcement of the Regulation will depend on the Member States' willingness to apply a consistent and adequate system of penalties.

In some instances, the Parliament and Council can also be influential in prompting the consideration of certain issues. For instance, in response to calls from the European Parliament and the Council for increased action at the Community level to prevent disasters and mitigate their impacts³⁷³, ³⁷⁴ the Commission put forward the **Communication on disaster prevention**, which in turn followed-up the Commission's commitment to develop proposals for an integrated European approach to disaster prevention³⁷⁵. The calls by the Parliament and Council were made following a series of natural disasters that affected the EU (floods, droughts, forest fires etc).

Implementation

Effective implementation of EU environmental is an important factor driving / hindering the achievement of 6EAP environmental objectives in this thematic area. Some of the main implementation problems identified in the Nature and Biodiversity thematic area, along with some of the reasons behind this are set out below.

The development and implementation of many **BAP** measures has been slow or incomplete (e.g. Natura 2000 in the marine environment), or otherwise stalled during negotiations (e.g. proposed soil framework Directive). Inadequate monitoring has provoked further hindrance across the board towards effective implementation and delivery of results. The BAP failed to outline indicators and baselines for its targets and actions. Whereas the monitoring procedures accompanying some legislative devices associated with the BAP provide useful

³⁷¹ Withana, S., et al, (2010), Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future, Report for the IBGE-BIM, IEEP, London

³⁷² European Parliament (EP), (2010), Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

³⁷³ Council of the European Union, (2008), Council Conclusions on Reinforcing the Union's Disaster Response Capacity – towards an integrated approach to managing disasters, 2878th GENERAL AFFAIRS Council meeting Luxembourg, 16 June 2008.

³⁷⁴ European Parliament (2008), European Parliament resolution of 19 June 2008 on stepping up the Union's disaster response capacity.

³⁷⁵ CEC, (2008), Communication from the Commission to the European Parliament and the Council on reinforcing the Union's disaster response capacity (COM(2008)130).

data for evaluation, other targets lack the prioritisation and measurability required to provoke action and deliver results³⁷⁶. Moreover, whilst there were a series of consultations and meetings in which Member States could influence the form of the BAP, responsibility for its implementation was delegated heavily to the Biodiversity Expert Group and by extension to environment ministries and agencies of the EU and Member States, whose political influence is generally regarded as relatively weak³⁷⁷. This marginalises the BAP and diminishes its influence on other sectors. It is thought the lack of ownership of policy development on the part of Member States has undermined commitment and progress in implementation, with most Member States not taking steps beyond the obligated minimum³⁷⁸.

The **Communication on disaster prevention** was intended as a first step towards the development of a comprehensive Community disaster prevention framework or strategy and the contribution of the measure to the objectives of the 6EAP will in part depend on the precise formulation of the adopted proposals at European level, which are expected to be presented in 2010/2011. However, it is important to keep in mind that protecting the public from disasters is essentially a task for the Member States and their regional and local tiers of governance, thus the success of efforts to coordinate action among Member States will depend on the extent to which Member States take up proposed initiatives, e.g. the sharing of best practices, and include disaster prevention in national operational programming of EU funding.

Member States are given a high degree of flexibility in terms of which **Rural Development (EAFRD)** measures they implement (only the agri-environment measure must be implemented in all countries) and how they are implemented. This allows the Member States to reflect specific environmental, agronomic, climatic, and biophysical conditions in designing measures so that they meet the needs of local areas most effectively. However, differences in priority given to measures for environmental purposes between Member States leads to differences in the ways that the measures contribute to meeting the 6EAP objectives in EU Member States.

Within the **agri-environment measure** all Member States operate their own scheme with a total of 88 being implemented in the EU 27. Each of these schemes include variations in terms of the packages of options offered, thus there is considerable diversity amongst the schemes in terms of the aims and objectives (which vary in relation to environmental priorities and the nature of the management required, as well as in relation to agronomic, climatic and biophysical conditions); the geographic coverage (e.g. whether it is available to all farmers across the country/region or targeted to particular areas, habitats or farm types) and the focus of schemes. Maintaining and enhancing the character of cultural landscapes and protecting farmland biodiversity are core priorities of the majority of agri-environment

³⁷⁶ Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010) Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2

³⁷⁷ Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010) Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

³⁷⁸ Stakeholder consultation, Brussels workshop.

schemes. Most Member States also use the agri-environment measure to encourage organic farming practices. Other priorities, such as improving water quality and soil functionality as well as the maintenance of sustainable water resources, have gradually become more widespread within schemes, while for some Member States, improving water quality or soil functionality is the key priority for their agri-environment scheme (for example, Finland, Greece, Hungary, Czech Republic), and in others, the sustainable management of natural resources has been added to the existing landscape and biodiversity objectives (for example Austria, Sweden, France, Ireland, England)³⁷⁹. Although agri-environment schemes have made a significant contribution to maintaining environmentally beneficial farming practices, in areas where these practices might otherwise have disappeared³⁸⁰, they have not delivered the reversals in biodiversity decline needed to meet the 6EAP objectives³⁸¹.

Although not an explicit aim of the **natural handicap measures**, LFA schemes in different guises have been used to support extensive livestock based systems over the past 30 years which are crucial to the maintenance of species rich semi-natural pastures and the avoidance of land abandonment. Despite this, evaluation studies have shown that while payments have contributed to continued agricultural land management in marginal areas, the measure is not targeted at areas of greatest biodiversity value or where the risk of land abandonment is greatest³⁸².

The **Natura 2000 measure** has only been implemented in a limited number of Member States³⁸³. Many Member States choose to deliver management of Natura 2000 sites via the agri-environment measure to incentivise actions above those required under legal requirements or management plans. In other Member States, the continued absence of legal provisions or management plans in place to specify the constraints on farmers in Natura 2000 areas means it is not possible to use this measure, and instead many use the agri-environment measure to incentivise management within these areas. Given the low number of Member States that use this measure, any impact in achieving objectives is likely to be small and on a local or sub-national scale.

The extent to which **advice and training measures** deliver the 6EAP objectives in practice is very dependent on how Member States choose to use the measures within their Rural

³⁷⁹ Organisation for Economic Co-operation and Development (OECD), 2008. *Environmental performance of agriculture since 1990*. Paris: OECD Publications; RDPs 2007–13; Institute for European Environmental Policy, (2008) *The Environmental Benefits of Set-Aside in the EU, A summary of evidence*. Report for the UK Department for the Environment, Food and Rural Affairs.

³⁸⁰ Oréade-Brèche (2005) Evaluation of agri-environment measures, Report prepared for DG Agriculture and Rural Development: Brussels.

³⁸¹ BirdLife International (2009) Could do better! Why EU Rural Development Policy is failing to reach its biodiversity potential, BirdLife: Brussels, Cooper, T., Hart, K., Baldock, D. (2009) Provision of public goods through agriculture in the EU, IEEP: London.

³⁸² Cooper, T. et al, (2006), An evaluation of the Less Favoured Area Measure in the 25 Member States of the EU, A report prepared by the Institute for European Environmental Policy for DG Agriculture.

³⁸³ European Network for Rural Development (ENRD). (Forthcoming). A Pan European Overview of how Member States Approach the Delivery of Environmental and Social Public Goods through the 2007–13 Rural Development Programmes. Draft Analytical Paper for the Thematic Working Group of the European Network for Rural Development on Public Goods and Public Intervention, 2010. ENRD.

Development Programmes (RDPs). However, expenditure on these measures is still very small in all RDPs³⁸⁴ and there is potential to increase resources allocated to these measures, particularly in support of providing information on the relationship between land management practices and the environment and efficient ways of reducing agriculture's environmental impact.

In relation to **Regulation (EC) No 73/2009**, a review of implementation of **cross compliance** in 2007 showed that only three Member States had established farmers' obligations for all relevant articles of the required legislation³⁸⁵. A report by the European Court of Auditors concluded that Member States had not implemented effective control and sanction systems and that as a consequence the control system provides insufficient assurance on farmer compliance³⁸⁶. It also demonstrated that the environmental Statutory Management Requirements and standards for Good Agricultural and Environmental Condition (GAEC) are less well checked during inspections than other standards, often due to them being less straightforward to inspect, and therefore the data on breaches may under represent the real situation.

There are also limitations to the implementation of **GAEC standards** in relation to the nature of conditions established and the stringency with which they are enforced. As permitted by the legislation, there is considerable variation between Member States in terms of the total number of GAEC standards applied and the level of ambition in using these standards to address environmental problems. Assessments of the sort of GAEC conditions that Member States have introduced indicate that most GAEC standards are based on requirements of pre-existing national legislation or have been adapted from previous Good Farming Practice (GFP) standards, thus limiting the environmental benefits they can achieve. In addition, not all Member States have introduced standards for all issues set out in the GAEC framework. An evaluation of cross compliance in 2006³⁸⁷ showed that only 12 Member States implemented a comprehensive set of GAEC standards. Variation enables the varying environmental, agronomic, bio-physical and climatic conditions across the EU to be reflected in the standards, but the issue of concern is whether Member States have too much latitude to adopt a minimalist approach, with adverse consequences for the environment. The division of GAEC standards into those that are compulsory to implement and those which are optional, as part of the CAP Health Check agreement in December 2008, should help address this to some extent, although the detailed requirements of the standards, and hence the degree to which they are designed to address the specific environmental needs of an area, remains in the hands of the Member States.

³⁸⁴ DG Agriculture and Rural Development (2009) Rural Development in the European Union – Statistical and Economic information, http://ec.europa.eu/agriculture/agrista/rurdev2009/index_en.htm.

³⁸⁵ European Commission (2007) Report from the Commission to the Council on the application of the system of cross-compliance, (COM (2007)147), Brussels, 29/03/2007.

³⁸⁶ ECA (2008) Is Cross Compliance and Effective Policy? Special Report No 8.

³⁸⁷ Alliance Environnement (2007) Evaluation of the application of cross compliance as foreseen under Regulation 1782/2003, Report prepared for DG Agri.

Barriers to the success of the **Marine Strategy Framework Directive (MSFD)** are not yet apparent but are likely to emerge during the implementation phase. It is foreseeable that the biggest barrier will be the lack of high-quality information on various components of the marine ecosystem, as existing monitoring and assessment programmes are neither integrated nor complete³⁸⁸. A review of the existing knowledge base of these programmes reveals a significant number of information gaps on the state of Europe's marine environment. In addition, there is limited information on the effectiveness of existing regulatory measures, and the various threats and pressures posed by human activities. A new approach to marine monitoring and assessment and the use of scientific information across the different levels of governance will be required to address these knowledge gaps, and to ensure that data collection and research is coordinated and harmonised and broadly disseminated for use in meeting the objectives of the MSFD³⁸⁹.

Implementation is widely regarded as the weak part of the current EU framework for risk assessment and monitoring of **GMOs**. In particular the way in which risk assessments are carried out and the previous EFSA guidelines have been the subject of significant criticism³⁹⁰. Since the adoption of the current legal framework on GMOs, seven Member States have prohibited or restricted the cultivation of certain GMOs authorised at EU level.³⁹¹ Member States have mostly based their measures, on Article 23 of the DRD. This article allows a Member State to prohibit or restrict the use of an authorised GMO on its territory if in the light of new or additional scientific knowledge it has grounds for considering that the GMO constitutes a risk to human health or the environment. EFSA has regularly rejected the claim that such new or additional scientific knowledge existed, which has led the Commission to conclude that the national measures were not compatible with Community law.³⁹² The risk assessments conducted by EFSA have been criticized and EFSA recently adopted revised environmental risk assessment guidelines. The impact of these revised guidelines remains to be seen.

Previous efforts to tackle the problem of **illegal logging** through FLEGT Voluntary Partnership Agreements proceeded slower than envisaged due to complications in the negotiation of the voluntary agreements. In addition, the bilateral approach of the FLEGT

³⁸⁸ CEC, (2005), Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

³⁸⁹ CEC, (2005), Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

³⁹⁰ The Commission has published two assessment reports on the DRD, in 2004 and 2007. Both reports are, however, relatively short. Both contain references to annexes with a more detailed discussion of issues such as environmental risk assessment or implications for the diversity of European eco-systems, but these annexes do not seem to have been published. The reports may be obtained from http://europa.eu/legislation_summaries/agriculture/food/l28130_en.htm.

³⁹¹ See the overview in the Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the freedom for Members States to decide on the cultivation of genetically modified crops, COM(2010) 380 final, 13.7.2010, footnote 4.

³⁹² Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the freedom for Members States to decide on the cultivation of genetically modified crops, p.3.

Regulation, the limited range of timber products covered³⁹³ and the risk of circumvention suggested that the Regulation as it stood was insufficient to combat illegal logging³⁹⁴ and led to the development of the proposal on a Regulation addressing illegal logging³⁹⁵. The effectiveness of the new Regulation³⁹⁶ will very much depend on the approach adopted by Member States to the application of penalties for operators placing illegally harvested timber and timber products on the market.

EU financial resources

Adequate financial resources are a key element of effective implementation of legislation and have played an important role in the achievement of environmental objectives in the nature and biodiversity thematic area of the 6EAP.

Although the lack of transparency in various funding streams makes it difficult to assess how much money is available under the current system for effective **biodiversity** action, the financial resources available are thought to be far below requirements³⁹⁷. It is also clear that the impact of LIFE programmes on the 6EAP biodiversity objective is limited by its relatively small budget, which is far below the investment needs of Natura 2000, as well as the narrow scope of coverage of the programme³⁹⁸. One of the major shortcomings identified with the BAP has been the failure to set aside a specific budget for its implementation and the poor level of funding for biodiversity as a whole³⁹⁹. The inadequate financing of biodiversity conservation actions and support for other measures stems from a low appreciation of the **value of biodiversity and the socioeconomic benefits** that can arise from protection of habitats and species, as well as poor understanding of the resource requirements of effective conservation management. At a general level, knowledge regarding biodiversity is still under development, which impedes decision-making at all levels and stages⁴⁰⁰.

³⁹³ The synthesis report on the public consultation is available at <http://ec.europa.eu/environment/forests/pdf/addloptionssynthfinal.pdf>.

³⁹⁴ EU Commission, Public Consultation on 'Additional Options To Combat Illegal Logging' - Analysis And Report, p. 3.

³⁹⁵ Commission of the European Communities, (2008), Proposal for a Regulation of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (COM(2008)644)

³⁹⁶ European Parliament (EP), (2010), Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010)

³⁹⁷ Kettunen, M. et al, (2009), Biodiversity and the EU Budget – an IEEP briefing paper, Institute for European Environmental Policy, London / Brussels, 29 pp

³⁹⁸ Gantioler, S., et al. (2010) *Costs and Socio-Economic Benefits associated with the Natura 2000 Network*. IEEP, GHK & Ecologic; Kettunen, M., et al. (2009). *Assessing Socioeconomic Benefits of Natura 2000 – a Toolkit for Practitioners* (September 2009 Edition). Output of the European Commission project Financing Natura 2000: Cost estimate and benefits of Natura 2000 (Contract No.: 070307/2007/484403/MAR/B2). Institute for European Environmental Policy (IEEP), Brussels, Belgium. 191 pp. +Annexes.

³⁹⁹ Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010) *Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy*. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

⁴⁰⁰ Stakeholder consultation, Brussels workshop.

The Communication on **disaster prevention** was not accompanied by specific financing proposals, because as was maintained by the accompanying Impact Assessment, setting up a specific funding instrument for prevention could lead to overlaps with existing instruments if it is not well designed and that the creation of a specific financial instrument did not seem appropriate because of the 'significant efforts it would require at EU and national level'⁴⁰¹. These 'efforts' include the administrative cost at the EU level involved in the creation of a new instrument and in monitoring its implementation. Thus, the Impact Assessment concluded that enhancing the profile of prevention in existing instruments was sufficient. Although a number of the EU funding instruments, e.g. the Structural and Cohesion Funds, the European Agricultural Fund for Rural Development (EAFRD), LIFE+, and the Space and Security Themes of the Seventh Framework Programme, explicitly address issues related to the protection against natural and technological risks (e.g. forest fire, floods, drought and maritime security). However, the uptake of these funds remains limited⁴⁰². The European Parliament argues that there is a need for the creation of a suitable financial framework for disaster prevention with adequate financial resources that will strengthen and link existing instruments⁴⁰³.

In the area of **agriculture**, the CAP budget, encompassing both Pillars, is a key policy mechanism for ensuring that biodiversity goals associated with farmland are met, as well as delivering other aspects of sustainable farming with respect to water, soil, and climate change. As such, it has considerable potential to stimulate both negative and positive change across the EU ecosystems. The introduction of cross compliance as a condition on receipt of Pillar 1 payments has not required the use of additional funds, as cross compliance is a tool for enforcing the pre-existing legal standards more efficiently, thereby also increasing the awareness of farmers about requirements in this area. However, effective monitoring and enforcement, as well as maintaining the political integrity of cross compliance provisions in the face of growing pressure for diluting or removing elements of cross compliance, remains a vitally important task. Article 68 measures, allowing support to schemes similar to agri-environment, can be funded out of the national budget for Pillar 1 funding without additional obligations to use national co-financing, so the funding is already available to Member States.

Against the backdrop of the two pillars, the budget allocated to Rural Development policy is only half that spent through Pillar 1 (€151 billion is allocated to rural development, including national co-financing (or €94.3 billion before co-financing), compared to €282 for Pillar 1 over the 2007-13 programming period⁴⁰⁴). Funds allocated to Member States for the Rural

⁴⁰¹ CEC (2009a): Commission Staff Working Document, Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man-made disasters, Impact Assessment, (SEC(2009)202).

⁴⁰² CEC (2010), Towards a stronger European disaster response: the role of civil protection and humanitarian assistance, (COM(2010)600).

⁴⁰³ European Parliament, (2010), European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI)).

⁴⁰⁴ These figures take account of the additional funds made available for rural development resulting from the CAP Health Check agreement in December 2008 and the European Economic Recovery Plan (EERP).

Development objectives have been essential for ensuring continuation of the agri-environmental measure and support to a suite of other environmentally beneficial measures. Programmed EU expenditure for the 2007-13 programming period for the main measures that have the potential to deliver environmental outcomes (either directly or indirectly) is calculated to be €58.4 billion, of which €8 billion is estimated to be allocated to forestry management or forest-related measures. Three measures in particular (the agri-environment, natural handicap and farm modernisation measures) account for almost 50% of total allocated public expenditure across all 88 RDPs for the programming period 2007 – 2013. The figures are based on budgetary information from January 2010⁴⁰⁵ which includes the additional allocations for 2010-2013 as a result of the CAP Health Check agreement on increased rates of compulsory modulation, and the additional funds made available through the EERP. However, there are considerable differences in the distribution of the EAFRD budget between RDPs and Member States, and the funding continues to be insufficient to meet both the environmental objectives of Rural Development and those set out within the 6EAP. There are large disparities in the proportion of the EAFRD budget that different Member States choose to spend on measures with environmental objectives. Although environmental outcomes can be delivered by measures under all four Axes of the EAFRD, the measures that are focused most directly on the delivery of environmental public goods generally sit within Axis 2, particularly the agri-environment measure. The proportion of the programme budget allocated to Axis 2 provides a broad indication of the relative priority given to environmental objectives in different Member States. Some Member States, e.g. Ireland, Finland, Austria and the UK allocate up to 80% of their EAFRD funding on Axis 2, compared to Malta, Belgium, Bulgaria and Romania which allocated under 30% to these measures⁴⁰⁶.

The European Fisheries Fund (EFF) established by Council Regulation (EC) No 1198/2006⁴⁰⁷ provides financial support for implementation of the **CFP**, including the sustainable development of coastal and inland fishing areas. With a budget of €4.3 billion for the 2007–2013 programming period, the EFF represents support of around €578 million a year, supplemented by around €470 million a year of national public funds. The protection and enhancement of the environment in the framework of Natura 2000, where its areas directly concern fishing activities, can also be funded under the EFF⁴⁰⁸. Although the EFF provides funds for environmental integration related projects, the uptake of such funds (axis 4 of the EFF) in national operational programmes (NOPs) by many Member States has been minimal⁴⁰⁹.

⁴⁰⁵ European Commission, Directorate-General for Agriculture and Rural Development (2010) Overview of the CAP Health Check and the European Economic Recovery Plan, Modification of the RDPS: Some facts and figures, Fact Sheet, Brussels, October 2010.

⁴⁰⁶ DG Agriculture and Rural Development (2009) Rural Development in the European Union – Statistical and Economic information, http://ec.europa.eu/agriculture/agrista/rurdev2009/index_en.htm.

⁴⁰⁷ Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund.

⁴⁰⁸ IEEP (2010) Manual for European Environmental Policy. Earthscan.

⁴⁰⁹ Lutchman, I., and Binet, T., (2007) Scorecard on the EFF programming and implementation up to April 2007 – A report to WWF EPO.

No specific financial resources have been dedicated to the implementation of the **EU FAP**, although different EU funding instruments allow addressing some of the objectives of the plan. The most important tool in this regard is Rural Development Regulation (EC) No 1698/2005, which guarantees funding to forest-related issues under the European Agricultural Fund for Rural Development (EAFRD). It has often been argued that at Community level, forest issues are adequately covered by the objectives of the CAP and thus no action beyond the coordination of activities by Member States is required⁴¹⁰. However, according to an assessment of planned expenditures for the 2007-2013 financing period, only a small proportion of the EAFRD has been dedicated to forest measures referring to the protection of the environment and land management (Axis 2). Only 0.11% of the EAFRD were available for Natura 2000 and forests and 0.28% for forest-environment measures⁴¹¹. These limited financial resources might have further hampered achievement of the objective of maintaining and enhancing biodiversity in forest ecosystems.

It is not evident that a lack of financial resources has affected the formulation and adoption of measures related to **GMOs**. However, according to the 2008 evaluation report by the Commission on Regulation (EC) No 1830/2003, several Member States had to reduce the number of inspections undertaken with the aim of controlling whether the rules of the Regulation were complied with due to limited resources available.⁴¹² While the rules on the identification, traceability and labeling of GMOs do not directly affect environmental conditions, a lack of adequate controls is likely to reduce the effectiveness of the rules in place.

Public opinion

Public support of action in a particular area, usually in combination with other factors, has contributed towards the achievement of certain 6EAP objectives in the nature and biodiversity thematic area.

The significant increase in the number and severity of natural and man-made disasters, in particular the floods and forest fires in the summer of 2007, increased public support for a more comprehensive EU approach to **disaster prevention**. A 2007 Euro Barometer survey found that man-made disasters were considered among the five main environmental issues of concern for 39% of respondents, while natural disasters were among the five main environmental issues of concern for 32% of respondents⁴¹³. A special Euro Barometer survey in 2009 concerning disaster management and civil protection found that there is significant public support for greater EU involvement and support for Member States in disaster

⁴¹⁰ CEC (2006): Communication from the Commission to the Council and the European Parliament - Commission staff working document Annex to the Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan (SEC(2006) 748) .

⁴¹¹ CEC, (2010), Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change - Accompanying staff working paper (SEC(2010)163)

⁴¹² Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final, p. 6.

⁴¹³ Euro Barometer, (2008), Attitudes of European citizens towards the environment.

management activities. The majority of respondents surveyed felt that common measures (along similar lines to the floods Directive), standards (e.g. on the safety of buildings) and common warning signals should be adopted across Europe⁴¹⁴. This public support, together with high-level political backing has helped push forward developments in this area.

With regards to cross compliance for farmers under **Council Regulation (EC) No 73/2009**, Member States have the flexibility to choose how to design standards for 'Good agricultural and environmental condition' (GAEC) to be introduced in their country as well as whether or not to make use of provision under Article 68 allowing use of small proportion of the Pillar 1 budget for measures with environmental rationale, without the need to provide co-financing. In some Member States, public consultations are undertaken which have the potential to influence the type of standards and measures that are introduced. The strong environmental lobby in some more Northern and Western Member States has led to more demanding environmental standards being introduced under cross compliance⁴¹⁵. Stakeholder lobbies play a prominent role in impacting on the overall focus of the Rural Development policy, the use of the **EAFRD** measures, and their design and implementation at the Member State level where there is flexibility in the measures applied. Strong environmental groups in Northern and Western Member States have resulted in an increased emphasis on the environment within many of these Rural Development Programmes. In other Member States, sometimes with a history of weak environmental authorities, the mandatory process of stakeholder consultation on RDPs provided environmental groups with a stronger ability to influence and shape environmental measures. In addition, the public is paying increasing attention to the role agricultural policy has to play in delivering public goods, including the environmental public goods. The EU-wide public stakeholder's consultation on the CAP 2020 in the first half of 2010 showed a considerably increased level of expectations of the public with regard to delivery of public goods by farmers, as well as expectation of public money being spent on support to public goods involving farm biodiversity, water and soil⁴¹⁶.

Public opinion has also very likely had an effect on the formulation of measures relating to **GMOs**. It has been noted that the revision of the previous EU GMO regulatory framework was aimed at addressing the loss of public trust in GMO regulation. The public's trust in EU risk assessment procedure had been undermined by a number of scandals in the food sector, in particular the BSE crisis.⁴¹⁷ In addition, it has been noted that the European food and retailing industries remain reticent to market GM food and food products due to expected negative consumer reactions. As a result, only a limited number of products are currently being marketed and imported.⁴¹⁸ In addition, it is likely that Member States' national

⁴¹⁴ Euro Barometer (2009): Civil Protection, Full Report.

⁴¹⁵ Hart, K., Baldock, D. (2010): Impact of CAP reforms on the environmental performance of agriculture, a report to the OECD from IEEP.

⁴¹⁶ CEC (2010): The Common Agricultural Policy after 2013: Your ideas matter - Public Debate. Synthetic Report.

⁴¹⁷ Paula Rey García, Directive 2001/18/EC on the Deliberate Release into the Environment of GMOs: an Overview and the Main Provisions for Placing on the Market, Journal For European Environmental and Planning Law, Vol. 2006 No. 1, p. 4.

⁴¹⁸ Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and

measures have also been influenced by the public's critical stance towards GMOs. However, public opinion does not seem to influence scientific conclusions reached during risk assessment procedures.

Other EU priorities

Other EU policy priorities have also had an important influence on developments in a number of sub-areas in the nature and biodiversity thematic area of the 6EAP and hence contributed to the achievement of certain 6EAP objectives in this area.

The adoption by EU leaders in 2001 of the Gothenburg target to halt biodiversity decline by 2010 and the global target agreed at the WSSD in Johannesburg in 2002 were identified by stakeholders among the main drivers behind action in the **biodiversity** area, in particular in relation to the development of the BAP in 2006⁴¹⁹. The 1998 EU Biodiversity Strategy and its review were also considered key drivers in this regard. A number of core European policy imperatives such as economic growth and development have also been seen to undermine conservation objectives and practical actions taken. Moreover, biodiversity concerns are often not adequately mainstreamed in sectoral policy, thus conservation progress in the wider environment is severely restrained. However, recent developments, including advancements in the knowledge base and increasing recognition of linkages with other policy areas (in particular the economy) have helped increase appreciation of the socioeconomic value of biodiversity and threats and pressures on biodiversity.

One of issues limiting the EU's ability to protect **soils** is related to how to improve agricultural management. The management of agricultural land and their soils into the future will likely be dictated by the outcome of discussions on the future of the EU budget and how agricultural payments will be distributed.

The EU's commitments with regard to biodiversity, water management, climate change and energy have been integrated in the Rural Development policy as a result of the **CAP Health Check** agreement in 2008. The revised Strategic Guidelines for Rural Development highlight the need 'to reinforce the efforts with regard to the Community priorities in the field of climate change, renewable energy, water management, [and] biodiversity'⁴²⁰ and that 'operations related to these Community priorities are further strengthened in the rural development programmes'⁴²¹. The preamble to the revised EAFRD Regulation (EC) No 74/2009⁴²² states

feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM (2006) 197 final, p.4; Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final, p. 7.

⁴¹⁹ Stakeholder consultation, Brussels workshop.

⁴²⁰ Council Decision of 19 January 2009 amending Decision 2006/144/EC on the Community strategic guidelines for rural development (programming period 2007 to 2013), OJ L 30, 31/1/2009.

⁴²¹ Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31/1/2009.

⁴²² Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31/1/2009.

that Europe continues to experience ‘serious problems in relation to water scarcity and droughts’, that ‘protecting biodiversity remains a major challenge, which is further increased by climate change and water demand’ and that Member States will need to ‘examine all possible ways of reducing greenhouse gas emissions [...] in the future the agriculture sector will be called upon to step up its emission reduction efforts as part of the EU global climate change strategy’.

Factors driving the integration of the environment in the **CFP** include the adoption of Article 6 of the EC Treaty in 1997 which required environmental protection requirements to be integrated in the definition and implementation of Community policies and the 1998 Community Strategy on Biodiversity⁴²³. The objectives of the Biodiversity Strategy with respect to fisheries were to conserve commercially exploited fish species, achieve sustainability of stocks, and reduce the impact of fishing on non-target species and marine habitats. This Biodiversity Strategy was followed by a more specific ‘Biodiversity Action Plan for Fisheries’⁴²⁴, which contained concrete proposals for minimising impacts on the biodiversity of Community waters, paying most attention to the precautionary approach, the reduction of fishing pressure, and the need to make use of restricted areas. The Commission also adopted a Communication in June 1999 on fisheries management and nature conservation in the marine environment which identified a number of priorities and implementing measures that would benefit from increased coordination and coherence between the CFP and the environmental policy⁴²⁵. The 2006 Biodiversity Action Plan includes five fisheries specific targets and over actions 12 for implementation at Community or Member State level, or both⁴²⁶.

Other EU policies influenced the **Marine Thematic Strategy** including the Water Framework Directive and the Integrated Maritime Policy. The interaction between the Marine Thematic Strategy and MSFD and these broader policies is addressed in the wider context of the Integrated Maritime Policy, which was developed largely after the main text of the MSFD was already agreed.

International commitments

International commitments have also played a role in driving forward action in relation to certain 6EAP objectives in this area.

The EU is a Party to the Convention on Biological Diversity (CBD) having ratified the Convention in 1993 and its commitments under the CBD have played a role in driving forward certain **biodiversity related developments**. Contracting Parties are required to

⁴²³ CEC (1998), Communication from the Commission to the Council and the European Parliament on a European Community biodiversity strategy, (COM(1998)42).

⁴²⁴ CEC (2001) Commission Communication - Biodiversity Action Plans in the areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Co-operation, (COM(2001)162), 27/03/2001.

⁴²⁵ CEC (1999): Communication from the Commission - Fisheries management and nature conservation in the marine environment, (COM(1999)363), 14/07/1999.

⁴²⁶ CEC (2006): Commission Staff Working Document - Annexes to the Communication from the Commission - Halting the loss of biodiversity by 2010 and beyond - Sustaining ecosystem services for human well-being, SEC(2006)621), 22/05/2006.

develop national strategies for the conservation and sustainable use of biodiversity, which in turn should be integrated into relevant national policies. In response to this requirement, the Commission produced a Communication outlining the EU strategy for biodiversity conservation⁴²⁷ which provides a general framework for the development of EU policies and instruments to implement the CBD consistently in the Community. This Strategy was followed in 2001 by four Biodiversity Action Plans on the conservation of natural resources; agriculture; fisheries; and economic and development cooperation⁴²⁸. The 2006 Biodiversity Action Plan advances the 1998 EU Biodiversity Strategy and related Action Plans.

EU action in relation to biodiversity has also had an influence on the formulation of certain international commitments. For instance, the commitment by EU leaders in June 2001 to halt the decline of biodiversity in the EU by 2010 influenced the international agreement reached in April 2002 among the Parties to the CBD to significantly reducing the current rate of biodiversity loss at the national, regional and international level by 2010. This target was subsequently endorsed in a variety of multilateral fora including the World Summit on Sustainable Development in 2002 and the UN General Assembly at the 2005 World Summit where it was incorporated as a new target under Goal 7 (ensuring environmental sustainability) of the Millennium Development Goals. Although EU leaders had already agreed in June 2001 to halt the decline of biodiversity in the EU by 2010, the international commitment (which is weaker than the EU commitment) can be seen to have been a further reinforcing factor in taking forward action in this area. The EU also played an important role at the 10th meeting of the Conference of the Parties (COP 10) to the CBD in Nagoya in October 2010 where advances on a number of key areas were made including the adoption of a Protocol on Access and Benefit Sharing (ABS) and a multi-year Strategic Plan 2011 to 2020. The results of the TEEB initiative provided important input to this COP and references to the valuing of biodiversity in the Strategic Plan, along with the inclusion of several paragraphs on TEEB, point to support for this approach and the need to further develop the work in the future.

The **Communication on disaster prevention** contributes to the overall implementation of the Hyogo Framework for Action 2005-2015 and aims to complement/support the work of national platforms for disaster risk reduction⁴²⁹. The Hyogo Framework for Action was adopted at the 2005 World Conference on Disaster Reduction by the Member States of the United Nations and is the key instrument for implementing disaster risk reduction. However these international commitments have not been a major factor in shaping the ambition of the Communication, rather this has been driven by subsequent events and high-levels of public and political support.

⁴²⁷ CEC (1998): Communication from the Commission to the Council and the European Parliament on a European Community Biodiversity Strategy, (COM(1998)42).

⁴²⁸ CEC (2001): COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT - Biodiversity Action Plans in the areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Co-operation, (COM(2001)162).

⁴²⁹ Council of the European Union, (2009): Council Conclusions on a Community framework on disaster prevention within the EU, 15394/09, 12 November 2009.

International pressure from various agreements and treaties has also played a role in further driving the integration of environmental principles in **fisheries management**. Having signed up to the Convention on Biological Diversity at the Rio Earth Summit in 1992 and the Jakarta Mandate on Marine and Coastal Biological Diversity which was adopted at the second meeting of the Conference of the Parties in 1995, the EU is now committed to achieving the conservation and sustainable use of marine and coastal biological diversity⁴³⁰ in EU waters. The EU is also a signatory to the United Nations Fish Agreement (UNFA) relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995) which requires parties to implement the precautionary and ecosystem-based approaches to management. In line with this agreement, the EU must assess the impacts of fishing on target and non-target species, and where necessary adopt conservation and management measures⁴³¹. Effectively controlling fishing activities, conducting scientific research, and minimizing pollution, by-catch and discards are further obligations of parties⁴³². The voluntary FAO Code of Conduct also agreed in 1995, was developed to establish principles and provide guidance to help nations elaborate on and implement national policies for responsible management and conservation of fisheries resources⁴³³. A combination of international agreements and treaties calling for improved marine conservation and management, and a growing awareness or concern for the state of fish stocks and the marine environment more generally have also had an influence on the impetus for a 'greening' of the CFP. These international developments whilst likely to have had a positive impact on environmental integration are not related to the 6EAP directly. Furthermore, the 6EAP did not instigate this global trend, and it is unlikely that altered or accelerated the momentum for environmental integration globally.

A number of the EU's international commitments have also affected the level of ambition of the adopted **Marine Thematic Strategy**. For example, the Johannesburg Plan of Implementation adopted at the WSSD in September 2002 encouraged the application of the ecosystem approach, which is featured in the Thematic Strategy. The Convention on Biological Diversity, the Convention for the Protection of Marine Environment of the North East Atlantic (OSPAR), and the Convention for the Protection of the Marine Environment of the Baltic Sea (HELCOM) are likely to have helped drive the marine biodiversity conservation agenda forward, and the shortcomings of these (lack of enforcement powers) are cited in the Communication as a reason for having a Thematic Strategy.

As was noted by some stakeholders consulted in the context of this study⁴³⁴, a large number of international agreements exist in relation to **forests**, such as the nineteen (legally non-

⁴³⁰ FAO (1995): Code of Conduct for Responsible Fisheries.

⁴³¹ UNGA (1995): United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, Agreement for the implementation of the provisions of the UN Convention on the Law of the Sea of 10 December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks, A/CONF.164/37.

⁴³² UNGA (1995) : United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, Agreement for the implementation of the provisions of the UN Convention on the Law of the Sea of 10 December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks, A/CONF.164/37.

⁴³³ FAO (1995): Code of Conduct for Responsible Fisheries.

⁴³⁴ Stakeholder consultation, Brussels workshop.

binding) resolutions adopted to date at the Ministerial Conferences on the Protection of Forests in Europe (now known as Forest Europe)⁴³⁵. The EU's involvement in initiatives such as the Forest Europe has influenced many of the measures on forestry undertaken at the national level (e.g. implementation of national forest programmes) and Community level. A working group is currently exploring the potential added value of and possible options for a legally binding instrument. The results of this process might influence the level of ambition of any instrument adopted after the expiry of EU FAP in 2011. In addition, the new Regulation on illegal logging acts as an incentive for sourcing timber covered by valid CITES (Convention on International Trade in Endangered Species) permits as this can provide a high degree of certainty for operators and exporting countries regarding the legality of harvested timber. CITES covers a number of species (those in Annexes A, B and C) threatened by international trade and thus its further development (by the adding of more species to the Convention) might have an impact on the enforcement of the Regulation.

International commitments have not manifestly influenced the achievement of the 6EAP objectives relating to GMOs, except of course, for the Regulation adopted to implement the Cartagena Protocol. There are currently no mandatory international rules on the labelling and traceability of GMOs; the Codex Alimentarius Commission has not adopted any standards in this regard so far. The Cartagena Protocol provides for a prior notification procedure in case of the trans-boundary movement of GMOs and refers to labelling as one aspect in this regard, but does not contain any mandatory labelling provisions. The Codex Alimentarius Commission has developed guidelines for the risk assessment of GM foods,⁴³⁶ but not on environmental risk assessment. WTO law had to be taken into account when formulating the EU legal rules on GMOs. While a previous 'de facto moratorium' of the EU on the approval of GMOs had been challenged successfully before the WTO dispute settlement, it is not evident that WTO law had any significant impact on the level of ambition of current EU GMO legislation.

1.3 Environment and Health

1.3.1 Achievement of objectives

1.3.1.1 Research

Relevant objectives

Article 7(1) of the 6EAP sets the following objective with regard to research in the environment and health area:

⁴³⁵ Forest Europe is a high-level political initiative whose signatory states are committed to voluntarily implementing decisions adopted in the process.

⁴³⁶ Guideline for the conduct of food safety assessment of foods produced using recombinant-DNA microorganisms, CAC/GL 46-2003 and Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants, CAC/GL 45-2003.

‘achieving better understanding of the threats to environment and health in order to take action to prevent and reduce the threats;’

Article 7(2a) calls for the ‘reinforcement of Community research programmes and scientific expertise, and encouragement to the international coordination of national research programmes, to support achievement of objectives on health and environment’. In particular, the following specific priority actions are set out:

- ‘identification and recommendations on the priority areas for research and action including among others the potential health impacts of electromagnetic pollution sources and including particular attention to the development and validation of alternative methods to animal testing particularly in the field of chemical safety;
- definition and development of indicators of health and environment;
- re-examination, development and updating of current health standards and limit values, including where appropriate, the effects on potentially vulnerable groups, for example children or the elderly and the synergies and the reciprocal impact of various pollutants;
- review of trends and the provision of an early warning mechanism for new or emerging problems;’

Overview of measures

The Community Action Programme on public health (2003-2008)⁴³⁷ considers the environment as a major health determinant. A number of EU Research Framework Programmes⁴³⁸ also include specific actions on the issue of environment and health. However, while many of the EU’s policy responses to health and environment concerns have focused on ‘single pollutants in single environmental compartments (air, water, soil, ...)', it was felt that what was needed was an integrated approach taking into account the transfer of pollutants from one part of the environment to another and acknowledging the fact that individuals are exposed to a combination of pollutants⁴³⁹.

In order to address concerns over the increasing effects of pollution on people’s health, the European Commission adopted the ‘**European Environment and Health Strategy**⁴⁴⁰ (EHS) in June 2003. This Strategy proposed an integrated approach involving closer co-operation between the health, environment and research areas with the aim of reducing the disease burden caused by environmental factors in Europe, identifying and preventing new health threats caused by environmental factors, and strengthening the EU’s capacity for policy-making in this area. The Strategy set out a long-term framework which was to be implemented in cycles, gradually expanding in coverage as the knowledge base improved.

⁴³⁷ Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002 adopting a programme of Community action in the field of public health (2003-2008), 09/10/2002, Brussels.

⁴³⁸ For a list of FP6 Environment programmes focusing and the environment and health please see: http://www.fp7.org.tr/tubitak_content_files/272/Haberler/FP6_ENV_Projects.pdf

⁴³⁹ Commission of the European Communities, Communication from the Commission, A European Environment and Health Strategy, 11/06/2003, Brussels, p.4.

⁴⁴⁰ CEC, (2003), The European Environment and Health Strategy, (COM(2003)338).

The Strategy was followed one year later by the **European Environment and Health Action Plan (EHAP) 2004-2010**⁴⁴¹ which proposed to develop an integrated information system on environment and health and to strengthen research on environment and health to render the assessment of the environmental impact on human health more efficient. The Action Plan is designed to give the EU the scientific information needed to help Member States reduce the adverse health impacts of certain environmental factors and to stimulate better cooperation between actors in the environment, health and research fields. It is structured around three central objectives/themes: to develop integrated environment and health information to understand the links between sources of pollutants and health effects; to fill the knowledge gap through strengthening research on environment and health; and to review current policies and improve communication with both citizens and health professionals by developing awareness raising, risk communication, training and education. The objectives of the Action Plan are to be met through a series of 13 actions, each a non-binding measure that includes qualitative targets.

Contribution of measures to achievement of 6EAP objectives

The EHS 'underlines the Commission's commitment to 'provide an environment where pollution does not give rise to harmful effects on human health and the environment' as stated in the Sixth Environment Action Programme⁴⁴². The EHAP (the instrument that emerges from the EHS) recognises the ongoing and upcoming work aimed at tackling the main environment and health problems, in particular in the Thematic Strategies under the 6EAP⁴⁴³. In this context, it notes the need to ensure that these efforts are well coordinated, taking into account all the available information, and also the need to use the increased understanding of environment and health risks resulting from the integrated information measures to assess the effectiveness of existing policies in improving health outcomes, and to stimulate a discussion on proportionate responses to the remaining identified risks. Action 11 of the EHAP states that the Commission will ensure co-ordination in the preparation and implementation of risk reduction initiatives of direct relevance to the four priority diseases covered by the EHAP, including the CAFE Programme (Air Thematic Strategy), the transport component of the Urban Thematic Strategy (both relevant for respiratory diseases) and the Pesticides Thematic Strategy (potentially relevant for neuro-developmental disorders and for endocrine disrupting effects).

The Commission's mid-term review of the EHAP⁴⁴⁴ listed a number of measures successfully carried out under the Action Plan including putting in place a number of EU-wide environment and health monitoring and information systems⁴⁴⁵ and assessment strategies to

⁴⁴¹ CEC (2004): The European Environment and Health Action Plan (EHAP) 2004-2010, (COM(2004)416).

⁴⁴² CEC (2003): The European Environment and Health Strategy, (COM(2003)338).

⁴⁴³ Volume II, Technical Annexes of (COM(2004)416).

⁴⁴⁴ CEC, (2007), Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

⁴⁴⁵ A review of current environment and health information and monitoring systems undertaken by the Commission in 2006 (SEC (2006)1461) concluded that although a number of EU-wide environment and health monitoring and information systems exist and that assessment strategies are in place to cover the range of environmental impacts expected to affect human health, efforts must be sustained to improve the integration and compatibility between systems and to ensure data quality and comparability.

cover the range of environmental impacts expected to affect human health. At the same time, the Commission also acknowledged that much remained to be done, including translating research project results into policy action and linking them to information systems; further studying the causes of environment-related diseases, the health effects of climate change and nanoparticles, further research on indoor air quality; integrating health concerns into other policy areas including transport, energy, chemicals and employment; and increasing linkages between existing information and monitoring systems.

The Commission has launched targeted research projects on asthma and allergy, neuro-immune disorders, exposure to metals and a number of other health problems linked to the environment⁴⁴⁶. The Commission has also funded several projects to develop methodological systems to analyse environment/health interactions, in particular with respect to the evaluation of cumulative effects and interaction between stressors and their influence on human health as well as projects to provide research support for policy actions in the field of climate change, water quality and risk assessment of nanotechnologies. Several projects have also been launched to improve indoor air quality⁴⁴⁷. Action 13 of the EHAP is focused on maintaining a watching brief on developments in the scientific evidence on the risks posed by electromagnetic fields. The Scientific Committee on Emerging and Newly Identified Health Risks adopted an Opinion on Research Needs to address the remaining knowledge gaps in electro-magnetic fields⁴⁴⁸, thus moving forward one of the priority environment and health risks highlighted in the 6EAP. With the exception of the work in relation to electro-magnetic fields, the priority areas being pursued in various Commission funded research projects are not among those explicitly mentioned in the 6EAP, however they do support the achievement of wider environment and health objectives set out in the 6EAP and contribute to the 'better understanding of the threats to environment and health in order to take action to prevent and reduce the threats'.

It can be argued that the EHAP has been successful in putting in place EU-wide monitoring and information systems and launching targeted research projects thus helping to increase information on and awareness of the linkages between the environment and health as set out in the 6EAP. However, improving research capabilities and information on environment and health is only one part of the 6EAP's objectives on environment and health. The 6EAP also calls for this information to be used to take action to prevent and reduce the threats to health linked to environmental factors. Whilst a number of other related policies (e.g. REACH, the pesticides framework Directive) are in place that contribute towards the wider 6EAP health and environment objectives, the EHAP itself and its structure (lack of concrete legal measures and strong incentives) offer little help in stimulating the much needed changes in current practices and health standards⁴⁴⁹.

⁴⁴⁶ CEC, (2007), Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

⁴⁴⁷ CEC (2007): Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

⁴⁴⁸ See: http://ec.europa.eu/health/ph_risk/committees/04_scenihp/scenihp_opinions_en.htm, Conclusions summarised in Technical Annexes

⁴⁴⁹ Withana, S., et al, (2010), Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future, Report for the IBGE-BIM, IEEP, London.

1.3.1.2 Chemicals

Relevant objectives

One of the overall **aims** of the 6EAP is:

‘contributing to a high level of quality of life and social wellbeing for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment’(Article 2(2)).

Article 7(1) of the 6EAP sets out the following **specific objectives** relevant for chemicals:

- ‘achieving better understanding of the threats to environment and human health in order to take action to prevent and reduce these threats;
- aiming to achieve within one generation (2020) that chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment, recognising that the present gaps of knowledge on the properties, use, disposal and exposure of chemicals need to be overcome;
- chemicals that are dangerous should be substituted by safer chemicals or safer alternative technologies not entailing the use of chemicals, with the aim of reducing risks to man and the environment;’

Article 7(2b) sets out the following **priority actions** to achieve these objectives:

- ‘placing the responsibility on manufacturers, importers and downstream users for generating knowledge about all chemicals (duty of care) and assessing risks of their use, including in products, as well as recovery and disposal;
- developing a coherent system based on a tiered approach, excluding chemical substances used in very low quantities, for the testing, risk assessment and risk management of new and existing substances with testing procedures that minimise the need for animal testing and develop alternative testing methods;
- ensuring that the chemical substances of concern are subject to accelerated risk management procedures and that substances of very high concern, including carcinogenic, mutagenic or toxic for reproduction substances and those which have POPs (persistent organic pollutants) characteristics, are used only in justified and well defined cases and must be subject to authorisation before their use;
- ensuring that the results of the risk assessments of chemicals are taken fully into account in all areas of Community legislation where chemicals are regulated and to avoid duplication of work;
- providing criteria for including among the substances of very high concern those that are persistent and bioaccumulating and toxic and substances that are very persistent and very bio-accumulative and envisaging the addition of known endocrine disruptors when agreed test methods and criteria are established;
- ensuring that the main measures that are necessary in view of the identified objectives are developed speedily so that they can come into force before the mid-term review;
- ensuring public access to the non-confidential information in the Community Register on Chemicals (REACH Register).

Overview of measures

Regulation (EC) No 1907/2006 concerning the **Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)**⁴⁵⁰ is the main legal instrument adopted that contributes to the 6EAP chemicals objectives. The Regulation introduces a single system for the registration, evaluation, authorisation and restriction of all chemicals and abolishes the distinction between 'new' (introduced into the market after 1981) and 'existing' chemicals (listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) before 1981). REACH incorporates into its remit all existing chemicals about which sufficient information is often lacking for effective assessment and control. It also transfers the burden of proof of risk assessments of substances from the public authorities to industry and places more responsibility on manufacturers, importers and downstream users to provide useful information about the chemicals on the market and calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified⁴⁵¹.

Other relevant legal instruments are the dangerous substances Directive 67/548/EEC (DSD), the dangerous preparations Directive 1999/45/EC (DPD) and Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

Contribution of measures to achievement of 6EAP objectives

To date, the implementation of the REACH Regulation has mostly been related to administrative aspects of the legislation, thus it is not possible to assess evidence based outcomes that could be attributed to REACH. Hence the evaluation below is based on how the legislation is likely to contribute to the aims, objectives and priority actions set out in the 6EAP.

Contributing to an environment where the level of pollution does not give rise to harmful effects on human health and the environment

Based on the increased knowledge of the possible harmful impacts of the estimated 30,000 substances that will be registered and implementation of REACH principles such as substitution, it is very likely that REACH will *contribute to* the reduction of negative impacts on human health and the environment. The aim of reducing the harmful impacts on human health and the environment overall also depends on the implementation of the other sub-areas in the environment and health thematic area.

Achieving better understanding of the threats of chemicals to environment and human health in order to take action to prevent and reduce these threats

This specific objective is one of the cornerstones of REACH. The two main stages of registration and evaluation will increase the knowledge of an estimated 30,000 substances manufactured and imported to the order of over one tonne per year with the authorization

⁴⁵⁰ Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, OJ L309, 24/11/2009.

⁴⁵¹ IEEP (2010) Manual for European Environmental Policy. Earthscan.

and restriction stages setting potential restrictions for their use. The main stages of authorisation and restrictions also cover substances that are not registered, and are manufactured or imported to the order of under one tonne per year. It is important to note that REACH not only requires assessment of risk, but also sharing of the knowledge from such assessments, such as in the supply chain, thus allowing the knowledge to be used for better decision making.

By 2020 chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment, recognising that the present gaps of knowledge on the properties, use, disposal and exposure of chemicals need to be overcome.

The REACH Regulation fulfils the second part of this objective of overcoming the present knowledge gaps on the properties, use, disposal and exposure of chemicals; however it is unlikely to meet the deadline of the 6EAP objective that by 2020 chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment. This is mainly because of the long implementation span of REACH, with for instance the deadline for registration provisions for phase-in substances⁴⁵² of one tonne or more per year being 1 June 2018. Other reasons include the exemptions for many substances (cellulose pulp, minerals, ores etc.), their coverage by other legislation (substances classified as waste, pesticides, etc), and complex procedures associated with the Regulation.

Chemicals that are dangerous should be substituted by safer chemicals or safer alternative technologies not entailing the use of chemicals, with the aim of reducing risks to man and the environment

Substances of very high concern are subject to authorisation by the Commission with regard to particular uses. To this end all manufacturers, importers and downstream users applying for authorisations are required to analyse the availability of alternatives and consider their risks, and the technical and economic feasibility of substitution. One of the main weaknesses of REACH is that the use of substances of very high concern can be authorised even if safer alternatives exist as long as they are 'adequately controlled'. The 'adequately controlled'⁴⁵³ route does not apply to the most dangerous substances but can be used for endocrine disruptors, even if safer alternatives exist. The Commission is to review whether endocrine disruptors should also be excluded from the adequate control route by June 2013.

Placing the responsibility on manufacturers, importers and downstream users

REACH transfers the burden of proof of risk assessments of substances from public authorities to industry, thus placing much more responsibility on manufacturers, importers and downstream users to provide relevant information about the chemicals on the market. However, in the course of the legislative process, a number of exceptions were introduced

⁴⁵² A phase-in substance is a substance listed in EINECS or those that have been manufactured in the Community, but not placed on the Community market, in the last 15 years, or the 'no longer polymers' of Directive 67/548/EEC.

⁴⁵³ Based on specific exposure levels and risk characterisation as defined in section Annex I, Section 6.4 of the REACH Regulation.

which limit the scope of industry's duty of care. For instance the information requirements for the registration of substances manufactured and imported between one tonne and ten tonnes are rather limited as they do not require a proper hazard assessment in the form of a chemical safety report (which is only required for substances that are manufactured or imported over 10 tonnes).

Developing a coherent system that minimises the need for animal testing and develop alternative testing methods

REACH requires that the intrinsic properties of substances be generated by means other than animal tests. This is especially true for human toxicity information, where the information has to be generated, whenever possible, by means other than a vertebrate animal test. These methods will be regularly reviewed and improved with a view to reducing testing on vertebrate animals and the number of animals involved. In addition, the Substance Information Exchange Forum⁴⁵⁴ is required to share existing vertebrate animal test data as well as agree on the generation of new test data. It is also the aim of ECHA to prevent unnecessary animal testing as part of the examination of the testing proposals.

Accelerated risk management procedures of chemical substances of concern and authorisation of substances of very high concern

The limitations of the authorisation procedure in using the 'adequately controlled' route for substances of very high concern even if safer alternatives exist have already been discussed above. In addition, even if a substance has been identified as being of very high concern, to the degree that not even the 'adequately controlled' route is allowed, an authorisation for its use can still be granted if it is shown that socio-economic benefits outweigh the risk to human health or the environment arising from the use of the substance. However, this applies only in situations where there are no suitable alternative substances or technologies.

For the evaluation of substances, REACH develops criteria for prioritising substances with a view to evaluating these further. This prioritisation is risk-based and covers criteria such as hazard, exposure and tonnage. However, this is not necessarily about *accelerating* the risk management procedure but rather prioritising the evaluation of those substances that are likely to have the greatest impact on human health and the environment.

Ensuring that the results of the risk assessments of chemicals are taken fully into account in all areas of Community legislation where chemicals are regulated and to avoid duplication of work

Several substance categories (food, wastes, medicines etc) are not covered by REACH but by other EU legislation and the development of a coherent approach is likely to be challenging not only in terms of avoiding duplication of work but also in terms of not fulfilling the requirement at all.

Providing criteria for including among the substances of very high concern those that are persistent and bio-accumulating and toxic and substances that are very persistent

⁴⁵⁴ Which aims to facilitate the exchange of information between potential registrants of phase-in substances.

and very bio-accumulative and envisaging the addition of known endocrine disrupters when agreed test methods and criteria are established

REACH sets criteria for these but as already mentioned, the inclusion of endocrine disrupters to be authorised as part of the 'adequately controlled' route is a concern, especially as the 6EAP acknowledges endocrine disruptors among the substances of very high concern. The lack of agreed test methods/criteria and the consequent difficulties in setting specific exposure levels for endocrine disrupters should not be a reason for allowing the 'adequately controlled' route even if safer alternatives exist as required by the precautionary principle, which is meant to 'underpin' the REACH system.

Ensuring that the main measures that are necessary in view of the identified objectives are developed speedily so that they can come into force before the mid-term review

The REACH Regulation came into force on 1 June 2007, which was before the mid-term review of the 6EAP. However as noted above the Regulation has a long implementation time span which undermines the achievement of identified 6EAP objectives by 2020 as envisaged.

Ensuring public access to the non-confidential information in the Community Register on Chemicals (REACH Register)

The 6EAP objective of ensuring wider public access to information on chemicals is compromised by provisions in REACH limiting the categories of 'non-confidential information' that is freely accessible by specifying a long list of confidential information (including production volumes and company names) and extending the possibilities for industry to claim that certain data should be treated as confidential.

1.3.1.3 Pesticides

Relevant objectives

One of the overall **aims** of the 6EAP is:

'contributing to a high level of quality of life and social wellbeing for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment...' (Article 2(2)).

Article 7(1) of the 6EAP sets out the following **specific objectives** relevant for pesticides:

'reducing the impacts of pesticides on human health and the environment and more generally to achieve a more sustainable use of pesticides as well as a significant overall reduction in risks and of the use of pesticides consistent with the necessary crop protection. Pesticides in use which are persistent or bio-accumulative or toxic or have other properties of concern should be substituted by less dangerous ones where possible.'

Article 7(2c) sets out the following **priority actions** to achieve these objectives:

- 'full implementation and review of the effectiveness of the applicable legal framework in order to ensure a high level of protection, when amended. This

- revision might include, where appropriate, comparative assessment and the development of Community authorisation procedures for placing on the market; and
- a thematic strategy on the sustainable use of pesticides that addresses:
 - i. *minimising the hazards and risks to health and environment from the use of pesticides;*
 - ii. *improved controls on the use and distribution of pesticides;*
 - iii. *reducing the levels of harmful active substances including through substituting the most dangerous with safer, including non-chemical, alternatives;*
 - iv. *encouragement of the use of low input or pesticide free cultivation among others through raising users' awareness, promoting the use of codes of good practices, and promoting consideration of the possible application of financial instruments;*
 - v. *a transparent system for reporting and monitoring progress made in fulfilling the objectives of the strategy including the development of suitable indicators;'*

Overview of measures

The **Thematic Strategy on the Sustainable Use of Pesticides** (COM (2006)372)⁴⁵⁵ was published in July 2006. The objectives of the Thematic Strategy are to minimise the hazards and risks to health and environment from the use of pesticides; improve controls on the use and distribution of pesticides; reduce the levels of harmful active substances including through substituting the most dangerous with safer alternatives; encourage low-input or pesticide-free cultivation; and establish a transparent system for reporting and monitoring progress. Two important legislative proposals were published alongside the Thematic Strategy - a proposal for a Regulation concerning the placing of plant protection products on the market (COM (2006)388)⁴⁵⁶ and a proposal for a Framework Directive to achieve a sustainable use of pesticides (COM (2006)373)⁴⁵⁷ which were subsequently adopted in 2009.

Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market⁴⁵⁸ aims to ensure a high level of protection of both human and animal health and the environment and harmonize the rules on the placing on the market of pesticides, while improving agricultural production. The Regulation divides the EU into three zones (north, centre and south) inside of which mutual recognition of plant protection products will become the rule. However, Member States will be allowed to ban a product on the basis of specific environmental or agricultural circumstances.

⁴⁵⁵ CEC, (2006), Communication from the Commission, A Thematic Strategy on the Sustainable Use of Pesticides, (COM(2006)372).

⁴⁵⁶ CEC, (2006), Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the placing of plant protection products on the market, (COM(2006)388), 12/07/2006.

⁴⁵⁷ CEC, (2006), Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for Community action to achieve a sustainable use of pesticides, (COM(2006)737), 12/07/2006.

⁴⁵⁸ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJL 309.

Directive 128/2009/EC establishing a framework for Community action to achieve the sustainable use of pesticides⁴⁵⁹ establishes a framework to achieve the sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of integrated pest management and of alternative approaches or techniques such as non-chemical alternatives to pesticides. The Directive requires Member States to adopt National Action Plans with quantitative targets, measures and timetables and to encourage the development and introduction of integrated pest management and of alternative approaches or techniques to reduce dependency on the use of plant protection products. The National Action Plans are also required to include indicators to monitor the use of plant protection products containing active substances of particular concern, especially if alternatives are available.

These two legislative measures together with legislation on **maximum residue levels on pesticides** and the **authorisation and marketing of biocides**, form the basis of EU pesticides policy.

Contribution of measures to achievement of 6EAP objectives

Directive 128/2009/EC came into force in November 2009 and the deadline for transposition is December 2011. Regulation (EC) No 1107/2009 came into force in December 2009 and will repeal Directive 79/117/EEC and partly repeal Directive 91/414/EEC on 14 June 2011. As these measures have not yet been implemented, this section will evaluate how these measures are likely to contribute to the aims, objectives and priority actions of the 6EAP. Some stakeholders consulted in the context of this study, considered the Pesticides Thematic Strategy to have been a success in that it led to stronger legislation in the area. However, the aims of the 6EAP in relation to pesticides were considered to be vague and it was recognised that more remains to be done in this area⁴⁶⁰.

Contribute to an environment where the level of pollution does not give rise to harmful effects on human health and the environment

The Directive on sustainable use of pesticides establishes a framework to achieve the sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment. Regulation (EC) No 1107/2009 on authorisation and marketing of plant protection products harmonises the rules on the placing on the market of pesticides, while improving agricultural production. Hence these measures are likely to contribute towards the above aim of the 6EAP with regard to pesticide pollution.

Reducing the impacts of pesticides on human health and the environment and more generally to achieve a more sustainable use of pesticides as well as a significant overall reduction in risks and of the use of pesticides consistent with the necessary crop protection. Pesticides in use which are persistent or bio-accumulative or toxic or have other properties of concern should be substituted by less dangerous ones where possible

⁴⁵⁹ Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309.

⁴⁶⁰ Stakeholder consultation, Brussels workshop.

The Pesticides Thematic Strategy addresses this objective as does the Directive on sustainable use of pesticides and the Regulation on authorisation and marketing of plant protection products. The Regulation requires the development of a candidate list for substitution for those products that can be eliminated where safer alternatives are available. The substances included in the candidate list are required to meet a number of criteria. Directive 2009/128/EC only applies to pesticides that are plant protection products as defined in the Regulation (EC) No 1107/2009 which does not include biocidal products, as defined in Directive 98/8/EC. It is however anticipated that the scope of Directive 2009/128/EC will be extended to cover biocidal products⁴⁶¹. This explains why the Directive categorically uses the term 'pesticides' (which covers plant protection products and biocidal products) instead of the term 'plant protection products'. However, until the scope is extended to biocidal products, the Directive only applies to plant protection products.

All the **priority actions** set out in the 6EAP are also objectives in the Pesticides Thematic Strategy with a number of measures incorporated in Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and Directive 128/2009/EC establishing a framework for Community action to achieve the sustainable use of pesticides. The extent to which the 6EAP priority actions are likely to be met when the Regulation and Directive are implemented is set out below.

Minimising the hazards and risks to health and environment from the use of pesticides

Directive 2009/128/EC establishes a framework to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment through a number of measures. Regulation (EC) No 1107/2009 also contributes to this priority action by setting criteria for the authorisation of active substances in plant protection products as well as their residues. These measures, when implemented, are thus very likely to reduce the hazards and risks from the use of pesticides.

Improved controls on the use and distribution of pesticides

Directive 2009/128/EC requires Member States to ensure that the use of pesticides is minimized or prohibited in certain specific areas after appropriate risk management measures. Member States are also required to adopt necessary measures to ensure that certain operations by professional users and distributors do not endanger human health or the environment. Directive 2009/128/EC sets restrictions on aerial spraying, while the authorisation procedure of Regulation (EC) No 1107/2009 sets requirements on the use of the plant protection product. Hence it is likely that when these legislative measures are fully implemented, this priority action of the 6EAP will be met.

Reducing the levels of harmful active substances by substituting the most dangerous with safer, including non-chemical, alternatives

Regulation (EC) No 1107/2009 sets out a candidate list for substitution in which candidate substances are eliminated where safer alternatives are available. For candidate substances, the approval periods are restricted to seven years. Although it is likely that the candidate list

⁴⁶¹ Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309.

for substances encourages innovation to substitute harmful substances with safer alternatives, it is difficult to estimate the speed of this transition as candidate substances can still have approval periods of up to seven years.

Encouragement of the use of low input or pesticide free cultivation among others through raising users' awareness, promoting the use of codes of good practices, and promoting consideration of the possible application of financial instruments

According to Directive 2009/128/EC, Member States have to take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods, so that professional users of pesticides switch to practices and products with the lowest risk to human health and the environment among those available. This includes the establishment of necessary conditions for the implementation of integrated pest management as well as appropriate incentives to encourage professional users to implement crop or sector-specific guidelines for integrated pest management on a voluntary basis. Member States have to describe how they will ensure that principles of integrated pest management are implemented by January 2014. This approach relies on voluntary action by pesticide users together with encouragement from Member States and it is likely that the success of these measures will vary considerably between Member States based on a number of issues, such as cultural circumstances. Nevertheless, the Directive fulfils the requirement of the 6EAP priority action to encourage the shift towards low input or pesticide free cultivation. The possible application of financial instruments is not specifically mentioned in the legislation.

A transparent system for reporting and monitoring progress made in fulfilling the objectives of the strategy including the development of suitable indicators

Directive 2009/128/EC requires the Commission, in co-operation with Member States, to develop by December 2012 a strategic guidance document on monitoring and surveying of impacts of pesticide use on human health and the environment. It also requires Member States to establish harmonized risk indicators. However, Member States may continue to use existing national indicators or adopt other appropriate indicators in addition to the harmonized ones. Consequently the aims of this priority action will be met when these provisions of the Directive are implemented.

1.3.1.4 Water

Relevant objectives

Article 7(1) of the 6EAP sets out the following objectives relating to water:

- 'achieving better understanding of the threats to environment and human health in order to take action to prevent and reduce these threats;
- achieving quality levels of ground and surface water that do not give rise to significant impacts on and risks to human health and the environment, and to ensure that the rates of extraction from water resources are sustainable over the long term;'

Article 7(e) provides more specific priority actions to achieve these objectives:

- 'ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use;
- working towards ensuring full implementation of the Water Framework Directive, aiming at a good ecological, chemical and quantitative water status and a coherent and sustainable water management;
- developing measures aimed at cessation of discharges, emissions and losses of Priority Hazardous Substances, in line with the provisions of the Water Framework Directive;
- ensuring a high level of protection of bathing water, including revising the Bathing Water Directive;
- ensuring the integration of the concepts and approaches of the Water Framework Directive and of other water protection directives in other Community policies'.

It is important to note that, in developing the 6EAP, the Commission recognized that the Water Framework Directive (WFD) 2000/60/EC was only recently adopted (in 2000) and that this established a comprehensive assessment, objective setting and management framework for Europe's surface (fresh and coastal) and ground waters. As a result, there was no need for a raft of detailed strategic objectives in the 6EAP on water. Rather the 6EAP identifies some specific remaining tasks and emphasizes the wider context of the WFD.

It is also worth noting that other policy developments regarding water policy have taken place since the adoption of the 6EAP, but these were not addressed by the 6EAP. This includes the development and adoption of the Floods Directive 2007/60/EC and continuing work (which began before the adoption of the 6EAP) to revise the Drinking Water Directive 98/83/EC. These developments are, therefore, not addressed in this section.

Overview of measures

A number of measures have been adopted that contribute to 6EAP objectives on water quality.

Directive 2006/118/EC on the protection of groundwater against pollution and deterioration⁴⁶² seeks to achieve the 6EAP objective of a high level of protection of groundwater and sets a much clearer context for groundwater protection objectives within River Basin Management Plans. In order to assist the implementation of the Directive a number of guidance documents⁴⁶³ have been developed under the Common Implementation Strategy of the WFD.

⁴⁶² Directive 2006/118/EC on the protection of groundwater against pollution and deterioration.

⁴⁶³ CEC (2007) *CIS Guidance No 15 Groundwater Monitoring*, http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents/nov-2006_final-2pdf/EN_1.0_&a=d; CEC (2007) *CIS Guidance No 16 Groundwater in Drinking Water Protected Areas*, http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents/groundwater_dwpaspdf/EN_1.0_&a=d; CEC (2007) *CIS Guidance No 17 Direct and Indirect Inputs in the Light of 2006/118/EC Directive*, http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents/guidance_document/EN_1.0_&a=d

Directive 2008/105/EC on environmental quality standards in the field of water policy⁴⁶⁴ (EQS) requires Member States to establish environmental quality standards for surface waters for 33 'priority substances' and eight other pollutants and includes a requirement to phase out discharges, emissions and losses of 13 'priority hazardous substances' within 20 years in order to achieve the environmental objectives of the WFD. Implementation of the Directive is to be achieved through the assessment and planning processes established under the WFD.

A **revised Bathing Water Directive** (Directive 2006/7/EC)⁴⁶⁵ has been adopted as called for in the 6EAP. Key achievements of the revision include the focus on critical microbial standards for bathers, enhanced monitoring, and improved information to the public.

Other water-related measures have been adopted which were not explicitly mentioned in the 6EAP including **Directive 2007/60/EC on the assessment and management of flood risks**⁴⁶⁶. A **Communication on addressing the challenge of water scarcity and droughts**⁴⁶⁷ in the EU has also been adopted which will help to address some of the quantitative water objectives of the WFD as noted in the 6EAP and will also contribute to wider objectives in the 6EAP such as halting biodiversity loss.

Contribution of measures to achievement of 6EAP objectives

Ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use

The groundwater Directive came into force in January 2007 (deadline for transposition was January 2009), thus it is still too early to tell what the impacts of the Directive have been. All Member States have reported transposing legislation, which is undergoing a conformity check by the Commission. In March 2010 the Commission published a report on the establishment of groundwater threshold values⁴⁶⁸ which found a considerable variability in the ranges of threshold values across Europe. Available data resulting from the Member States monitoring programmes will be assessed in the evaluation of the River Basin Management Plans, which is due for completion by 2012. It will take many years to determine the environmental outcomes of the measure. However, the Directive once implemented is expected to be sufficient to achieve the 6EAP objectives in this regard.

Developing measures aimed at cessation of discharges, emissions and losses of Priority Hazardous Substances, in line with the provisions of the Water Framework Directive

⁴⁶⁴ Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council.

⁴⁶⁵ Directive 2006/7/EC concerning the management of bathing water quality and repealing Directive 76/160/EEC.

⁴⁶⁶ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (Text with EEA relevance) *OJ L 288*, 6.11.2007, p. 27–34.

⁴⁶⁷ CEC (2007): Commission Communication - Addressing the challenge of water scarcity and droughts in the European Union (COM(2007)414).

⁴⁶⁸ CEC (2010): Report from the Commission in accordance with Article 3.7 of the Groundwater Directive 2006/118/EC on the establishment of groundwater threshold values. (COM (2010)1096).

The deadline for transposition of the EQS Directive was July 2010, thus it is too early to tell what the impacts of the Directive will be on the environment. The Directive is likely to have important impacts in the future as it kick-starts action on hazardous substances that were long stalled by failure to develop further daughter Directives under Directive 76/464/EEC⁴⁶⁹. It also places the planning for such action within the River Basin Management Plans of the WFD. Having said this, the Directive introduces the concept of mixing zones where standards do not have to be met, which (despite Guidance being agreed between the Commission and Member States) leaves some room for possible exploitation by some Member States not to tackle certain discharges.

Ensuring a high level of protection of bathing water, including revising the Bathing Water Directive

As called for in the 6EAP, a revised bathing water Directive has been adopted. The Directive is currently in force and is being implemented. It has been transposed and Member States have until December 2014 to implement it. Reports indicate that although there are some compliance problems, bathing water quality continues to improve⁴⁷⁰. It is very likely that the revised Directive has stimulated further action to improve environmental quality. How far this was already planned by the Member States is difficult to assess.

Working towards ensuring full implementation of the Water Framework Directive, aiming at a good ecological, chemical and quantitative water status and a coherent and sustainable water management

There has been much activity to take forward this 6EAP priority action. In May 2001, a meeting of the Water Directors Group agreed a Common Implementation Strategy (CIS) for implementation of the Directive. The CIS established a series of expert and working groups to take forward various aspects of the Directive. This has included the development of guidance documents and, to date, 24 such documents have been published. The Commission published implementation reports in 2007⁴⁷¹ and in 2009⁴⁷². The striking feature of the 2007 report was the number of water bodies which were reported to be 'at risk'. While there were still many data gaps, only three of the 27 Member States reported that the majority of water bodies were not at risk. There were a number of reasons for this, including agricultural and point source pollution and over-abstraction. In some cases improvements were stated to be in the pipeline (such as implementation of urban waste water treatment in the new Member States). In many cases, however, there would need to be considerable efforts in developing programmes of measures within the river basin management plans.

⁴⁶⁹ Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, OJ L 129, 18.5.1976, p. 23–29

⁴⁷⁰ EEA (2010): Quality of bathing water — 2009 bathing season, EEA Report, No 3/2010, <http://ec.europa.eu/environment/water/water-bathing/report2010/EU-wide%20report.pdf>.

⁴⁷¹ CEC (2007): Communication from the Commission to the European Parliament and the Council - Towards sustainable water management in the European Union - First stage in the implementation of the Water Framework Directive 2000/60/EC. (COM (2007)128).

⁴⁷² CEC (2009): Report from the Commission to the European Parliament and the Council in accordance with article 18.3 of the Water Framework Directive 2000/60/EC on programmes for monitoring of water status. (COM(2009)156).

The transposition of the WFD by the EU 15 (December 2003 deadline) was poorly met, although they have caught up to a large extent and the new Member States had progressed well by the date of accession in 2004. The 2009 report concluded that all Member States had reported on the establishment of monitoring programmes in accordance with Article 8 and Annex V of the Directive, with the exception of Greece which did not report, and Malta which did not report on surface water monitoring programmes. Overall, there was a good monitoring effort across the EU. The deadline for publishing River Basin Management Plans was 22 December 2009 and the deadline for reporting these to the Commission was 22 March 2010. The Commission is currently evaluating these plans and, therefore, an assessment of implementation is not possible at this stage. However, as of October 2010, 17 Member States and Norway had adopted their River Basin Management Plans; although consultations had been finalised in Poland, Slovenia and Romania, the plans were awaiting adoption. However, for seven Member States (Belgium, Cyprus, Denmark, Greece, Lithuania, Portugal and Spain) the consultations were ongoing or had not even started. A report by the EEB presented in July 2010 argued that there were 'serious doubts over the effectiveness of the WFD implementation to change specific and well known unsustainable water management practices'⁴⁷³. The Commission is aiming to publish a 'Blueprint for Europe's water resources' in 2012 which will draw on its assessment of the implementation of the WFD.

Although not explicitly called for in the 6EAP, the Communication on water scarcity and droughts can be seen to contribute to the objective of the 6EAP of 'working towards ensuring full implementation of the Water Framework Directive, aiming at a good ecological, chemical and quantitative water status and a coherent and sustainable water management'. The Communication is important in helping to address some of the quantitative water objectives of the WFD as noted in the 6EAP. By seeking to provide a more comprehensive approach to water scarcity and droughts the Communication will assist in how this is addressed under the WFD. It also focuses attention at some EU level policies (to which the WFD is not addressed), so that action additional to the WFD may be taken. The Communication will contribute to wider objectives in the 6EAP such as halting biodiversity loss. The Communication was also clearly influenced by the EU's climate adaptation policies. However, entrenched policies such as the CAP may have limited how such sectors are addressed. Finally, the Commission is aiming to publish a review of the policy on water scarcity and droughts in the framework of the above mentioned Blueprint, taking into account water vulnerability to climate change and other man made pressures.

1.3.1.5 Air

Relevant objectives

Article 7(1) of the 6EAP sets out the following **specific objective** with respect to air quality:

⁴⁷³ EEB (2010): 10 years of the Water Framework Directive: A Toothless Tiger? A snapshot assessment of EU environmental ambitions, <http://www.eeb.org/?LinkServID=B1E256EB-DBC1-AA1C-DBA46F91C9118E7D&showMeta=0>.

- ‘achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment’

This more or less directly applies part of the **overall aim** of the 6EAP, i.e. to provide ‘*an environment where the level of pollution does not give rise to harmful effects on human health and the environment*’ (Article 2(2)) to air quality.

In order to achieve the specific objective relating to air quality, a number of **priority actions** were envisaged in the 6EAP and set out in Article 7(2f):

- ‘Improving the monitoring and assessment of air quality, including the deposition of pollutants, and the provision of information to the public, including the development and use of indicators;
- a thematic strategy to strengthen a coherent and integrated policy on air pollution to cover priorities for further actions, the review and updating where appropriate of air quality standards and national emission ceilings with a view to reach the long term objective of no-excedence of critical loads and levels and the development of better systems for gathering information, modelling and forecasting;
- adopting appropriate measures concerning ground-level ozone and particulates;
- considering indoor air quality and the impacts on health, with recommendations for future measures where appropriate;
- playing a leading role in the negotiations and the implementation of the Montreal Protocol on ozone depleting substances;
- playing a leading role in the negotiations on and strengthening the links and interactions with international processes contributing to clean air in Europe;
- further development of specific Community instruments for reducing emissions from relevant source categories.’

Overview of measures

In 2005, the **Thematic Strategy on Air Pollution**⁴⁷⁴ was adopted as requested in the 6EAP. The Thematic Strategy concluded that it was not possible to achieve the 6EAP specific objective for air quality and proposed interim health and environmental objectives to be attained by 2020, associated emission reduction targets for the main pollutants and a number of measures that when implemented would help to deliver its objectives. The Thematic Strategy was accompanied by a legislative proposal to merge five pre-existing instruments on ambient air quality into a single Directive. This proposal was subsequently adopted in 2008. This new **ambient air quality Directive**⁴⁷⁵ meets the 6EAP’s call for a review and update of air quality standards, if appropriate. Based on the latest scientific advice from the WHO, most of the existing limit values remained unchanged, although several new objectives were introduced regarding fine particulate matter (PM_{2.5}) in air, in line with the findings of the Thematic Strategy. In light of the persistent difficulties faced by

⁴⁷⁴ CEC (2005): Communication from the Commission to the Council and the European Parliament Thematic Strategy on air pollution, (COM(2005)446).

⁴⁷⁵ Directive 2008/50/EC of the European Parliament and of the Council on ambient air quality and cleaner air for Europe, OJ L 152, 11.6.2008, p. 1-44.

Member States in reaching the limit values for PM₁₀, NO₂, and benzene in the preceding legislation, the new ambient air quality Directive also allowed Member States to apply for derogations from meeting the limit values by the original target dates. The Commission was tasked to assess requests by Member States for derogations according to predefined criteria. The proposal emanating from the Thematic Strategy to revise the National Emissions Ceiling Directive (NECD)⁴⁷⁶ in line with the interim objectives of the Thematic Strategy is still outstanding. Other initiatives, such as the climate and energy package, are expected to reduce national pollutant emissions significantly⁴⁷⁷.

There have also been a number of measures to **reduce emissions from relevant source categories** as also called for by the 6EAP. For example, the industrial emissions Directive **2010/75/EU**⁴⁷⁸ should deliver emissions reductions, as it has strengthened the role of the Reference documents on Best Available Techniques (BREFs) in the permitting of industrial installations and has strengthened the emission limit values for large combustion plants (from 2016 on). New stages of emissions limits for both light duty (EURO 5/6)⁴⁷⁹ and heavy duty vehicles (EURO V/VI)⁴⁸⁰ have been agreed by the Council and the European Parliament. A Directive⁴⁸¹ has also been adopted to reduce emissions of petrol vapour during the refuelling of vehicles at service stations and an agreement was reached at the International Maritime Organization to substantially reduce the sulphur content of marine fuels used globally and in some EU sea areas in particular. However, action has not yet been taken on indoor air pollution, as foreseen by the 6EAP.

Contribution of measures to achievement of 6EAP objectives

The Thematic Strategy on Air Pollution set the overarching framework, the ambient air quality Directive set air quality limit values, and other legislative measures, such as those mentioned above, target particular sources of emissions. In this respect, they act together to move towards the objective of the 6EAP with respect to air. However, given their relatively recent adoption and implementation dates, it is not yet possible to identify their overall contribution towards this target.

⁴⁷⁶ Directive 2001/81/EC of the European Parliament and of the Council on national emission ceilings for certain atmospheric pollutants, OJ L 188, 18.7.2009, p. 1–13.

⁴⁷⁷ See for example the assessment that have been undertaken as part of the preparations for the NECD review: AEA (2008) Analysis of the Costs and Benefits of Proposed Revisions to the National Emissions Ceilings Directive – NEC CBA Report 3. National Emissions Ceilings for 2020 based on the 2008 Climate and Energy Package ; see <http://ec.europa.eu/environment/air/pollutants/cba.htm>.

⁴⁷⁸ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJL 334/17, 17/12/2010.

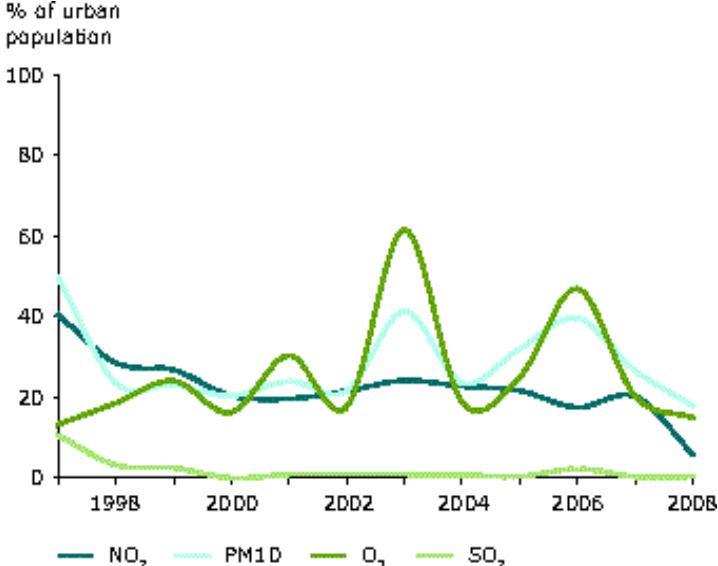
⁴⁷⁹ Regulation (EC) 715/2007 of the European Parliament and of the Council on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, OJ L171, 29.6.2007, p. 1-16.

⁴⁸⁰ Regulation (EC) No 595/2009 of the European Parliament and of the Council on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information, OJ L171, 29.6.2007, p. 1-16.

⁴⁸¹ Directive 2009/126/EC of the European Parliament and of the Council on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations, OJ L 285, 31.10.2009, p. 36–39.

The latest Commission Environmental Policy Report⁴⁸² showed the importance of these new measures as existing exposure of urban populations to both PM₁₀ and ozone are still at levels that potentially damage human health while emissions of NO_x are projected to be above the required emissions ceilings for 2010.

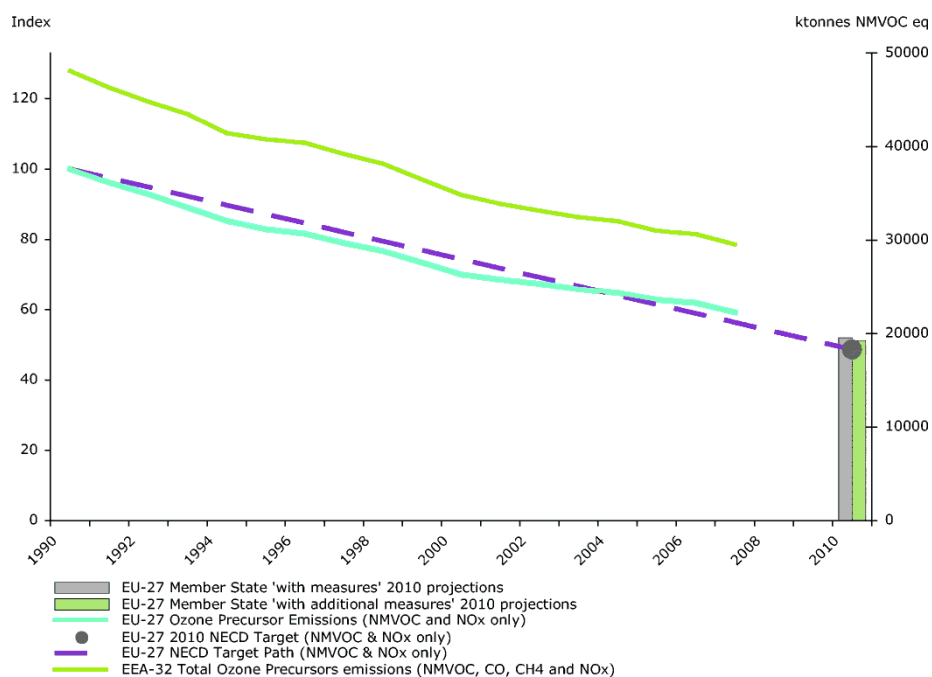
Figure 9: Percentage of urban population resident in areas where pollutant concentrations are higher than selected limit/target values



Source: EEA, see <http://www.eea.europa.eu/data-and-maps/figures/percentage-of-urban-population-resident-in-areas-where-pollutant-concentrations-are-higher-than-selected-limit-target-values-eea-member-countries-1997-2007>

Figure 10: Emissions of ozone precursors (EU-27)

⁴⁸² CEC (2010): COMMISSION STAFF WORKING DOCUMENT - 2009 Environment Policy Review - Part 1, Part 2 and Part 3 (SEC(2010)975).



Source: EEA, see <http://www.eea.europa.eu/data-and-maps/figures/emissions-of-ozone-precursors-eea-member-countries->

A thematic strategy to strengthen a coherent and integrated policy on air pollution to cover priorities for further actions, the review and updating where appropriate of air quality standards and national emission ceilings with a view to reach the long term objective of no-excedence of critical loads and levels and the development of better systems for gathering information, modelling and forecasting

The **Thematic Strategy on Air Pollution** was published in 2005. It concluded that it was not possible to achieve the 6EAP's objective for air quality even if all technically-feasible measures were implemented. Thus, the relevant aim and objective of the 6EAP with respect to air quality will not be achieved by 2020. However, a range of measures have been put in place, often building on pre-existing legislation, that should contribute to meeting the interim targets set by the Thematic Strategy and help move towards meeting the objectives of the 6EAP (although certain elements are outstanding). An important issue with the respect to the Thematic Strategy's overall conclusion on the possibility of meeting the 6EAP targets, which was raised during the interviews conducted for this study, was that the assessment underlying the Thematic Strategy did not take account of the potential benefit to air quality of potential climate change policy actions. Including such benefits would have reduced the costs of meeting the air quality objectives, as has been demonstrated in previous assessments of EU air pollution policy, as well as in subsequent work⁴⁸³. Hence, this would

⁴⁸³ For example, see Communication to the Council and the European Parliament on a Community strategy to combat acidification, (COM(1997)88), as well as AEA (2008) on <http://ec.europa.eu/environment/air/pollutants/cba.htm>.

have reduced the costs of meeting the targets in the 6EAP and could have led to the adoption of more ambitious targets in the Thematic Strategy.

The Thematic Strategy on Air Pollution meets the requirements of the 6EAP in most respects. The Thematic Strategy, which was based on an accompanying Impact Assessment and supporting studies, reviews the impact on air quality of existing legislation and the potential impact of the implementation of all possible technical measures. In this respect, it could be seen to be taking a 'coherent and integrated' approach to identifying priorities and further actions. Additionally, the Thematic Strategy notes that the EU's legislation on air quality standards and national emissions ceilings will be updated, as also called for in the 6EAP, if appropriate. The Thematic Strategy also proposed that information gathering and dissemination be improved by moving to an electronic-based system. The only element of the relevant aspects contained in the 6EAP that were not taken up in the Thematic Strategy was the development of better systems for modelling and forecasting, although the Thematic Strategy did note that it built on models and tools developed using EU research funds. The national emissions ceilings Directive has not been updated, as stated in the Thematic Strategy; this was mentioned as a gap by a number of stakeholders interviewed in the context of this study⁴⁸⁴.

⁴⁸⁴ Stakeholder consultation, interview.

Improving the monitoring and assessment of air quality, including the deposition of pollutants, and the provision of information to the public, including the development and use of indicators

The deadline for transposition of the **ambient air quality Directive** was June 2010, thus it is still too early to assess what the concrete impacts of the Directive have been. The Directive is however an important element in meeting the objectives of the Thematic Strategy, and therefore in moving towards the objective of the 6EAP. It sets the target air quality levels that other measures will have to contribute to and will be used as a justification for other measures to limit air pollutant emissions from various sources. The measure broadly corresponds to the respective requirements of the 6EAP. The 6EAP called for a review and update of the air quality standards 'if appropriate' and for 'appropriate' measures concerning ground level ozone and particulates. The ambient air quality Directive takes actions in this respect, as the existing limit values were reviewed, although it was decided on the basis of scientific advice not to update most of the existing limit values. The one amendment that was made, which was undertaken on the basis of a Working Group that had been established to examine the regulation of PM, was to repeal the original Stage 2 indicative limit value for PM₁₀ and replace this with measures to address PM_{2.5}.

Adopting appropriate measures concerning ground-level ozone and particulates; Further development of specific Community instruments for reducing emissions from relevant source categories

The **industrial emissions Directive 2010/75/EU**⁴⁸⁵ is another important element in meeting the objectives of the Thematic Strategy, and therefore in moving towards the objective of the 6EAP. While the measure was not explicitly mentioned in the 6EAP, it does cover a range of relevant source categories and should contribute to reducing ground level ozone and particulates, so is justified by two of the priority actions. If the industrial emissions Directive should achieve its anticipated environmental impact, it would make a significant contribution to attaining the objectives of the Thematic Strategy. The Impact Assessment accompanying the proposal⁴⁸⁶ explicitly referred to the contribution the Directive would make to reducing the gap between Member States' projected emissions and the objectives of the Thematic Strategy. It concluded that strengthening the minimum requirements for large combustion plants would reduce this gap by 30% to 70%, while the extension of the Directive to cover smaller combustion plants would close the gap between Member States' projected industrial emissions and the Thematic Strategy objectives by between 2% and 6%. However, the Directive has not been in place long enough to identify its actual contribution to meeting the 6EAP objectives, although the preceding IPPC Directive will have contributed to recent improvements (see Figure 9).

⁴⁸⁵ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJL 334/17, 17/12/2010.

⁴⁸⁶ Impact Assessment accompanying the proposal for a Directive of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) (recast), (SEC(2007)1682).

Similarly, while the **Paints Directive**⁴⁸⁷ was not explicitly mentioned in the 6EAP, it also addresses a relevant source category and should contribute to reductions in ground level ozone as it targets VOC emissions due to the use of certain coatings and vehicle refinishing products, which are an ozone precursor. When it was proposed, its aim was to reduce VOC emissions by 280 kilotonnes by 2010, whereas under the NECD, total VOC emissions in 2010 were not to exceed 6.5 million tonnes. However, given that the first set of limit values under this Directive only come into force in 2007, the Directive would only have contributed to declining trends since then, although it is not possible to conclude this definitively without additional studies (see

Figure 10).

Considering indoor air quality and the impacts on health, with recommendations for future measures where appropriate

No action has been taken on indoor air pollution, which was highlighted as a gap by one stakeholder interviewed in the context of this study.

1.3.1.6 Noise

Relevant objectives

Article 7(1) of the 6EAP sets out the following **objective** relating to noise:

- substantially reducing the number of people regularly affected by long-term average levels of noise, in particular from traffic which, according to scientific studies, cause detrimental effects on human health and preparing the next step in the work with the noise directive.

In order to achieve the specific objective relating to noise the following **priority actions** were envisaged in the 6EAP and set out in Article 7(2g):

- Supplementing and further improving measures, including appropriate type-approval procedures, on noise emissions from services and products, in particular motor vehicles including measures to reduce noise from the interaction between tyre and road surface that do not compromise road safety, from railway vehicles, aircraft and stationary machinery;
- developing and implementing instruments to mitigate traffic noise where appropriate, for example by means of transport demand reduction, shifts to less noisy modes of transport, the promotion of technical measures and of sustainable transport planning;

Overview of measures

Directive 2002/49/EC relating to the assessment and management of environmental noise is the key piece of legislation in this area and requires competent authorities in Member States to produce strategic noise maps on the basis of harmonised indicators, to draw up action

⁴⁸⁷ Directive 2004/42/EC of the European Parliament and of the Council on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

plans to address noise issues, and to inform the public about noise exposure and its effects. This Directive was published in July 2002, thus at the same time as the 6EAP. The development of the proposal and adoption processes could not, therefore, have been influenced by the final adopted 6EAP Decision, even though there were parallel thought processes. The interaction is, therefore, complimentary, rather than causal. A report produced by a consortium of European consultancies presented in May 2010⁴⁸⁸ included an implementation review, an inventory of noise reduction measures and a series of recommendations including the use of trigger values at EU level, the integration of noise planning within more general planning in urban areas, an improvement of tyre regulation and road maintenance, and a harmonised noise mapping method.

Other more specific Directives addressing noise from various sources including motor vehicles, tyres, aircraft and airports, railways and rolling stock, recreational craft, household appliances and equipment for use outdoors also exist. Some of the legislative measures that have been adopted since 2002 in this area include: Directive 2002/30/EC on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports which was adopted at the very end of the 5EAP; Directive 2009/108/EC on certain components and characteristics of two or three-wheel motor vehicles which is an adaptation to an earlier Directive; Directive 2009/63/EC relating to certain parts and characteristics of wheeled agricultural or forestry tractors which is a codification and clarification of a previous Directive; Directive 2005/88/EC which is an amendment of a previous Directive; and Directive 2003/10/EC on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise) which adopted some new noise thresholds for the safety of workers. Moreover, the 2001 White Paper of Transport and various pieces of sectoral legislation in the pipeline recognise the importance of noise pollution and further measures are expected in the coming years. Work has also begun on the development of further noise related legislation. However, this has yet to result in concrete outcomes.

It is thus evident that either the pieces of noise related legislation that have been adopted since 2002 are relatively minor, that they were adopted (i.e. published) almost at the same time as the 6EAP Decision, or have yet to come to fruition. Therefore, in terms of the added value of the 6EAP, it appears that the Programme has had little new impetus in the noise policy area and thus this report does not contain a detailed consideration of this sub-area.

1.3.1.7 Urban

Relevant objectives

Article 7(1) of the 6EAP sets out the following **objective** relating to the urban environment:

- 'contributing to a better quality of life through an integrated approach concentrating on urban areas'

488 Milieu Ltd, Risk and Policy Analysis Ltd and TNO (2010), Review of the Implementation of Directive 2002/49/EC on Environmental Noise, Final report, Service contract No 070307/2008/510980/SER/C3, May 2010.

This contributes to the overall **aim** of the 6EAP of '*encouraging a sustainable urban development*' (Article 2(2)).

In order to achieve the specific objective relating to the urban environment, a number of **priority actions** were envisaged in the 6EAP and set out in Article 7(2h):

'A thematic strategy promoting an integrated horizontal approach across Community policies and improving the quality of urban environment, taking into account progress made in implementing the existing cooperation framework reviewing it where necessary, and addressing:

- the promotion of Local Agenda 21;
- the reduction of the link between economic growth and passenger transport demand;
- the need for an increased share in public transport, rail, inland waterways, walking and cycling modes;
- the need to tackle rising volumes of traffic and to bring about a significant decoupling of transport growth and GDP growth;
- the need to promote the use of low emission vehicles in public transports;
- the consideration of urban environment indicators.'

Overview of measures

In 2005, the **Thematic Strategy on the Urban Environment**⁴⁸⁹ was published which stated that the Commission would:

- Develop guidance for local authorities on integrated environmental management.
- Develop guidance for local authorities on the main aspects of sustainable urban transport plans (SUTPs).
- Offer support for the exchange of good practice and for demonstration projects, as well as evaluating a pilot network of national focal points (URBACT) with the aim of identifying whether this could be used to build a 'European framework programme for the exchange of experience on urban development' that was proposed under Cohesion Policy for 2007-2013.
- Assess the feasibility of establishing an internet portal for local authorities.
- Use LIFE+ and other instruments to support capacity building on urban management issues.
- Encourage Member States to exploit the opportunities for addressing urban problems given by other EU programmes, such as Cohesion and Structural Funds and the FP7 research funding.

Guidance for local authorities on integrated environmental management⁴⁹⁰ and a 'preparatory document' on SUTPs⁴⁹¹ were published in 2007. DG TREN's 2009 Action Plan on Urban

⁴⁸⁹ Communication from the Commission to the Council and the European Parliament on Thematic Strategy on the Urban Environment, (COM(2005)718).

⁴⁹⁰ DG Environment (2007) *Integrated Environmental Management: Guidance in relation to the Thematic Strategy on the Urban Environment*. Technical Report – 2007/013. Luxembourg: Office for Official Publications of the European Communities.

Mobility⁴⁹² made a direct reference to following on from the work of the Thematic Strategy in its support for the accelerated uptake of sustainable urban mobility plans through guidance, exchange of best practice, benchmarking and educational support for professionals. With respect to funding, URBACT II is now in place to cover the period 2007 to 2013 period with an expanded budget of €69 million (compared to nearly €25 million under URBACT I)⁴⁹³. From 2001 to 2004, there was also a funding mechanism specifically targeting urban sustainable development, the Community Framework for Cooperation to promote Urban Sustainable Development (often referred to as the 'Cooperation Framework'), which was subsequently integrated into LIFE+. It was set up by Decision 1411/2001/EC and funded projects and activities focusing on the exchange of information, cooperation and 'accompanying measures'.

There are also an increasing number of urban projects funded under the Community's Cohesion Policy, which has as two of its four main objectives: 'Protecting and improving the urban environment, in order to achieve local and global sustainability; and Contributing to good urban governance and local empowerment'⁴⁹⁴.

Contribution of measures to achievement of 6EAP objectives

As called for in the 6EAP, the Commission presented a Thematic Strategy on the Urban Environment in 2005. However, the contribution of the Thematic Strategy to the specific 6EAP objectives is difficult to assess, particularly as the Thematic Strategy did not contain any binding elements or deadlines by which action needed to be taken. The actions that have been taken forward in relation to the urban environment arguably contribute to the overall aim of the 6EAP of encouraging a **sustainable urban development**. However, these are not as comprehensive in terms of coverage as, for example, the interim Communication on the Thematic Strategy on the Urban Environment, which included proposals for measures on sustainable construction and sustainable urban design, or the 1998 Communication.

Consequently, the Thematic Strategy only partially responds to the requirements of the 6EAP. Of the six relevant priority actions in the 6EAP Decision that the Thematic Strategy was meant to address, four related to transport, while the other two focused, respectively, on the promotion of Local Agenda 21 (LA21) and the consideration of urban environment indicators.

On these latter two points, the Thematic Strategy mentioned, in the wider context of the integrated environmental management of urban areas, the role of **LA21** and stated that the Commission would publish a report in 2006 'based on **indicators** describing the living conditions in a number of EU cities'.

⁴⁹¹ DG Environment (2007) Sustainable Urban Transport Plans: Preparatory Document in relation to the follow-up of the Thematic Strategy on the Urban Environment. Technical Report – 2007/018. Luxembourg: Office for Official Publications of the European Communities.

⁴⁹² CEC (2009), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Action Plan on Urban Mobility, (COM(2009)490)

⁴⁹³ DG Regio (2009) *Promoting sustainable urban development in Europe: Achievements and opportunities*; see http://ec.europa.eu/regional_policy/themes/urban/publications_en.htm

⁴⁹⁴ DG Regio (2009), p. 9.

With respect to **transport**, the Thematic Strategy supported the development and implementation of sustainable urban transport plans (SUTPs) and planned to produce relevant guidance and 'best' practice examples. In theory, this could have covered all four of the transport elements noted in the 6EAP Decision, but it did not explicitly do so. Of the four elements mentioned in the 6EAP, **'the promotion of public transport, cycling and walking'** was mentioned in the Thematic Strategy, although **'the need for an increased share' for these modes**, as stated in the 6EAP was not explicitly mentioned. The 6EAP also called for 'an increased share' for inland waterways, but this mode was not mentioned in the Thematic Strategy. Of the other three transport elements, the **'need to promote the use of low emission vehicles in public transport'** was mentioned in the Thematic Strategy, although not explicitly in the section on the promotion of SUTPs. Instead, the importance of such vehicles was mentioned at various places elsewhere in the Thematic Strategy, particularly in the context of links to other EU measures, such as Cohesion Policy, research and the (then) proposed clean vehicles Directive.

The other two transport elements mentioned in the 6EAP referred to the need to reduce the **'link between economic growth and passenger transport demand'** and to **'tackle rising volumes of traffic'** by bringing about a 'significant decoupling of transport growth and GDP growth'. Neither of these more strategic elements was explicitly mentioned in the Thematic Strategy, although SUTPs could contribute to these in theory.

One indicator as to whether the EU's urban areas are becoming a better place to live, which might reveal a positive impact of the Thematic Strategy, are the perceptions of inhabitants in urban areas. The most recent survey completed in 2009 found that people felt that the situation regarding air quality and noise in their cities is improving, although air pollution was still considered to be a major problem in larger cities and in most cities more than half of the population agreed that noise was still a major problem. The importance of such perceptions can be seen from the fact that there was a strong correlation between how people perceived air pollution and whether they felt that their city was a healthy place to live⁴⁹⁵. Additionally, if projects funded by URBACT, the Cooperation Framework and Cohesion Policy have contributed to delivering urban sustainability, then they could also have played an important role in delivering the objectives of the Thematic Strategy. For example, the mid-term assessment of the Cooperation Framework concluded that the projects and activities that had been funded were consistent with the aims of the Thematic Strategy^{496,497}.

Having said this, many of the environmental issues of concern with respect to the urban environment, e.g. air quality, noise, waste, are addressed in parallel EU legislation that developed separately from the Thematic Strategy, so it would be difficult to argue that the

⁴⁹⁵ DG Regio (2010): *Survey on perception of quality of life in 75 European cities*; see http://ec.europa.eu/regional_policy/themes/urban/publications_en.htm

⁴⁹⁶ IEEP, Ecologic, Institute for European Policy and Yvonne Rydin (2005) *Mid-term Assessment of the Community Framework For Cooperation to promote Sustainable Urban Development* Report to DG Environment, contract number 07 01 04 01/2004/383535.

⁴⁹⁷ It is too early to assess the contribution of URBACT II and the current Cohesion Policy funding period. For example, a call for tender for the mid-term assessment of URBACT was published in October 2010; see <http://urbact.eu/en/header-main/news-and-events/view-one/open-calls/?entryId=4890>.

improvements are the direct result of the Thematic Strategy. Additionally, both URBACT II and Cohesion Policy are the responsibility of DG Regio and build on previous funding instruments, although the Cooperation Framework which operated in parallel to the Thematic Strategy between 2001 and 2004 was beneficial. Furthermore, the Thematic Strategy did not contain any mandatory actions that would deliver change directly. Therefore, overall, it is doubtful that the Thematic Strategy played anything more than a minor role in contributing to the respective aims and objectives of the 6EAP.

Stakeholders interviewed in the context of this study considered that the Thematic Strategy could have brought added value if it had had a greater emphasis on implementation and good practice, particularly given the range of EU environmental legislation relevant to cities (and problems with their implementation; see discussion on air quality above), and on coordinating and mainstreaming action on the urban environment within the European Commission. How far EU level action can deliver urban sustainability is also a part of the debate. The issue of subsidiarity is clearly relevant when discussing action on the urban environment, but it was noted by several interviewees that while there are differences in urban areas, there are also common problems, which would benefit from EU level engagement. Additionally, the arguments for European engagement in the urban environment are similar to those that have been used to justify other European level interventions, such as those on Integrated Coastal Zone Management and forests.

1.3.2 Drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the environment and health thematic area. Some factors have helped achieve objectives and improve environmental conditions (drivers), whereas other factors have undermined / prevented progress or even caused a deterioration in environmental conditions (barriers). The main drivers and barriers that have affected the attainment of 6EAP objectives in this thematic area, as identified through our research and stakeholder consultation, are set out below.

Aspects of the decision-making procedure

Processes to develop policy put forward in the 6EAP, in particular the stakeholder consultation process related to the development of the Thematic Strategies, as well as the formal decision-making procedures to agree EU legislation, have been important factors influencing the final form of specific pieces of legislation and hence affecting the attainment of certain 6EAP objectives in this thematic area.

The whole **REACH** negotiation process was characterised by heavy lobbying, which began with a joint letter by President Chirac (FR), Chancellor Schroeder (DE), and Prime Minister Blair (UK) in 2003 sent to Commission President Prodi before the Commission had even finalized the REACH proposal. This letter warned of the possible impacts REACH might have on the competitiveness of the European chemical industry. At the time of the letter, these three Member States together could constitute a blocking minority in Council and hence it

was a powerful expression of opinion. After consultation, the proposal⁴⁹⁸ was consequently substantially modified from an earlier draft and overall these changes led to a reduced burden on industry and the weakening of environmental provisions. The negotiation process was also categorised by a number of Impact Assessments produced by different industrial interest organisations trying to influence the outcome of the negotiations. It is a credit to the EU decision-making procedure that a compromise on REACH was achieved at all, taking into consideration the powerful interest groups involved and the necessary complexity of the legislation.

With regard to **pesticides** the publication of the Pesticides Thematic Strategy together with the legislative proposals is likely to have given the Thematic Strategy an overarching role in bringing about the required changes to pesticides legislation in a credible way. Many of the issues covered in the 6EAP were addressed in the Thematic Strategy and the proposed legislation. One could suggest that by consulting on the issues as part of the Thematic Strategy process, this made later discussions, as part of the co-decision procedure, more familiar and framed, thus making the whole legal process less confrontational.

Notwithstanding the fact that the **Thematic Strategy on Air Pollution** could not deliver the relevant objective of the 6EAP, the main drivers of the level of ambition proposed in the Thematic Strategy were the various studies that supported the development of the Thematic Strategy and the level of engagement with experts, including the scientific community, and other stakeholders in the course of its development. This approach continued from earlier approaches to the development of air legislation, such as the Auto-Oil Programme, and the CAFE Programme. As a result of this engagement and scientific advice, the air quality limits contained within the **ambient air quality Directive** remained largely unchanged and new limits on PM_{2.5} were introduced. Under the CAFE programme, which preceded the Thematic Strategy, a number of Working Groups were set up in order to bring the latest scientific knowledge to the process. One of these was a Working Group on Particulate Matter, which made the recommendations with respect to the treatment of PM in the Directive. In the course of the formation of its views on the proposed Directive, the Parliament also commissioned its own work to assess the impact of the Commission's proposals versus its preferred approach. Similarly, a large number of analytical studies were undertaken in support of the new **industrial emissions Directive**. The Impact Assessment accompanying the proposal drew heavily on these studies and also included regular references to the objectives of the Thematic Strategy suggesting that the existence of these objectives at least provided a wider context for the proposal. A number of stakeholders interviewed in the context of this study felt that the extensive stakeholder engagement process was an important element in the development of the Thematic Strategy on Air Pollution and its accompanying legislation.

⁴⁹⁸ CEC (2003): Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach), establishing a European Chemicals Agency and amending Directive 1999/45/EC and Regulation (EC) (on Persistent Organic Pollutants), (COM(2003)644)

In the interim Communication on the **Thematic Strategy on the Urban Environment**⁴⁹⁹, the Commission had proposed obligations for local authorities to implement environmental management plans and sustainable urban transport plans. These proposals originated from the recognition that if the Thematic Strategy was to have any added value, it would need to focus on the process rather than setting more targets, as these were set elsewhere. However, stakeholders generally did not support such obligations being included in the Thematic Strategy. This was partly due to concerns regarding subsidiarity and the need for EU policies in this area⁵⁰⁰. The European Parliament had been insistent on the inclusion of a Thematic Strategy on the Urban Environment in the first place and in its resolution on the Thematic Strategy called for Community legislation to require all urban areas with over 100,000 inhabitants should have an SUTP. However, some stakeholders interviewed in the context of this study felt that the Parliament could have supported the Thematic Strategy more strongly once it had emerged. In general, Member States were sceptical of anything other than soft measures being proposed.

Some stakeholders interviewed in the context of this study noted that within the Commission, the role of DG Environment was not clear with respect to the **urban environment**. Within DG Environment, air quality, noise etc are taken forward by the desk officers working on these areas, while funding for urban environment is covered by those responsible for LIFE+ or by the various DG Regio funding mechanisms. At times, there has been more action on the urban environment than at other times within DG Environment and this discontinuity has been partially caused by changes in staff, both the desk officers involved, as well as those higher up the hierarchy within DG Environment⁵⁰¹. For example, the 1998 Communication⁵⁰² was developed in collaboration with other DGs, but was not really taken forward by the Thematic Strategy on Urban Environment. Some interviewees even considered the 1998 Communication to be a better document than the Thematic Strategy. Despite an inter-service group on urban issues led by DG Regio, some stakeholders interviewed considered that action that is being taken would benefit from better coordination and the allocation of more resources, both in terms of staff and funding.

During the adoption of the Water Framework Directive, it was not possible for the Council and European Parliament to reach an agreement on all issues concerning groundwater protection. Hence, a decision was taken to develop a 'daughter' Directive to address these issues and complete the replacement of Directive 80/68/EEC. This provided political impetus for the adoption of the subsequent **groundwater Directive**, which together with the work under the Common Implementation Strategy to develop the proposal, were the key driving factors behind the adoption of the Directive. Thus the Directive had its own drivers and institutional points of debate which were in place prior to the adoption of the 6EAP. The co-decision procedure also affected the outcome of the Directive. Issues that required

⁴⁹⁹ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions *Towards a thematic strategy on the urban environment*, COM(2004) 60.

⁵⁰⁰ Stakeholder consultation, Brussels workshop.

⁵⁰¹ Stakeholder consultation, interview and Brussels workshop.

⁵⁰² Communication on Sustainable Urban Development in the European Union: A Framework for Action, (COM(1998)605).

considerable deliberation included a proposal for non-deterioration of groundwater quality and the details of the interaction with the Nitrates Directive.

The basis of Directive 2000/60/EC (WFD) to take forward action in improving control of dangerous substances, which had been a moribund policy area for years, was a major driver behind the adoption of the **EQS Directive**. This Directive was envisaged as a daughter Directive of the WFD to complete the repeal of Directive 76/464/EEC. This was all in place prior to the adoption of the 6EAP. The co-decision procedure played an important role in determining the scope and ambition of the EQS Directive. In particular, the Council had to defend the Commission's original list of priority substances, which the Parliament sought to expand significantly. Also the Parliament sought to introduce some specific controls on discharges, but these were also not accepted. The role of scientific assessment of the hazardousness and extent of priority substances was also very important.

The co-decision procedure also affected the text of the revised **bathing water Directive**. The European Parliament adopted a number of proposed amendments seeking an extension of the scope to other recreational activities; a limited management system for bathing waters affected by short-term pollution problems; closer integration with the WFD; and increased public information requirements. The Council gave a qualified welcome to the proposal but was sceptical about the evidence used to justify the tighter bathing water standards and the quality of the Commission's cost/benefit analysis. There was strong opposition from most Member States to extending the scope of the Directive to include other recreational waters. The main changes proposed by the Council were: an additional bathing water classification of 'satisfactory' (now called 'sufficient') alongside 'excellent', 'good' and 'poor'; an implementation deadline that corresponds with the WFD (i.e. 2015); and the production of a report reviewing implementation of the Directive in 2020.

Implementation

Effective implementation of EU environmental legislation is an important factor driving / hindering the achievement of 6EAP environmental objectives. A number of measures adopted in the environment and health thematic area are still in the early stages of implementation, thus only some general observations can be made in this regard.

In relation to **REACH**, the implementation process is currently at the stage of meeting registration deadlines as well as identifying substances of very high concern for the candidate list which are subject to eventual authorisation. Within the process of authorization, ECHA has identified 38 substances of very high concern (SVHC) for the candidate list subject to eventual authorization. This low number is disappointing compared to the 356 substances identified of very high concern by the International Chemical Secretariat⁵⁰³. However, this amount is likely to increase in 2011 as approximately 100 SVHC have recently

⁵⁰³ SIN list database; <http://www.chemsec.org/list/latest-on-sin/577-new-sin-list-database-will-assist-in-identification-of-chemicals-of-concern>.

been identified by a group of six Member State Competent Authorities for possible inclusion in the candidate list⁵⁰⁴.

With respect to **air pollution**, it is important to note that there have been improvements in air quality in the last 10 years resulting from reductions in emissions from various sectors. In particular, emissions of sulphur dioxide and heavy metals have been reduced significantly, e.g. see Figure 9. However, these reductions were due to the legislation that was put in place prior to the adoption of the Thematic Strategy on Air Pollution, whereas the legislation arising from the Thematic Strategy has only recently been put in place. Existing problems with air quality, particularly with respect to PM₁₀ and NO_x in urban areas, are largely due to the fact that increasing traffic levels have undermined emissions reductions in other sectors, including the improved emissions performance of individual road vehicles. Notwithstanding these improvements, there have been problems with the implementation of previous legislation, which need to be remedied in their successors. For instance, issues relating to compliance and enforcement were identified as problems associated with the previous IPPC Directive 2008/1/EC and the **industrial emissions Directive** 2010/75/EU was designed to address some of these issues. Thus, existing problems should at least be addressed to a large extent by the new Directive. However, given that implementation problems existed with the preceding legislation, it can be anticipated that implementation of the new Directive will be an important factor in the functioning and performance of the measure, particularly where limit values are more stringent or where installations are included for the first time.

The performance and functioning of the **ambient air quality Directive** depends on the performance and functioning of measures introduced at the European level to reduce emissions at source, as well as on the implementation of national, regional and local measures to ensure air quality limit values are met. As noted above, the objectives of the Thematic Strategy are used to justify European measures to limit emissions at source. However, the Commission has taken enforcement action against 19 Member States for failure to bring air quality within the limits specified in previous air quality legislation⁵⁰⁵. In order to meet the objectives of the Thematic Strategy, the Commission's role in assessing and approving any requests for derogations submitted by Member States will continue to be important. Finally, in spite of the fact that the NECD has not yet been revised as proposed by the Thematic Strategy, it is important to note that emissions reductions are expected to be delivered by the various elements of the climate change and energy package⁵⁰⁶.

Although **bathing water** compliance has been steadily increasing since the adoption of the 1976 Directive, implementation gaps remain. Annual reporting on bathing waters indicate improved compliance, but this is not yet 100%. As the Directive is a legal environmental standard, failure to achieve the objective is an implementation problem. The **Communication on Water Scarcity and Droughts** drew heavily on analysis undertaken

⁵⁰⁴ Final Minutes of 41 UKCSF Meeting, 13 July 2010; <http://www.defra.gov.uk/environment/quality/chemicals/csf/100713/minutes100713.pdf>.

⁵⁰⁵ CEC, (2010), COMMISSION STAFF WORKING DOCUMENT - 2009 Environment Policy Review - Part 1, Part 2 and Part 3, (SEC(2010)975).

⁵⁰⁶ See, for example, AEA (2008) at <http://ec.europa.eu/environment/air/pollutants/cba.htm>

under the WFD Common Implementation Strategy. Being a non-legislative Communication, the Communication does not however impose implementation obligations on the Member States and there were few barriers to adoption, however the second follow-up report noted that immediate actions in the 2007 Communication had been met⁵⁰⁷.

EU financial resources

Adequate financial resources are a key element of effective implementation of EU legislation and have played an important role in the achievement of environmental objectives in the environment and health thematic area of the 6EAP.

In a number of cases, the lack of adequate resources has undermined the achievement of objectives. For instance, in the case of **REACH** which places an important administrative and procedural burden, not only on public authorities, but also on the European Chemicals Agency (ECHA) to compel industry to discharge its responsibilities, resource constraints and the need for prioritisation, has meant that there is still a long way to go before appropriate risk management measures are actually taken for many 'phase-in' substances. The delay in the establishment of ECHA further postponed the commencement of the authorisation process. Failure to tackle sources of microbial inputs to **bathing waters** (mostly sewage) has historically been and remains the main problem relating to implementation of bathing water quality legislation. Funding from various sources is required to improve compliance. Some of this has been supported by EU funding, some national and some private. The balance between these funding sources has varied over time and between Member States. Lack of sufficient funding at the right time has been a major cause of implementation failure.

In certain instances, there is a more general problem of lack of awareness of the available sources of funding. For instance, a number of stakeholders interviewed in the context of this study considered that funding for urban sustainability was generally beneficial, even though much of it was not necessarily a direct result of the **Thematic Strategy on the Urban Environment**⁵⁰⁸. It was noted that a lack of coordination makes it difficult for cities, regions and Member States to be aware of all of the potential sources of funding that might be open to them with respect to the urban environment⁵⁰⁹.

Public opinion

Public support of action in a particular area, usually in combination with other factors, has contributed towards the achievement of certain 6EAP objectives in this area. For instance, despite pressure from some parts of the public that the revised **bathing water Directive** should apply to all water users and not only bathers (a proposal supported by the European Parliament), this was not acceptable to the Commission or Council and not included in the adopted Directive. The introduction of better public communication methods in the revised Directive is also expected to help improve its effectiveness, although there is no analysis yet

⁵⁰⁷ CEC (2010): Second Follow-up Report to the Communication on water scarcity and droughts in the European Union, (COM(2010)228).

⁵⁰⁸ However, in this respect, the difficulty of finding the final reports of the various projects that have been funded was noted by stakeholders, which makes it difficult to evaluate and learn from the projects that have been undertaken.

⁵⁰⁹ Stakeholder consultation.

to know if this is, or will be, the case. With regards to the **Communication on water scarcity and droughts**, droughts have a major public profile and this may have helped form a basis for action. However, how far public pressure guided any particular detail of the measure is uncertain. In the case of REACH, public interest groups and NGOs had an important role in counterbalancing the interests of the chemicals industry during negotiations on the proposed Regulation; however it is difficult to identify public opinion as a force in itself. It is likely that, due to the technical nature of REACH, public opinion relied on respective organisations to act on their behalf.

International commitments

International commitments have also played a role in driving forward action in relation to certain 6EAP objectives in this area. For instance, the list of substances in the **EQS Directive** was heavily influenced by developments within OSPAR and HELCOM. Future developments by the Regional Seas Conventions could affect further developments. International commitments including the World Summit on Sustainable Development in 2002 and the launch of a world partnership project on 'Healthy Environment for Children.....' launched at the WSSD by the WHO, as well as the specification of the UN Millennium Development Goals were triggers for the development of the **Environment and Health Strategy**. The EHAP served as the Commission's contribution to the Fourth Ministerial Conference on Environment and Health, organised by the WHO in Budapest in June 2004 and was developed to be consistent with the Ministerial Declaration and the Children's Environment and Health Action Plan for Europe (CEHAPE) which was scheduled to be adopted at the meeting in Budapest⁵¹⁰. The **EHAP** was in turn designed to complement existing actions at regional, national, European and international level, notably the WHO pan-European Environment and Health process, and commitments to ensuring safer environments for children⁵¹¹.

1.4 Natural Resources and Waste

Sustainable use and management of natural resources and waste

The 6EAP deals with natural resources and waste in Article 8, concentrating in particular on the decoupling of resource use and waste generation from economic growth, improving waste management (increasing recycling and recovery of waste) and the further development of waste legislation. The objectives laid down in this article are divided between those relating to natural resources and those relating to waste; the requirements regarding waste are more elaborate.

This section first provides an overview of the 6EAP's main objectives and sub-areas relating to the thematic area, then concentrates on the achievements of these objectives. Section 1.4.3 1.4.3 focuses on different drivers and barriers in the context of the thematic area.

⁵¹⁰ CEC (2004): The European Environment and Health Action Plan (EHAP) 2004-2010, (COM(2004)416).

⁵¹¹ Ibid.

Section 1.4.4 analyses the chosen policy mix and approach of the 6EAP, and Section 1.4.5 provides an assessment of the impact of the 6EAP on the adoption of measures.

1.4.1 Introduction

Overall Aims

The following overall aims are laid down for the area of natural resources and waste in Art. 2(2) point 4 of the 6EAP:

- 'Better resource efficiency and resource and waste management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources and the generation of waste from the rate for economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment'.

Specific Objectives

The specific objectives of the 6EAP in the natural resources and waste area as set out in Article 8 are:

- 'aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use. In this context the indicative target to achieve a percentage of 22% of the electricity production from renewable energies by 2010 in the Community is recalled with a view to increasing drastically resource and energy efficiency;
- achieving a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns;
- a significant reduction in the quantity of waste going to disposal and the volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil;
- encouraging re-use and for wastes that are still generated: the level of their hazardousness should be reduced and they should present as little risk as possible; preference should be given to recovery and especially to recycling; the quantity of waste for disposal should be minimised and should be safely disposed of; waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations'.

Output requirements

The 6EAP includes concrete priority actions which enable policy makers and the interested public to better monitor progress with regard to its implementation. The natural resources and waste thematic area can be separated into a number of different sub-areas: Sustainable use and management of resources; Waste prevention and management; Waste recycling; and Development and revision of waste legislation. Article 8(2) includes a number of priority actions relating to these different sub-areas which are set out below.

Sustainable use and management of resources

The main output requirement is the development of a thematic strategy on the sustainable use and management of resources, including *inter alia*:

- ‘an estimate of materials and waste streams in the Community, including imports and exports for example by using the instrument of material flow analysis;
- a review of the efficiency of policy measures and the impact of subsidies relating to natural resources and waste;
- establishment of goals and targets for resource efficiency and the diminished use of resources, decoupling the link between economic growth and negative environmental impacts;
- promotion of extraction and production methods and techniques to encourage eco-efficiency and the sustainable use of raw materials, energy, water and other resources;
- development and implementation of a broad range of instruments including research, technology transfer, market-based and economic instruments, programmes of best practice and indicators of resource efficiency;’

Waste prevention and management

- ‘developing a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010. The Commission is invited to prepare a proposal for such targets by 2002;
- encourage ecologically sound and sustainable product design;
- raising awareness of the public's potential contribution on waste reduction;
- the formulation of operational measures to encourage waste prevention, e.g. stimulating re-use and recovery, the phasing out of certain substances and materials through product-related measures;
- developing further indicators in the field of waste management;’

Waste recycling

Development of a Thematic Strategy on Recycling including inter alia:

- ‘measures aimed at ensuring source separation, the collection and recycling of priority waste streams;
- further development of producer responsibility;
- development and transfer of environmentally sound waste recycling and treatment technology;’

Development of legislation

Development and revision of waste legislation including inter alia:

- ‘*construction and demolition waste, sewage sludge, biodegradable wastes, packaging, batteries and waste shipments, clarification of the distinction between waste and non-waste and development of adequate criteria for the further elaboration of Annex IIA and IIB of the framework directive on wastes*’.

1.4.2 Achievement of objectives

1.4.2.1 Sustainable use and management of resources

Overall aims

Better resource efficiency and resource management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources from the rate for economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment.

Specific objectives

Aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use. In this context the indicative target to achieve a percentage of 22% of the electricity production from renewable energies by 2010 in the Community is recalled with a view to increasing drastically resource and energy efficiency;

Priority actions

The 6EAP required the development of a **Thematic Strategy on Sustainable Use and Management of Resources** to cover the following issues:

- an estimate of materials and waste streams in the Community, including imports and exports for example by using the instrument of material flow analysis;
- a review of the efficiency of policy measures and the impact of subsidies relating to natural resources and waste;
- establishment of goals and targets for resource efficiency and the diminished use of resources, decoupling the link between economic growth and negative environmental impacts;
- promotion of extraction and production methods and techniques to encourage eco-efficiency and the sustainable use of raw materials, energy, water and other resources;
- development and implementation of a broad range of instruments including research, technology transfer, market-based and economic instruments, programmes of best practice and indicators of resource efficiency.

Measures

A series of measures have been adopted that seek to contribute to the 6EAP objectives relating to natural resources, i.e. the overarching issues of resource management.

As called for in the 6EAP, the **Thematic Strategy on the sustainable use of natural resources**⁵¹² was published in December 2005 (described in detail below).

⁵¹² COM(2005)670, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Thematic Strategy on the sustainable use of natural resources.

An **Action Plan on Sustainable Consumption and Production**⁵¹³ (SCP) was issued in 2008, addressing different aspects of SCP and related policy tools. As regards resource management, the Action Plan highlights successes up to date in resource efficiency but states that ‘further tools will be developed to monitor, benchmark and promote resource efficiency, taking into account a life-cycle perspective and including trade. Detailed material-based analysis and targets will be addressed at a later stage, based on environmental significance and on access to natural resources.’ The Action Plan further elaborates on the Community Eco-Management and Audit Scheme (EMAS), which it says helps companies to optimize their production processes, reducing environmental impacts and making more effective use of resources. In order to fully realize its potential for improving the resource efficiency of production processes, the Action Plan said that the Scheme will be significantly revised to increase the participation of companies, and reduce the administrative burden and costs to SMEs. The Action Plan was accompanied by the following documents: Proposal for the extension of the Eco-design Directive; Proposal for the revision of the Ecolabel Regulation; Proposal for the revision of the EMAS Regulation; GPP Communication.

The Ecodesign Directive (or EuP Directive) was issued in 2005 and was recently replaced by **Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy related products**. Its primary objective is to improve the energy efficiency of energy related products (ErPs) and thereby contribute to efforts to achieve European targets for climate protection. However, the Directive does not only cover the energy use of products but also aims to reduce the overall negative environmental impact of the products under consideration, including the resources needed to produce the product. The evaluation of the eco-design of a product must include the entire product life-cycle: from raw material selection and manufacturing process to packaging, transport and distribution to installation, maintenance and use, and finally to end-of-life which includes recycling, reuse, and final disposal. Ecodesign must balance environmental considerations with technical, functional and economic considerations.⁵¹⁴ This goal, by nature, has an impact on resource use and efficiency. Implementing measures laying down binding requirements for five product categories entered into force in the first months of 2009, following a series of preparatory studies and public consultations. The first products addressed were those with a standby and off-mode, followed by simple set top boxes and various lighting products and external power supplies. Most recent (November 2010) implementing measures concerned dishwashers⁵¹⁵ and household washing machines.⁵¹⁶ Exhaustive assessments of the effect of the Ecodesign Directive on resource saving and resource/energy efficiency do not yet exist given the recent entry into force of the implementing measures. To date a strong tendency

⁵¹³ COM(2008)397, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan.

⁵¹⁴ See for a short introduction: <http://www.rsjtechnical.com/WhatisEuP.htm> (11 November 2010).

⁵¹⁵ COMMISSION REGULATION (EU) No 1016/2010 of 10 November 2010 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household dishwashers.

⁵¹⁶ E.g. COMMISSION REGULATION (EU) No 1015/2010 of 10 November 2010 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household washing machines.

exists to focus implementing measures on energy efficiency in the use phase and to avoid directly addressing non-energy natural resources aspects. Only the issue of mercury (in lamps and TVs, but only in public awareness-raising, not in limiting amounts), water efficiency (in washing machines and dishwashers) and durability (in lamps) having been addressed so far in the implementing measures. However the Directive does have the potential to contribute to energy and resources savings and will in the long run form an important part of a broader product policy directed at resource efficiency.

The revised **Ecolabel Regulation**⁵¹⁷ lays down rules for the establishment and revision of criteria to be used to award the EU Ecolabel. The European Ecolabel is a voluntary scheme, established in 1992 to encourage businesses to market products and services that are kinder to the environment. Products and services awarded the Ecolabel carry the flower logo, allowing consumers - including public and private purchasers - to identify them easily. Today the EU Ecolabel covers a wide range of products and services, with further groups being continuously added.⁵¹⁸ The revised Ecolabel Regulation lays down rules for the establishment and revision of criteria to be used to award the EU Ecolabel covering the whole life cycle of products, including resource use, generation of waste, the substitution of hazardous substances and other aspects relevant for sustainable management and use of resources.

The **EMAS Regulation**⁵¹⁹ lays the framework for the EU Eco-Management and Audit Scheme (EMAS), a management tool for companies and other organisations to evaluate, report and improve their environmental performance, including resource and energy use. Third-party verification from independent auditors significantly adds credibility to registered organisations by guaranteeing the value of both the actions taken and the disclosed environmental information. Transparency is generated by the environmental statement, which an organisation is required to provide as part of EMAS registration. The communication tool makes available to the public information on the environmental impact and performance of the organisation.⁵²⁰

The Scheme has been available for participation by companies since 1995 and was originally restricted to companies in industrial sectors. The latest revision of EMAS came into effect on 11 January 2010. The elements of Regulation (EC) No 1221/2009 (EMAS III) improve the applicability of the scheme and strengthen EMAS's visibility and outreach. It aimed inter alia to simplify the participation of SMEs in EMAS.

The revised scheme has introduced the following mandatory key-performance indicators for companies to report on

⁵¹⁷ Regulation No 66/2010 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2009 on the EU Ecolabel.

⁵¹⁸ http://ec.europa.eu/environment/ecolabel/about_ecolabel/what_is_ecolabel_en.htm (11 November 2010).

⁵¹⁹ Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.

⁵²⁰ http://ec.europa.eu/environment/emas/about/summary_en.htm (11 December 2010).

- Energy Efficiency;
- Material Efficiency;
- Water;
- Waste;
- Biodiversity;
- Emissions.

The revision created the option for a corporate registration, meaning that an organisation with sites located in one or more Member States or third countries may apply for one single corporate registration of all or some of those sites. The revised scheme also allows companies from outside the EU to have their environmental management systems certified and registered according to EMAS (EMAS Global).

The revised **Energy-Labeling Directive**⁵²¹ recasts Council Directive 92/75/EEC on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances. The new Directive has had its scope extended from 'white goods' household appliances to energy-related products which have a significant direct or indirect impact on energy consumption and, where relevant, on other essential resources during their use. This extension in scope thereby links this Directive to the Ecodesign Directive, to create positive synergies between the two. The Directive requires *inter alia* that information relating to the consumption of electric energy, other forms of energy and where relevant other essential resources during use, and supplementary information, is brought to the attention of end-users by means of a fiche and a label.

The Communication Public procurement for a better environment⁵²² defines Green Public Procurement (GPP) as 'Public procurement for a better environment' meaning 'a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.' Most importantly, the Communication sets out a process for setting common GPP criteria at European level to promote goods that reduce negative environmental impacts, *inter alia* resource use.

The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

A first set of common GPP criteria was established in the framework of the Training Toolkit on GPP. The first set of criteria cover product and service groups in 10 sectors which had been identified as most suitable for implementing GPP (i.e. paper, cleaning products and services, office IT, construction, etc.)

A second set of GPP criteria for 8 new sectors was made available in July 2010.

⁵²¹ Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.

⁵²² COM(2008)400, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and The Committee of the Regions, Public procurement for a better environment.

The GPP criteria are based on data from an evidence base, on existing ecolabel criteria and on information collected from stakeholders of industry, civil society and Member States. The evidence base uses available scientific information and data, adopts a life-cycle approach and engages stakeholders who meet to discuss issues and develop consensus.⁵²³

The **Communication on Raw Materials**⁵²⁴, whilst primarily intended to deal with the EU's access to necessary raw materials, includes a focus on improving resource efficiency, recycling, substitution and the increased use of secondary raw materials (as opposed to virgin raw materials), and makes reference to the Thematic Strategy on Sustainable Use of Natural Resources and to the Sustainable Consumption and Production Action Plan's resource efficiency objectives. In this context, the Communication bemoans the fact that many resources that could be reused, especially materials contained in End-of-life-vehicles (ELV) or waste electrical and electronic equipment (WEEE) are not taken advantage of but are instead shipped abroad for dismantling. Therefore, more value should be placed on waste recycling. The recycling of secondary raw materials will be facilitated by the full implementation and enforcement of relevant recycling legislation (including the WEEE, ELV, Batteries and Packaging Waste Directives) as well as by the new provisions in the revised Waste Framework Directive (WFD) on end-of- waste. The revised WFD also requires Member States to meet collection targets for the reuse and recycling of metals, paper, glass and non-hazardous construction and demolition waste.⁵²⁵ To boost the reuse or recycling of products and materials at a significant economy of scale within the EU, a fair and transparent market is essential, based on agreed minimum standards and certification schemes (where appropriate), within proportionate legal framework conditions.

Contribution of important measures to 6 EAP objectives

Current status of resource use and decoupling

When assessing the **trends of resource use** and the **extent of decoupling** of resource consumption from economic growth, it can be said that EU economies have become more efficient in many respects. Efficiency gains can be observed for a number of indicators, from the consumption of raw materials and energy to the generation of waste and greenhouse gas emissions. The Sustainable Consumption and Production (SCP) Action Plan (2008) maintains that resource productivity (measured by GDP per resource use, €/kg) in the EU has improved by 2.2% per annum in real terms over the past 10 years.⁵²⁶ This means that the EU has been able to stabilise resource use whilst the economy has been growing, largely due to efficiency improvements in production and the increasing importance of services in the economy. Improvements in resource productivity should continue at least at the same

⁵²³ http://ec.europa.eu/environment/gpp/gpp_criteria_en.htm (11 December 2010).

⁵²⁴ COM(2008)699, Communication from the Commission to the European Parliament and the Council: The Raw materials initiative – meeting our critical needs for growth and jobs in Europe.

⁵²⁵ See COM(2008)699, p. 11.

⁵²⁶ COM(2008)397, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, p. 9.

pace as this EU average.⁵²⁷ However, the most recent EEA report (2010)⁵²⁸ confirms that in Europe, resource use continues to rise although there are considerable national differences in per person resource use, driven mainly by different social and economic conditions. Moreover it states that while resource extraction within Europe has been stable over the past decade, dependence on imports is increasing and is among the highest in the world, more than 20% of all resources consumed in Europe are imported.⁵²⁹

In assessing resource use with regard to **decoupling**, two concepts need to be distinguished: 'Relative decoupling' is achieved when resource consumption grows more slowly than the economy, i.e. fewer resources are used to produce one unit of gross domestic product (GDP). However, such efficiency increases may be outweighed by economic growth; as a consequence, absolute level of resource consumption may still increase in the case of relative decoupling. By contrast, 'absolute decoupling' is observed if resource consumption falls in absolute terms, even though the economy is still growing. In recognition of this, one of the key objectives of the 6EAP is to achieve 'decoupling', understood as *breaking the link between economic growth and environmental degradation*. The Thematic Strategy on the sustainable use of natural resources states in its Annex that its proper implementation could be expected to raise the EU's annual resource productivity improvements to 3% (from the 2.2% stated earlier) over the period 2000-2030, equivalent to continuing to stabilise resource use. Thus the EU's TS on Resources aims explicitly for relative decoupling, supplemented by reduced environmental impact of resources use. Given this stated expected impact, the overall aim of absolute decoupling, i.e. breaking the link between economic growth and environmental degradation, of the 6EAP has not been taken up in the Resources Strategy.

In short, the EEA report 2010 says that that 'even though growth in resource use has been slower than economic growth' (read: 'relative decoupling') 'it has still been increasing', (read: no absolute coupling has been achieved) .

Contribution of measures

The primary **priority action** of the 6EAP with regard to resource efficiency was the development of a **Thematic Strategy on Sustainable Use and Management of Resources**. The Thematic Strategy lays the basis for further research and the establishment of institutions that can help to increase data on resources issues, and monitor and document resource use, rather than setting concrete objectives or developing policy options. The TS has only delivered partly on the concrete issues enumerated in the 6EAP as explained below:

- An estimate of materials/waste streams in the Community was carried out in support of the TS530, and the data centre on natural resources and products was

⁵²⁷ Ibid.

⁵²⁸ EEA Draft-report 2010, 11 June 2010, The European Environment: State and Outlook 2010.

⁵²⁹ EEA, Draft-report 2010, 11 June 2010, The European Environment: State and Outlook 2010 p. 47.

⁵³⁰ Resource use in European countries - An estimate of materials and waste streams in the Community, including imports and exports using the instrument of material flow analysis, <http://scp.eionet.europa.eu/publications/zero> (11 July 2010).

created in Eurostat. Thus, the TS delivered on the requirement of estimating material and waste streams in the Community.

- The TS did not review or analyze the efficiency of resource policies and subsidies related to natural resources and waste, thus not fulfilling this requirement of the 6EAP.
- The TS is principally based on research considerations and does not establish goals or targets for resource efficiency or decoupling or a process for setting these in future, nor does it review or propose concrete policy measures, although this was called for in the 6EAP. However, the TS proposes that each EU Member State develop national measures and programmes on the sustainable use of natural resources to achieve the strategy's objectives. These measures and programmes should focus on resource use which has the most significant environmental impacts. Member States should also include mechanisms to monitor progress and, where possible, develop targets.
- The TS does not address the promotion of extraction and production methods and techniques to encourage eco-efficiency and the sustainable use of raw materials, energy, water and other resources.
- The 6EAP also called for the 'development and implementation of a broad range of instruments including research, technology transfer, market-based and economic instruments, programmes of best practice and indicators of resource efficiency.' The adopted TS merely provides a framework for further attempts to meet these requirements in the future through institutional mechanisms such as the High Level Forum, data centre and international panel. The Commission put much effort into the creation of the international panel, the UNEP Resource Panel, launched in late 2007, and as stated earlier has created the data centre on natural resources and products in Eurostat. However, the creation of a High Level Forum is still under discussion.⁵³¹
- The TS called for the development of **indicators** to measure progress in resource productivity. DG Environment commissioned studies to assess potential indicators, and the environmental impacts of key natural resources. The study 'Potential of the Ecological Footprint for monitoring environmental impacts from natural resource use' ⁵³² assessed the potential of the Ecological Footprint and related tools and indicators to measure negative environmental impacts related to natural resource use. Two studies on specific natural resources, 'Significant Natural Resource Trade Flows into the EU'⁵³³ and 'Environmental Impacts of Significant Natural Resource Trade Flows into the EU'⁵³⁴ were also undertaken.

⁵³¹ <http://www.eeb.org/EEB/?LinkServID=D00F0EA1-09C3-5DF1-D6D7AEF4CAC16BCC&showMeta=0> (11 December 2010).

⁵³² http://ec.europa.eu/environment/natres/pdf/footprint_summary.pdf (11 November 2010).

⁵³³ http://ec.europa.eu/environment/natres/pdf/nat_resources_trade_flows.pdf (27 November 2010).

⁵³⁴ http://ec.europa.eu/environment/natres/pdf/env_impact.pdf (27 November 2010).

The TS has been broadly criticised for failing to take the opportunity to set out a more ambitious approach to decoupling resource use from economic growth.⁵³⁵ While it does state that its objective is to ‘reduce the negative environmental impacts generated by the use of natural resources in a growing economy’, it does not say whether the goal is for relative or absolute decoupling, nor are any targets set. Furthermore, it does not commit to reducing resource consumption, except to state that for renewable resources this means staying below the threshold of overexploitation.

No direct changes in environmental or other conditions can be attributed to or expected from the TS, given its rather theoretical character and its emphasis on data generation and institution-building. The TS itself is rather modest in formulating impacts, limiting itself to stating that it will create the conditions for improved eco-efficient resource use and incentives for moving towards more sustainable production and consumption patterns. One positive impact of the TS is the establishment of the Environmental Data Centre on Natural Resources and Products⁵³⁶.

As for the overall effects of the other adopted measures that relate to resource efficiency, resource and energy efficiency have been addressed for certain products, such as through the requirements of the Ecodesign Directive, and criteria in the European Ecolabel and GPP. It is difficult though to gauge the contribution of these measures to 6 EAP goals given the very recent entry into force of e.g. the implementing measures to the Ecodesign Directive.

Conclusions: There is no trend that would justify the assumption that resource use is on its way to not surpass carrying capacity of the environment even if it is acknowledged that the effects of many of the product-related measures taken will make themselves felt only in a few years’ time. In Europe, resource use continues to rise even though considerable national differences in per person resource use exist driven mainly by different social and economic conditions. While resource extraction within Europe has been stable over the past decade, dependence on imports is increasing and is among the highest in the world more than 20% of all resources consumed in Europe are imported. So far only relative decoupling of resource use from economic growth has been realized.

The Thematic Strategy on Resource Use does not live up to the concrete requirements for the Strategy set out in the 6EAP. Whilst the 6EAP required the TS to include concrete policy options and set targets, it simply concentrates on defining further research needs and laying the groundwork for the creation of institutions dealing with resource issues.

The overall effects of the adopted measures that relate to resource efficiency are that resource and energy efficiency have been addressed for certain products, such as through the requirements of the Ecodesign Directive, and criteria in the European Ecolabel and GPP.

⁵³⁵ See Pallemarts, Marc, Kristof Geerarts, Assessment of the achievements of the 6th Environmental Action Programme, 2007, p. 65.:
http://www.europarl.europa.eu/comparl/envi/pdf/externalexpertise/assessment_of_the_achievements_of_the_6th_environmental_action_programme.pdf, (11 December 2010).

⁵³⁶ Environmental Data Centre on Natural Resources and Products,
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Environmental_Data_Centre_on_Natural_Resources_and_Products (11 December 2010).

It is difficult though to gauge the practical influence of these requirements given the very recent entry into force of the different pieces of legislation.

1.4.2.2 Waste prevention and management

The sub-area of waste prevention and management in the 6EAP deals with the prevention of waste (i.e. reduction of waste in quantitative and qualitative terms) and the better management of waste.

Overall aims

Better waste management to bring about more sustainable production and consumption patterns, thereby decoupling the generation of waste from the rate of economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment.

Specific Objectives

- Achieving a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns;
- a significant reduction in the quantity of waste going to disposal and the volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil.

Output Requirements

- developing a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010. The Commission is invited to prepare a proposal for such targets by 2002;
- encourage ecologically sound and sustainable product design;
- raising awareness of the public's potential contribution on waste reduction;
- the formulation of operational measures to encourage waste prevention, e.g. stimulating reuse and recovery, the phasing out of certain substances and materials through product-related measures;
- developing further indicators in the field of waste management.
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Measures

The following measures have been taken to help achieve the aims/objectives mentioned above:

- Waste Framework Directive (revised)
- Thematic Strategy on the prevention and recycling of waste
- WEEE Directive (revised)
- Packaging Directive (revised)
- Batteries Directive

- Landfill Directive and Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills
- Mining Waste Directive

In the following chapter the contribution of the measures enumerated above to the 6EAP objectives will be analysed.

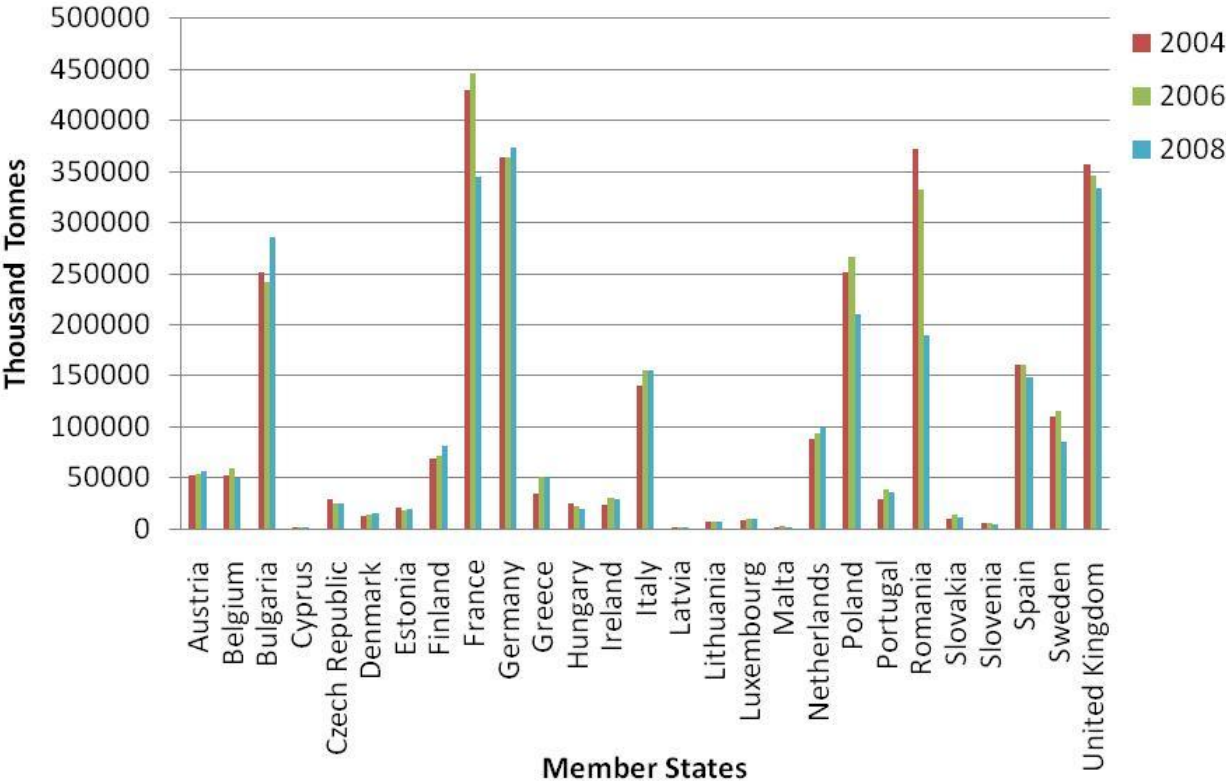
Contribution of important measures

Overall waste generation has tended to increase in recent decades, despite the objective of the 6th Environmental Action Plan to reduce it. In 1995 waste generation in the EU-15 was approximately 3.5 tonnes per person, or a total sum of 1.29 billion tonnes; by 2004, total waste generation in the EU-15 was an estimated 1.93 billion tonnes, and by 2006 had reached an estimated 2.01 billion tonnes. This equates to an increase for the EU-15 of around 55% in just over a decade. An additional increase of just under 4% was also experienced between 2004 to 2006 for the EU-15. In the EU-12, total waste generation actually fell from 0.98 billion tonnes in 2004 to 0.94 billion tonnes in 2006, a decrease of almost 4%. For the EU-27, total waste generation was estimated to be 2.91 billion tonnes in 2004. By 2006 the estimate had risen to 2.95 billion tonnes, an increase of just over 1% in two years. There is a high variance in waste generation between Member States; in 2006 this ranged from 445.9 million tonnes (France) to 1.86 million tonnes (Latvia) reflecting the economic, demographic, social and environmental conditions across the different Member States. Figure 11 below compares total waste generation of the EU-27 Member States for 2004, 2006 and 2008. This figure demonstrates the high variability not only in terms of the overall level of generation but also the direction of change i.e. with some Member States such as Bulgaria, Finland and Germany, demonstrating a significant increase across the 4 year period, while others remain relatively static i.e. Austria, Denmark and Lithuania, and others show a clearer downward trend i.e. France, Hungary, Poland, Romania, Spain, Sweden, and the UK. When this data is aggregated across the EU there is some decrease shown in the total amount of waste generated across the EU-27. It is possible that at least a proportion of the decrease in 2008 is due to decreases in economic output and therefore waste materials. Figure 11 summarises the key trends in overall waste generation for the EU-27, EU-15 and EU-12.⁵³⁷

⁵³⁷ Final Report - Supporting the Review of the Thematic Strategy on Waste Prevention and Recycling, IEEP et al, October 2010 (unpublished), p. 29.

Figure 11: Overall generation of waste (in 1000 tonnes), EU-27, EU-15 and EU-12

Source: Derived by Emma Watkins, IEEP, from Eurostat, 2010, Environmental Data Centre on Waste, Overall



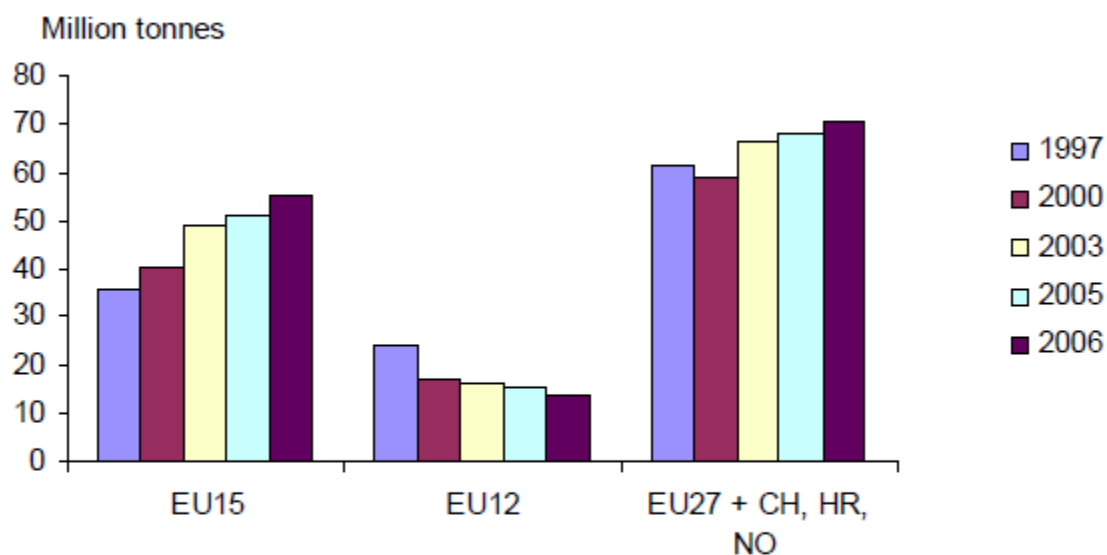
Waste Generation

Municipal Solid Waste generated per capita in the EU-27 increased by around 5% between 1997 and 2008, from 499 to 524kg per annum, and since 2006 has been relatively stable while consumption expenditure in constant prices increased by 16.3% per person and the number of people per household decreased by 5.6% (Odyssee database). This shows a relative decoupling between consumption and municipal waste generation.

In line with other analyses (such as resource productivity), this compares favourably to the USA (750kg in 2005), but unfavourably to Japan (400kg in 2005).]

Hazardous Waste: The EU-27 Member States, Croatia, Norway and Switzerland together reported the generation of 70.6 million tonnes of hazardous waste in 2006, an increase of 15% since 1997.

Figure 12: Hazardous waste generation in the EU-15, EU-12 and EU-27 plus Norway, Switzerland and Croatia, 1997 to 2006



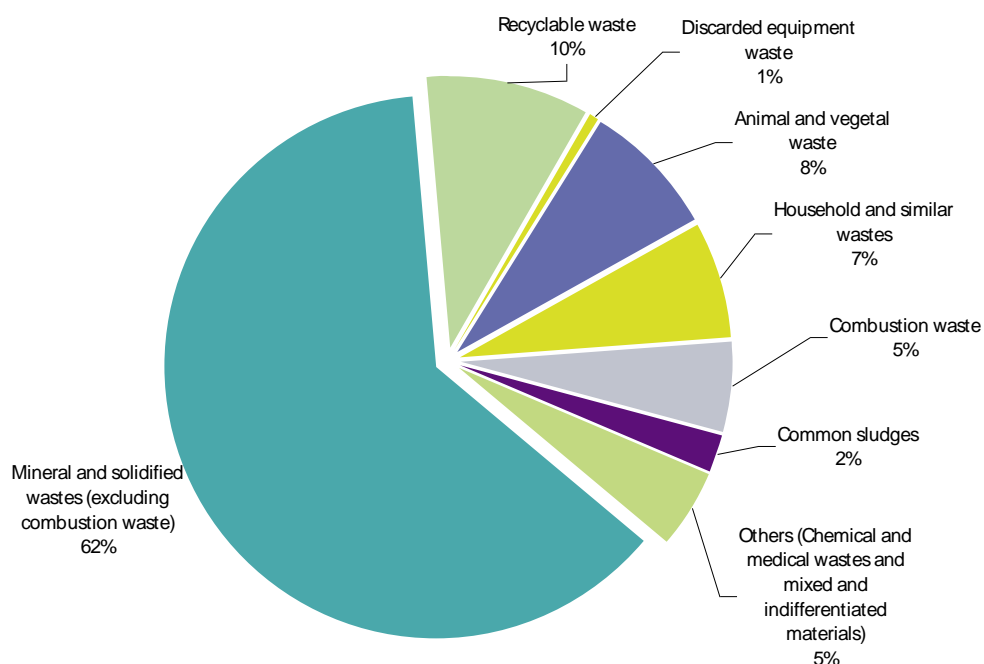
Source: EEA (2010): European Environment State and Outlook (SOER) Report, Draft for Consultation April-May 2010.

The decrease in hazardous waste generation in the EU12, as outlined in the table above, can be explained by introduction of cleaner technology and mine closures. In addition, some waste types historically deemed hazardous were re-classified as non-hazardous compared as a consequence of the introduction of the European Waste List upon accession to the EU. The increase in hazardous waste generation in the EU15 is more difficult to explain, although changes in the EU hazardous waste list in 2001 increased the number of waste codes to cover hazardous wastes that were previously only classed as hazardous in some countries. Other contributing factors may include increased municipal waste incineration (which is estimated to have contributed to an increase in hazardous flue gas cleaning residues of at least 600,000 tonnes between 1997 and 2006) and remediation of contaminated sites.⁵³⁸

Composition of waste: As regards the composition of waste in the EU 27 about two thirds (62%) of the waste generated in EU-27 is mineral waste, stemming from construction and demolition activities (25-30%) and from mining and quarrying 25%. The rest is from manufacturing, households and other activities.

⁵³⁸ EEA, The European Environment State and Outlook 2010, Material Resources and Waste, p. 23.

Figure 13: Composition of waste EU-27, 2006



Source: Eurostat waste data centre 2010

Waste management: As for waste management, the share of waste that is disposed of in landfills is decreasing. In 1995 (the baseline year for the targets in the Landfill Directive) an average 62% of MSW in the EU-15 was sent to landfill. By 2007, this figure had fallen to 42%.⁵³⁹ For the EU-27, Eurostat calculated a fall in per capita landfilling of MSW from 293kg to 207kg between 1997 and 2007.⁵⁴⁰ However, at the same time they estimate that MSW incineration has increased from 70kg per capita to 102kg per capita.⁵⁴¹ While data on hazardous waste treatment is limited, analysis by the EEA concluded that in 2006 33.6% of hazardous waste generated was disposed of and 34% was recovered; there was no information about management of the remaining 32.4%.⁵⁴²

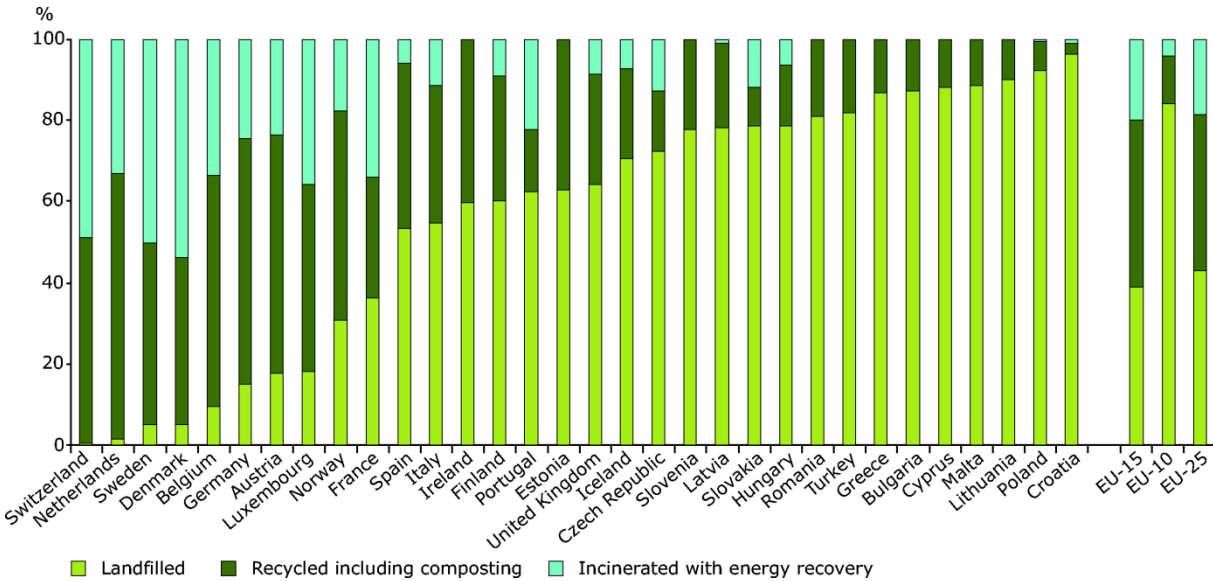
⁵³⁹ EEA (2009): EEA Report No 7/2009, Diverting waste from landfill – Effectiveness of waste-management policies in the European Union.

⁵⁴⁰ Eurostat (2010): Environmental Data Centre on Waste, Landfill and incineration.

⁵⁴¹ Eurostat (2010): Environmental Data Centre on Waste, Landfill and incineration.

⁵⁴² EEA (2010): European Environment State and Outlook (SOER) Report, Draft for Consultation April-May 2010.

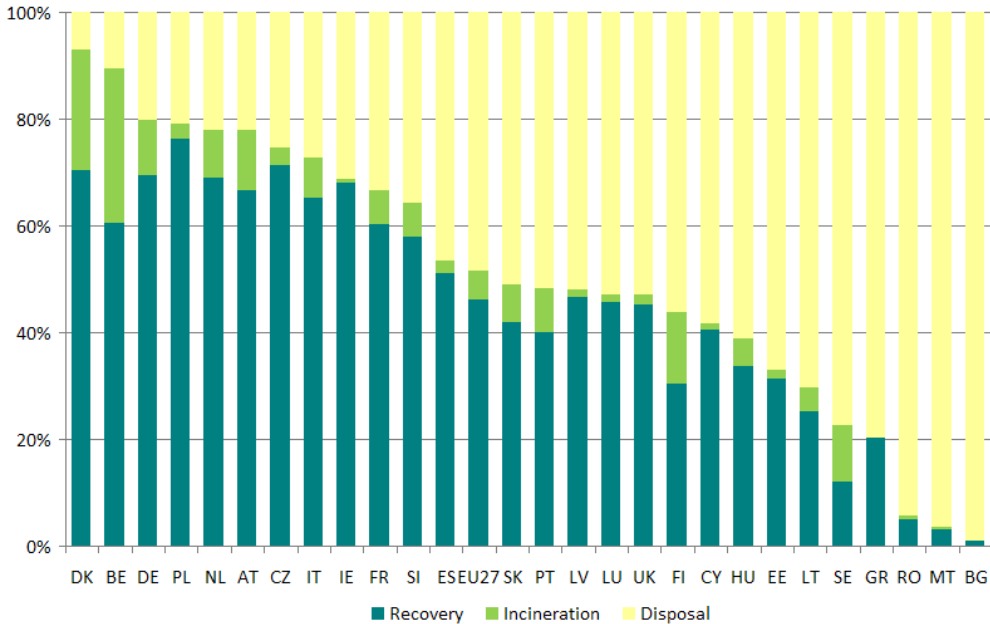
Figure 14: Treatment of waste in 2005



Source: EEA, 2007, Europe’s Environment, The Fourth Assessment, State of the Environment Report No 1 (regards year 2005)

These trends have been stabilizing or evolving (see for the trends in 2008 the following figure).

Figure 15: Types of waste treatment, 2008⁵⁴³



Source: Eurostat Waste Data Centre 2010EUROSTAT waste data centre 2010 (provided by the EU Commission).

In the following sections the contribution of the different measures to the objectives of the 6 EAP is analysed.

⁵⁴³ In percent of total waste treated.

Achieving a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns

Prevention is the first pillar of the waste hierarchy and measures to promote prevention have been introduced in most of the EU waste legislation although most measures are still rather abstract. It is difficult to measure accurately the exact effect of these measures on each waste stream. In addition, most of the measures included in the legislation are relatively recent and have not yet produced their whole effects. This is the case for instance for the revised WFD.

The revised **Waste Framework Directive**⁵⁴⁴ (WFD) as the fundamental law on waste management includes concrete articles on waste prevention. Art. 2(12) of the WFD defines prevention as measures taken before a substance, material or product has become waste, that reduce:

- (a) the quantity of waste, including through the re-use of products or the extension of the life span of products;
- (b) the adverse impacts of the generated waste on the environment and human health; or
- (c) the content of harmful substances in materials and products;

The Directive requires Member States to draw up waste prevention programmes enumerating waste prevention objectives and measures. The WFD says *expressis verbis* in Article 29 that the aim of such objectives and measures shall be to break the link between economic growth and the environmental impacts associated with the generation of waste. Member States shall determine appropriate specific qualitative or quantitative benchmarks for waste prevention measures adopted in order to monitor and assess the progress of the measures, and may determine specific qualitative or quantitative targets and indicators for this purpose. They shall evaluate the usefulness of the examples of measures indicated in Annex IV of the WFD, such as the use of planning measures, promotion of eco-design, use of awareness campaigns and information provision directed at the general public or a specific set of

Consumers, promotion of creditable eco-labels, and much more. As a result, the revised WFD is much more concrete on waste prevention than the former Directive, and lays the basis for concrete measures and criteria for waste prevention and its monitoring. In many cases Member States had already developed waste prevention programmes, although they are often devoid of concrete targets and measures and are not assessed or enforced. It remains to be seen whether waste prevention programmes as required by the new WFD will be more concrete and enforceable. Effective implementation of this obligation, including regular monitoring and effective co-ordination, will therefore be critical.

The WFD also requires the Commission to produce certain reports, including possible prevention and decoupling objectives by 2014 to be valid for 2020; however those objectives

⁵⁴⁴ DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives.

only need to be part of a proposal 'if appropriate' (see Article 9). This requirement of the WFD is quite unclear with a view to its wording, thus it is also unclear if 'binding prevention objectives' can be expected to be set at a European level.^{545 546}

The WEEE and ROHs Directives, the Packaging Directive and Batteries Directive include qualitative waste prevention measures.

The WEEE Directive states that its basic objective is to prevent WEEE but does not add any concrete measures on waste prevention. The recast of this Directive is ongoing since 2008. Prevention requirements have been left relatively untouched except to align its definition with that established under the revised WFD.

The impact of the RoHS Directive has been recently estimated⁵⁴⁷: the application of the Directive has resulted in reducing the quantities of the banned substances being disposed of and potentially released into the environment by 89 800 tonnes of lead, 4 300 tonnes of cadmium, 537 tonnes of hexavalent chromium, 22 tonnes of mercury, and 12 600 tonnes of octa-BDE per year.

Directive 2004/62/EC which amended the original **Packaging Directive**⁵⁴⁸ in 2004 calls Member States to implement other preventive measures additional to those of the essential requirements. It also added the following clause to the original Directive: 'The Commission shall, as appropriate, present proposals for measures to strengthen and complement the enforcement of the essential requirements and to ensure that new packaging is put on the market only if the producer has taken all necessary measures to minimise its environmental impact without compromising the essential functions of the packaging.'

The **Batteries Directive** lays down a reporting obligation on efforts to prevent battery waste. This Directive also introduces specific collection and recycling targets for waste batteries.

Other legal instruments that can contribute to waste prevention are the Ecodesign Directive, which lays down requirements for the ecodesign of products (see above), the European

⁵⁴⁵ In the Thematic Strategy on Waste Prevention and Recycling (year 2005) the Commission had decided against concrete waste prevention targets.

⁵⁴⁶ It is controversial whether setting concrete (quantitative) prevention and decoupling objectives are the best way of tackling the issue of waste prevention. The EU Commission has concluded in the TS Thematic Strategy on the prevention and recycling of waste that such global objectives were not appropriate. See TS, p. 16, 'This strategy does not prescribe EU waste prevention targets as this would not be the most effective and eco-efficient way to foster waste prevention. This is because such targets fail to address the complexity of environmental impact: the weight of waste could be reduced yet the environmental impact could increase, whereas small weight reductions can bring large reductions in environmental impact. In addition, prevention policies should take into account national production and consumption patterns, their projected trends and their relation to economic growth.' Another issue of debate is whether the European level is the appropriate political level to set waste prevention targets in the first place. Yet, the 6 EAP in Art. 8(2)(ii)(a) expressly required the development of a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010.

⁵⁴⁷ Commission Staff working paper accompanying the Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (recast) – Impact Assessment, COM(2008) 810 final, 3 December 2008, p. 19, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2008:2933:FIN:EN:PDF> (11 December 2010).

⁵⁴⁸ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Ecolabel and GPP via their product criteria, and the IPPC Directive⁵⁴⁹ (*now revised to the Industrial Emissions Directive*⁵⁵⁰), which lays down requirements for the permitting of industrial installations.

Resumé: Current figures on waste generation, as presented above, indicate that to date waste prevention efforts have not yet delivered a considerable or long-term reduction of the absolute volume of waste produced. While there has been a slight decrease of overall waste generation from 2006 to 2008, it is difficult to assess whether this can be attributed to policy or legislative measures.

As the European Commission said in its report on the implementation of waste legislation⁵⁵¹, prevention policy until now has not been efficient, with limited and sporadic actions taken by Member States but hardly any large-scale coherent policies in place. The report acknowledges that this might have been due to a limited focus on waste prevention in the old WFD, and could change when the relevant requirements of the revised WFD enter into force.⁵⁵² It remains to be seen how important an effect the new provisions of the WFD will have on waste generation, or whether more targeted efforts are needed at EU-level.

A significant reduction in the quantity of waste going to disposal, and the reduction of volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil.

This objective related to better waste management which the 6EAP associates first and foremost to substituting waste disposal in landfills with forms of waste recovery or recycling. The **Landfill Directive** resulted in an important shift away from the landfill of waste, although the directive did not precisely specify what methods of waste management would then come into play. The Directive obliged Member States to devise strategies to reduce the disposal of biodegradable waste in landfills. Also, the Directive banned certain wastes e.g. tyres, liquid waste, to be disposed of in landfills. This Directive was introduced before the 6EAP, but was also fostered by the **Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills** pursuant to Article 16 and Annex II to Directive 1999/31/EC, which introduced *inter alia* leaching limit values for waste destined at landfills thereby reducing the hazardousness levels of waste eligible for landfilling.⁵⁵³ Evidently, the Landfill Directive has had the greatest impact in countries and locations where the process of shifting away from landfill was not already under way. As such, it has been a strong driver of change for example in Estonia, Hungary, Ireland, Italy and the UK, but has

⁵⁴⁹ Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control.

⁵⁵⁰ The Council adopted the European Parliament's position in 2nd reading on the Directive without amendments on 8 November 2010.

⁵⁵¹ Report of 20.11.2009, COM(2009) 633 final.

⁵⁵² Ibid., p. 4.

⁵⁵³ For further information see e.g. www.fead.be/uploads/documents/Events/Scharff_acc_crit.ppt (11 December 2010).

had less impact in Germany, Scandinavian countries, and the Flemish Region of Belgium, where implementation of diversion policies started before the adoption of the Directive.⁵⁵⁴

There are huge differences between Member States in terms of waste management: recycling varies from a few percent up to 70% and landfilling has virtually disappeared in some Member States but still represents more than 90% in a few others. It means that a significant margin for progress in sustainable waste management on the ground still exists beyond the current EU minimum collection and recycling targets.

The drive away from landfill to more sustainable waste management methods has been importantly bolstered by the revised **WFD**, which institutes in its Article 4 a binding five-step waste management hierarchy, under which waste disposal in landfills is the absolute last resort. Another major step in improving waste management is the concrete recycling targets for household and construction and demolition waste set in Article 11. These new requirements, to be met by 2020, will lead to the volume of waste going to landfill to likely decrease considerably, at least in some EU Member States.

Additional waste-related directives or modifications to directives such as the Packaging Directive, Batteries Directive and WEEE Directive, have also helped to divert waste from landfills. They have done this by setting or tightening minimum targets for separate collection and/or recycling and recovery of the waste streams concerned (packaging, batteries, EEE); such targets will naturally contribute to the diversion of these waste streams from landfills.⁵⁵⁵

The fact that waste is diverted from disposal in landfill to other waste treatment processes such as incineration, recycling, or mechanical-biological treatment (MBT) is not accompanied by increased overall emissions to air, water and soil (as would be disapproved of by the 6 EAP). Most of the waste treatment processes are subject to European emission abatement legislation including - depending on the waste treatment method - the IPPC Directive. The latter directive forces Member States to apply the best available techniques (BAT) e.g. for waste incineration and mechanical-biological treatment. In general, the emissions caused by the alternative waste treatment processes are much less harmful than the methane emissions and leachate emanating from landfills.

Conclusion: There is a consistent trend in Europe to move away from landfilling to other kinds of waste treatment such as recycling, waste incineration or mechanical-biological treatment. The waste-related directives and decisions adopted have played an important role in supporting this trend given their binding character and the requirements for Member States to report on their delivery of related targets. Huge differences between MS can be observed, Some MS will have to make strong efforts to meet the EU minimum targets, others have already largely passed these minimum targets.

⁵⁵⁴ EEA report, 7/2009, Diverting Waste From Landfills, p. 7, <http://www.eea.europa.eu/publications/diverting-waste-from-landfill-effectiveness-of-waste-management-policies-in-the-european-union> (11 December 2010).

⁵⁵⁵ It has to be noted, however, that the treatment of WEEE remains a sensitive issue as illegal exports to countries such as China and Nigeria continue occur, in contravention to both the WEEE Directive and the Waste Shipment Regulation. Therefore, reduction of disposal in landfills does not in all cases mean diversion to sound treatment facilities (see for this the implementation chapter).

Reduction of volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil.

The 6EAP also aims at reducing the hazardous nature of waste produced, i.e. promoting 'qualitative' waste prevention. Having absorbed the former Hazardous Waste Directive, the revised **WFD** contains the basic requirements for hazardous waste. The WFD's definition of prevention includes 'measures taken before a substance, material or product has become waste, that reduce the content of harmful substances in materials and products', providing a lever in the WFD to reduce hazardous waste. In addition, Article 9 requires the Commission, by the end of 2011 to produce an interim report on the evolution of waste generation and the scope of waste prevention, including the formulation of a product ecodesign policy addressing both the generation of waste and the presence of hazardous substances in waste, with a view to promoting technologies focusing on durable, re-usable and recyclable products.

In a more concrete fashion, the **RoHS** and **Batteries Directives** in particular can be cited as drivers to limit hazardous waste by preventing or dramatically limiting the use of a series of heavy metals formerly used in EEE and batteries. The Packaging and ELV Directives also limited or banned certain heavy metals in the production of packaging and cars; however these Directives were enacted before the 6EAP came into effect. The RoHS Directive bans or limits the use of the following substances: Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr6+), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ether (PBDE).⁵⁵⁶ The Batteries Directive prohibits: batteries and accumulators, whether or not incorporated in appliances, containing more than 0.0005% by weight of mercury (except for button cells, which must have a mercury content of less than 2% by weight); portable batteries and accumulators, including those incorporated in appliances, with a cadmium content by weight of more than 0.002% (except for portable batteries and accumulators for use in emergency and alarm systems, medical equipment or cordless power tools).^{557 558}

Outside the waste sector *stricto sensu*, a very important instrument to limit and reduce hazardous waste in future is the **REACH Regulation**. Under this Regulation, industry is responsible for assessing and managing the risks posed by chemicals and providing appropriate safety information to their users. The aim of the authorisation of certain substances under REACH is to ensure the good functioning of the internal market whilst assuring that the risks from substances of very high concern (SVHC) are properly controlled and that these substances are progressively replaced by suitable alternative substances or technologies where these are economically and technically viable (Article 55)⁵⁵⁹.

⁵⁵⁶ See above: assessment of the impact of the RoHS Directive.

⁵⁵⁷ http://europa.eu/legislation_summaries/environment/waste_management/l21202_en.htm (11 December 2010).

⁵⁵⁸ There is no evidence that the ban of the heavy metals mentioned and the resulting preventing of hazardous waste would in turn result in the increase of emissions into soil, air or water (see Art. 8(1)3rd tiret of the 6 EAP: requiring a significant reduction in the quantity of hazardous waste produced while avoiding an increase of emissions to air, water and soil).

⁵⁵⁹ See Chemsec. 2009, REACH and RoHS - complementary regulations http://www.chemsec.org/images/stories/publications/Downloads/Fact_Sheet_REACH_RoHS.pdf (11 December 2010).

The Directive 2005/64 'on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability and amending Council Directive 70/156/EEC' established that vehicle manufacturers and their suppliers should include reusability, recyclability and recoverability of component parts 'at the earliest stages of the development of new vehicles, in order to facilitate the treatment of vehicles at the time when they reach the end of their life. The focus shifted to the recyclability and recoverability of the vehicles before being produced and commercialised. Vehicles have to be constructed as to be: reusable and/or recyclable to a minimum of 85% by weight, and reusable and/or recoverable to a minimum of 95% by weight. In addition the Commission is currently working to encourage the development of clean and energy efficient cars, which includes aims facilitating the recycling of car batteries (COM (2010) 186).

The **Ecodesign Directive** also to some degree aims at reducing hazardous substances in products, although only one implementing measure addressing this has been agreed to date, on reducing mercury in compact fluorescent lamps and encouraging their safe disposal. In general implementation measures under the eco-design directive focus on energy efficiency and not on other resource-related issues of hazardousness. The Ecolabel Regulation, although voluntary, generally sets stricter criteria levels than is found in other legislation, and a study undertaken in preparation for its recent revision⁵⁶⁰ identified that these criteria were used as benchmarks by companies far beyond those actually applying for the label. Therefore, its indirect influence is considerably larger than its direct influence appears.

Conclusions: Specific measures outlawing or reducing hazardous substances have led to the phasing out of certain hazardous materials in certain products, thereby helping to reduce **volumes of hazardous waste produced** while avoiding an increase of emissions to air, water and soil. However, the overall mass of hazardous waste has been growing between 1997 and 2006⁵⁶¹, thus the overall reduction of volumes of hazardous waste has not been achieved.

Developing a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010. The Commission is invited to prepare a proposal for such targets by 2002;

This priority action has not been fulfilled by the Commission as required by the 6EAP. In general, waste-related directives state waste prevention as their ultimate goal but do not develop quantitative reduction targets. Different waste-stream directives, however, lay down qualitative bans or limits to the use of specific hazardous substances in products (such as the RoHS Directive, the ELV Directive or the Packaging Directive). During the development of the Waste TS, the Commission concluded from research that given the different local circumstances in EU Member States, the definition of common waste prevention and

⁵⁶⁰ http://ec.europa.eu/environment/ecolabel/about_ecolabel/revisions/research_findingsl.pdf (11 December 2010).

⁵⁶¹ The EU-27 Member States, Croatia, Norway and Switzerland together reported the generation of 70.6 million tonnes of hazardous waste in 2006, an increase of 15% since 1997 (see Figure 11 below). Between 1997 and 2006 generation increased by 54% in the EU-15 but decreased by 42% in the EU-12. According to the EEA, taking into account the limited data available, the overall trend shows growing or stabilising amounts of hazardous and non-hazardous waste in the EU, see for this EEA, EEA, 2010, European Environment State and Outlook (SOER) Report, Draft for Consultation April-May 2010.

resource efficiency targets would deprive policymakers of flexibility, and that such a general waste reduction aim was therefore to be discarded (see above). The impact assessments accompanying the Thematic Strategies on natural resources and waste were the principal bases on which the decision to not institute concrete reduction targets was based. However, the revised WFD of 2008, at the insistence of the European Parliament, includes an article calling on the Commission to come up with, if appropriate, a proposal to set waste prevention and decoupling targets by 2014 (for the year 2020). It remains to be seen whether the Commission will opt for EU-level targets for waste prevention.

Encourage ecologically sound and sustainable product design

The issue of encouraging ecologically sound and sustainable product design was addressed primarily by the **Ecodesign Directive** which subjects various energy-related products to specific ecodesign requirements, and the **Ecolabel Regulation**, which addresses 26 consumer products.⁵⁶²

The **WEEE Directive**, the **ELV Directive**⁵⁶³ and the **Packaging Directive** also contain certain clauses about **sustainable product design** (with a view to promoting recyclability and reusability).

The **Batteries Directive** requires Member States which have manufacturers established on their territory to promote research and encourage improvements in the overall environmental performance of batteries and accumulators throughout their entire life cycle, as well as the development and marketing of batteries and accumulators which contain smaller quantities of dangerous substances or which contain less polluting substances, in particular as substitutes for mercury, cadmium and lead.

Raising awareness of the public's potential contribution on waste reduction

The European Commission has for example contributed to **awareness raising campaigns**, such as the European Week of Waste Reduction (funded by the LIFE-programme)⁵⁶⁴. One main objective of this event was to highlight the work accomplished by various actors, through concrete examples of waste reduction and to encourage changes in the behaviour of Europeans (consumption, production) in everyday life.⁵⁶⁵ Thus, the Commission has contributed to awareness-raising on waste prevention.

Formulation of operational measures to encourage waste prevention

No specific operational measures at EU level to encourage waste prevention have been developed at EU level apart from the requirement for Member States to develop waste prevention programmes, as required by Article 29 of the revised **WFD**.

⁵⁶² http://ec.europa.eu/environment/ecolabel/about_ecolabel/facts_and_figures_en.htm#evolution (11 December 2010).

⁵⁶³ Adopted before the 6EAP.

⁵⁶⁴ For further information please refer to : <http://www.ewwr.eu/presentation-week> (11 December 2010)

⁵⁶⁵ Ibid.

As for product-related measures contributing to the phasing out of certain substances and materials, the **RoHS Directive**, **Batteries Directive**, **ELV Directive**⁵⁶⁶ and the **Ecodesign Directive**⁵⁶⁷ contain relevant text.

Developing further indicators in the field of waste management

Article 29(4) of the revised **WFD** states that indicators for waste prevention measures may be adopted. By this stipulation, the priority action can technically be considered to have been covered by EU legislation, although the indicators are yet to be developed.

1.4.2.3 Waste recycling

Overall aims

Better waste management to bring about more sustainable production and consumption patterns.

Specific objectives

- encouraging re-use and
- for wastes that are still generated: the level of their hazardousness should be reduced and they should present as little risk as possible;
- preference should be given to recovery and especially to recycling;
- the quantity of waste for disposal should be minimized and should be safely disposed of;
- waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations.

Priority actions:

Thematic Strategy on recycling which includes:

- measures aimed at ensuring source separation, the collection and recycling of priority waste streams;
- further development of producer responsibility;
- development and transfer of environmentally sound waste recycling and treatment technology.

Measures

Many measures dealing with the issues above have already been described in preceding sections, such as:

- Promoting reuse: Waste Framework Directive, product-related directives, such as WEEE Directive.
- Reduction of hazardous waste (see above)

⁵⁶⁶ The ELV Directive was enacted and went into force before the 6 EAP.

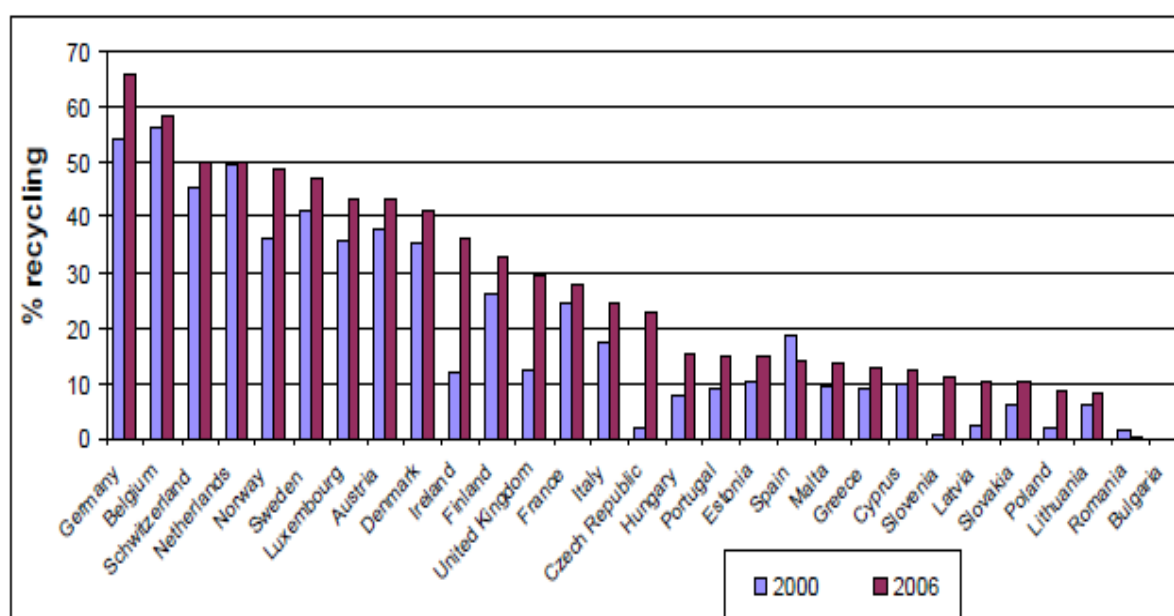
⁵⁶⁷ Impact of these will depend much on the Ecodesign Directive's implementation.

- Safe disposal of waste: Landfill Directive and Council Decision on waste acceptance criteria.
- Measures for promoting recovery and recycling, (see above diverting waste from landfills, specifically text on Batteries, ELV, Packaging Waste and WEEE Directives, new WFD)
- Treating waste close to its place of generation:
 - *Waste Framework Directive*
 - *Waste Shipment Regulation*

Contribution of important measures to 6 EAP objectives

According to EEA figures for 2006, in the EU 27 approximately 55% of waste targeted by EU Directives was recycled, including 70% of ELVs, 57% of packaging, 65% of C&D waste, 34% of MSW and 19% of WEEE.⁵⁶⁸

Figure 16 Recycling rates for municipal waste in the EU 27, Norway and Switzerland



Source: EEA, upcoming State and Outlook of the Environment Report 2010, draft version June 2010⁵⁶⁹

In terms of MSW recycling there remain significant disparities between Member State achievement in terms of recycling efforts and also importantly differences in the rate of change in terms of performance in recent years. The above figure compares Member State performance in terms of MSW recycling in 2000 and 2006. It demonstrates that in 2006 Germany had the highest levels of recycling, also demonstrating significant growth levels in

⁵⁶⁸ See presentation 'Supporting the Review of the TS on Waste Prevention and Recycling', <http://www.eu-smr.eu/tswpr/meetings.php> (11 December 2010).

⁵⁶⁹ Cited in Background report for stakeholder event - 22 June 2010 Supporting the Review of the Thematic Strategy on Waste Prevention and Recycling, http://ec.europa.eu/environment/waste/pdf/review_report.pdf (11 December 2010).

MSW recycling. Belgium and the Netherlands also demonstrate high levels of recycling of MSW, however, the rate of increase has been slower between 2000 and 2006 for Belgium with recycling levels remaining static over the period for the Netherlands. Meanwhile rapid increases in the level of recycling, starting from a low base in 2000, can be seen for Ireland, the UK, the Czech Republic, Slovenia, Latvia and Poland.⁵⁷⁰

Many of the specific objectives that relate to the sub-area of 'Waste Recycling', such as **reduction of hazardous waste, promotion of recovery and recycling and reduction of landfilling and increase of recycling**, are a repetition of the specific objectives of the preceding sub-area on waste management. Therefore, please refer to the section above for information. The directives promoting recycling are the Waste Framework Directive, the WEEE Directive, the Packaging Directive, the Batteries Directive, the ELV Directive, and more indirectly the Landfill Directive.

With regards to the **promotion of reuse**, the provisions in waste-related directives, such as the Waste Framework Directive, the ELV Directive, the Packaging Directive and the WEEE Directive, encourage reuse. The WEEE and ELV Directive include reuse in their recovery targets. The revised Waste Framework Directive puts 'preparation for re-use' on the top of the waste management hierarchy (below prevention) and includes preparation for re-use in its own recycling/reuse targets..

Waste to be disposed of also needs to be **disposed of safely**: The Landfill Directive lays down minimum criteria to be fulfilled by landfills to operate legally. This Directive was enacted in 1999, thus before the publication of the 6EAP⁵⁷¹ but has been bolstered by the **Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills**.

Waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations

Article 16 of the revised **WFD** (Directive 2008/98) calls on Member States to establish an integrated and adequate network of waste disposal installations and installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers. Member States may limit incoming shipments of waste destined for incinerators that are classified as recovery where it has been established that such shipments would result in national waste having to be disposed of or treated in a way that is not consistent with their waste management plans. The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal and the recovery of mixed municipal waste. The network shall enable Member States to move towards that aim individually (principle of self-sufficiency). The network shall enable waste to be disposed of or specific waste to be recovered in one of the nearest appropriate

⁵⁷⁰ Final Report - Supporting the Review of the Thematic Strategy on Waste Prevention and Recycling, IEEP et al, October 2010, p. 448.

⁵⁷¹ Most implementation problems of EU waste legislation have, however, been registered in the field of compliance with the Landfill Directive.

installations, by means of the most appropriate methods and technologies (principle of proximity). The main difference with regard to the former Waste Framework Directive (2006/12/EC) is that the new WFD expands the principles of self-sufficiency and proximity to certain wastes to be recovered, especially mixed household waste to be incinerated. Thus, the new WFD can be seen to exceed the specific objectives of the 6EAP by not only addressing waste for disposal when it comes to the proximity and self-sufficiency principles, but also specific waste for recovery.

The revised **Waste Shipment Regulation** contributes to the objectives of self-sufficiency and proximity by laying down limits and justifying objections to waste for disposal and for certain waste to be recovered (definition corresponds to the definition in the Waste Framework Directive) being shipped out of or to be imported into a country. This contributes also to sustainable waste management outside the EU by limiting waste imports or exports for disposal. However, as was already stated earlier, illegal shipments of waste still occur in considerably large volumes, most worryingly of hazardous WEEE, but also other wastes mixed in with materials meant for recycling.

In **summary**, concrete advances have been made in the field of diverting waste from landfills and promoting waste recovery and recycling – mainly thanks to EU directives that have been implemented since the end of the 1990s. Concrete standards have been set up to ensure safe waste disposal and there is some encouragement of waste reuse in waste directives (especially via re-use and recycling targets). As a result of the diversion of waste from landfills, methane emission rates in the EU 27 have been dropping.

The principles of self-sufficiency and proximity are laid down in the WFD and the Waste Shipment Regulation. It remains to be seen how well these principles will be implemented and enforced. The new requirements of the Waste Shipment Regulation justifying objections to waste imports and exports under certain circumstances, especially if waste is not destined for recycling or recovery according to best available techniques, can also contribute to sustainable waste management at an international level.

Thematic Strategy on Recycling

The **Thematic Strategy on Waste Prevention and Recycling**⁵⁷² published in 2005 reflected not only on recycling but also on waste prevention, and more importantly on the better implementation and enforcement of existing waste law, which to a significant extent also favours recycling and recovery. Overall, the TS includes considerations on specific issues of waste management in general.⁵⁷³

The TS elaborates on the following issues:

- A renewed emphasis on full implementation of existing legislation.

⁵⁷² COM(2005)666, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and The Committee of the Regions - Taking sustainable use of resources forward - A Thematic Strategy on the prevention and recycling of waste.

⁵⁷³ See also statement by FEAD on the TS on Waste, April 2006, http://www.fead.be/uploads/PositionPapers/documents/FEAD_POSITION_PRecyclStrategy_WastePolicy_130406.pdf (11 December 2010).

- Simplification and modernisation of existing legislation;
- Introduction of life-cycle thinking into waste policy;
- Promotion of more ambitious waste prevention policies;
- Better knowledge and information;
- Development of common reference standards for recycling.

As regards fostering recycling (chapter on 'Towards a EU Recycling Society'), the TS recognizes the current Recycling Directives' contribution to setting-up and financing recycling infrastructure for large waste streams. However, the TS finds it difficult to justify the application of this approach to a new range of waste streams. For smaller waste streams or waste streams with less environmental impact, such an approach could create heavy administrative burdens compared to the environmental benefit obtained.

While the present priority of the TS is to ensure complete implementation of the EU Recycling Directives, what would be needed for the future would be a complementary approach that is both more flexible and broader in its coverage. The assessment of the need for further measures to promote recycling was left to the review of the TS. In particular, this would consider moving towards a more material-based approach, possibly using producer responsibility.

Also with regard to recycling targets, the TS is cautious saying that without a thorough analysis (as the one carried out in the revision of the Packaging Waste Directive) there would be a risk of setting targets that promote processes with little or no environmental benefit or which fail to promote technologies that could deliver sizable environmental benefits but find it difficult to break into the market⁵⁷⁴.

Furthermore, the TS targets at a level playing field in recycling via different legal approaches (see below recycling standards).

Taking into account the issues that the TS covers, the TS on Waste Prevention and Recycling differs from what the 6EAP has envisaged for the strategy in Art. 8(2)(iii) (see above), and does not comply with the content-related requirements of the 6EAP as follows:

- The TS does not develop concrete measures aimed at ensuring source separation, collection and recycling of priority waste streams. Thus, it does not reflect on source separation in contrast to the requirements of the 6EAP. The only concrete measure that the TS refers to as 'next steps' is the review of the collection target in the WEEE Directive. In turn, the TS is skeptical on introducing additional Recycling Directives, taking into consideration, however vaguely, the uptake of a 'material-based approach'.
- References to producer responsibility in the TS are in general very limited and do not develop further the concept of producer responsibility as called for in the 6EAP.
- The TS does not include a conclusive chapter on the development and transfer of environmentally sound waste recycling and treatment technology. It does, however, elaborate on the development of common reference standards for recycling, which

⁵⁷⁴ Thematic Strategy on Waste Prevention and Recycling, p. 18.

it suggests should be based on amendments of the WFD and the IPPC Directive⁵⁷⁵. This approach would be applied to bio-waste as a priority. These standards would be minimum standards across the Community for recycling activities and recycled materials so as to ensure a high level of environmental protection and to prevent the threat of 'eco-dumping' and in line with the requirements of the 6 EAP.

Conclusions: the TS rather prepares the revision of legislation and highlights the need for better implementation but does not in itself outline concrete measures for source separation, the further development of producer responsibility. It develops, in turn, some ideas on the development or rather the fostering of environmentally sound recycling technology by demanding common recycling standards.

1.4.2.4 Development and revision of waste legislation

Waste legislation has developed very dynamically over the last eight years, i.e. since the publication of the 6EAP. Consequently, one specific objective of the 6EAP, which has for the most part been attained, was the development or revision of legislation on wastes (Art. 8(iv)), including on:

- construction and demolition waste (recycling/recovery targets for construction and demolition waste were included in the new WFD; there is no specific directive for C&D waste);
- sewage sludge (the European Commission is currently examining whether a review is needed);
- biodegradable waste (an article on biowaste has been included in the WFD, encouraging Member States to separately collect biowaste. Apart from this, the Commission has so far rejected calls for a stand-alone directive on biowaste, arguing that there are no policy gaps at EU level that prevent member states from taking stronger action at present⁵⁷⁶;
- packaging: revision of the original Directive was adopted in 2004
- batteries: new Directive adopted in 2006;
- waste shipments: revision of the Waste Shipment Regulation adopted in 2006.
- clarification of the distinction between waste and non-waste and development of adequate criteria for the further elaboration of Annex II A and II B of the Waste Framework Directive (included in the new WFD);

Moreover, proposals for **revised WEEE and RoHS Directives** were issued in 2008. A directive on extractive **waste**⁵⁷⁷ was published in 2006. In addition to these 6EAP

⁵⁷⁵ These common recycling standards have not yet materialised. Yet, the proposal for the review of the IPPC Directive extends its scope to recycling installations.

⁵⁷⁶ See EurActiv, 7 July 2010, Parliament calls for EU biowaste directive, <http://www.euractiv.com/en/sustainability/parliament-calls-for-EU-biowaste-directive-news-496052> (11 December 2010).

⁵⁷⁷ Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC.

requirements, a revised **WFD** was adopted at the end of 2008, integrating the former Waste Oil and Hazardous Waste Directives.

Conclusions: In principle, the actual legislative activity has taken into account all areas mentioned in Article 8(iv) of the 6EAP, if one accepts that certain areas have only been examined with regard to the need for legal action and the Commission has decided against far-reaching new legislation. As a result, there has been much activity in waste-related legislative work at European level in recent years, which goes far beyond what the 6EAP *expressis verbis* envisaged by requiring European waste law to be further developed and revised.

1.4.2.5 Summary assessment of the thematic area

Overall aims

Better resource efficiency and management

When assessing the trends of resource efficiency, it can be said that EU economies have become more efficient in many respects. Efficiency gains can be observed for a number of indicators, from the consumption of raw materials and energy to the generation of waste and greenhouse gas emissions. The Sustainable Consumption and Production (SCP) Action Plan (2008) maintains that resource productivity (measured by GDP per resource use, €/kg) in the EU has improved by 2.2% per annum in real terms over the past 10 years.

Important steps have been made in the field of energy efficiency of energy-related products, focusing heavily on energy efficiency in the use phase. The Ecodesign Directive has led to the elaboration of implementing measures laying down requirements for the ecodesign of various products, such as lightbulbs and household appliances – focusing for the large part on energy efficiency aspects. A small number of these implementing measures have already taken effect, with more to come into effect in the coming years, and will certainly contribute to better availability of more energy efficient appliances on the market.

The Ecolabel Regulation is to a certain extent apt to contribute to better resource efficiency and management, as resource-related criteria are to be considered in the Ecolabel. Similar considerations are valid for Green Public Procurement.

Furthermore, new institutions have been set up to deal with and monitor resource efficiency progress in line with the Thematic Strategy on Resources. Extensive research is going on to develop further the issue of resource efficiency and the sustainable management of resources.

Better waste management

The overall aims of the 6EAP have to a certain extent been achieved over the last 10 years. In particular, in the field of waste management, the disposal of waste in landfills has been reduced in favour of increased rates of recycling and recovery. Thus, in the field of waste management more sustainable patterns have been established. One of the main drivers for better waste management has been waste legislation promoting recycling and recovery and forcing Member States to reduce waste disposal in landfills. There are, however, large differences between Member states. Waste legislation still suffers from sub-optimal

implementation and enforcement in the Member States, meaning less change on-the-ground than implied by the legislation texts. Also, there is still too little focus on the top of the hierarchy, i.e. waste prevention.

Decoupling resources and waste from economic growth

Although a very important objective, the decoupling of the use of resources from the rate of economic growth has only been achieved to a very limited extent. Better resource efficiency per unit of products produced has been achieved given that there has been relative decoupling between resource use and economic growth, e.g. resource use is increasing more slowly than economic growth. However, absolute decoupling has not been achieved, thus resource use in absolute terms is still increasing. As for waste one of the tenets of the 6EAP is waste prevention and overall masses of waste generated have been slowly growing although not as quickly as GDP over the last 10 years (relative decoupling) and tend to decrease between 2006 and 2008. It is nevertheless difficult to link this relative decoupling to specific measures or policies.

As a consequence, the EU is still exceeding carrying capacity in its consumption of renewable and non-renewable resources.

Specific objectives

Ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environmental and breaking the linkages between economic growth and resource use

As already mentioned, decoupling of economic growth and resource use has been achieved to a limited extent; only relative decoupling has been achieved to date.

Achieving a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns

Over the last 10 years, waste generation has not reduced in Europe; rather it has continued to grow at a slower rate than GDP or stabilized in some Member States (albeit at high levels). As a consequence, waste prevention efforts undertaken to date have not been adequate to achieve a significant overall reduction in the volumes of waste generated. This failure is assumed to be mostly due to the preference of policy makers to encourage economic growth (and consumption) instead of resource efficiency and waste reduction. Nevertheless, some encouraging signals are coming from recent data showing some decrease in waste generation – even if it might be partly linked to the economic downturn - and some decoupling between consumption/GDP growth and overall and municipal waste generation could be observed showing that less waste is generated for the same level of consumption or GDP. The increase in resource efficiency has so far not had a significant impact on waste prevention.

Significant reduction in the quantity of waste going to disposal

This objective has been achieved largely due to the obligatory requirements of the Landfill Directive and related decisions banning certain waste streams from landfills on the one hand, and specific recycling directives that require certain minimum quantities of waste to be

recycled or recovered on the other hand. The new recycling targets included in the WFD and in the specific waste stream legislation/Directives will further increase recycling and recovery, and in turn reduce the quantity of waste going to landfills. However, also here proper implementation of existing legislation remains an issue and requires particular attention.

Significant reduction of volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil

Concerning the generation of hazardous waste, the volume of hazardous waste has not shrunk overall up to 2006, rather it has increased.

As regards the product design phase, waste legislation bans specific hazardous substances traditionally used in specific products, for example the ban on certain heavy metals in EEE⁵⁷⁸, batteries, cars, or packaging. Very good results have been demonstrated by the car industry which has reduced the presence of the banned substances by 96 to almost 100%.⁵⁷⁹ Furthermore, different product-related measures such as the Ecodesign Directive, the Ecolabel Regulation and GPP can contribute to reducing hazardous waste.

In a more expansive manner, the REACH Regulation subjects certain substances of very high concern (SVHCs) to an authorisation procedure that aims to replace hazardous substances with less hazardous alternatives.

The effects of these instruments combined will make themselves felt only in a few years' time.

Encouraging re-use and for wastes that are still generated: the level of their hazardousness should be reduced and they should present as little risk as possible

With regards to the **promotion of reuse**, the provisions in waste-related directives, such as the Waste Framework Directive, the ELV Directive, the Packaging Directive and the WEEE Directive, encourage reuse. The WEEE and ELV Directive include reuse in their recovery targets. The revised Waste Framework Directive puts 'preparation for re-use' on the top of the waste management hierarchy (below prevention) and includes preparation for re-use in its own recycling/reuse targets..

Waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations

The WFD and the Waste Shipment Regulation lay down the self-sufficiency principle and the proximity principle. The concrete requirements go beyond waste destined for disposal and also include e.g. mixed household waste.

Priority actions (output requirements)

⁵⁷⁸ The RoHS Directive is at the moment under revision and will previsibly see its scope widened.

⁵⁷⁹ Study on analysis of costs and environmental benefits of heavy metal ban, and proposal for better regulation, Oko-Institut, November 2010.

The **development and revision of European waste law**, as called for in the 6EAP, have been conducted over the last 10 years with a series of revisions of existing directives/regulations and new directives coming up.

As for the **Thematic Strategies on Resource Use and Waste Recycling** requested in the 6EAP, these strategies were duly developed and published. However, to a large extent these Thematic Strategies did not correspond to the concrete content requirements that the 6 EAP foresaw for the Thematic Strategies. Most importantly, the TS on Resources did not come up with concrete policy proposals or resource efficiency objectives, and the Thematic Strategy on Waste Prevention and Recycling did not deal in a concrete way with source separation or producer responsibility as required by the 6EAP but rather dealt with general issues of waste management and the streamlining and better implementation of waste legislation. While also the better implementation of waste legislation certainly contributes to promoting recycling, the 6 EAP required the TS to develop concrete measures on the source separation, the collection and recycling of priority waste streams and to further develop the concept of producer responsibility. The TS fails to a large extent to respond to these requirements in a concrete way.

As for the **development of quantitative and qualitative waste reduction targets** to be achieved at Community level by 2010, these have been extensively discussed during the co-decision process on the revision of the Waste Framework Directive. The European Parliament advocated such targets, the Council strongly opposed. As a result, the Commission will re-assess the option of setting prevention targets in the context of the 2008 WFD for the period until 2020. A prevention target on bio-waste has been analyzed but could not have been proposed due to subsidiarity arguments.

Other actions, such as the development of **ecodesign** or **public awareness-raising** events for waste prevention have been fulfilled at least to some extent.

1.4.3 Drivers and barriers

Changes in target areas

As regards the overall generation of waste, the economic crisis could have influenced waste generation given that overall waste generation decreased in 2008 with regard to 2006. More recent data are not available.

In the recent years, interest for resource efficiency and sustainable consumption and production has increased leading to enhanced research activities in the field of sustainable resource management and resource efficiency.

Conformity/lack of conformity

The conformity of measures with the aims and objectives of the 6EAP differed depending on the specific aim and objective concerned. Whereas the improvement of waste management (reduction of landfilling and increase of waste recovery and waste recycling, better management of landfills and the banning of certain hazardous materials) was pursued with significant determination and achieved a high grade of conformity with the requirements of the 6EAP; other issues (decoupling of waste generation and resource use from economic

growth, concrete targets for waste prevention or resource use/efficiency) did not conform with the 6EAP's requirements. These latter short-comings appear to be largely due to the higher priority given to economic growth and consumption rather than decoupling, but also to the fact that resource policy is a rather new policy field that often lacks well-entrenched methodologies to deal with the problems at hand, such as resource monitoring and the reduction of resource use.

The Waste and Resources Thematic Strategies do not comply with the concrete aspects that the 6EAP had *expressis verbis* required them to deal with. As a consequence, a series of important aspects, such as concrete proposals on how to increase source collection or waste recycling or concrete policy options for resource efficiency are lacking from the TS on Waste. In some sense, the Thematic Strategies contribute to the overall aims and specific objectives of the 6 EAP (see corresponding chapters above).

The development of the waste-related directives follow almost completely the requirements set out in the 6EAP.

Decision making

The EU decision making procedures, concretely the co-decision procedure involving the European Parliament, have influenced the achievement of the overall aims and specific objectives of the 6EAP. The Commission's initial proposal of the new WFD was significantly altered through the co-decision procedure; in particular by the European Parliament which raised the level of ambition of the legislation. In particular, it reclaimed a 5-step waste hierarchy and made it legally-binding. Furthermore, the Parliament included *inter alia* concrete recycling targets for household waste (50%) and C&D waste (70%), an issue that was not envisaged by the Commission's original proposal. This certainly contributes to better waste management and more sustainable consumption patterns, especially if treatment of waste by recycling replaces disposal of waste by landfilling. In this way, the Parliament enhanced the contribution of the new WFD to the 6EAP objectives in comparison to the Commission's original proposal. The same is true for the requirements relating to waste prevention, where Parliament required the Commission to report on different aspects of waste prevention in the EU and, if appropriate, develop a proposal for EU waste prevention targets (Article 9). In turn, a concrete EU waste prevention goal was not included into the finally adopted directive.⁵⁸⁰

Another example of the influence of the co-decision procedure is the Batteries Directive. The Council and the European Parliament had different views on the level of ambition of the proposed Directive compared to the Commission; in particular the European Parliament suggested stricter measures. The conciliation procedure resulted in a cadmium ban but granted derogations from the ban of cadmium in cordless power tools. To reduce unnecessary administrative burden, an exemption for small producers of batteries from the requirement to finance the collection and treatment of batteries was introduced in line with the Commission's Better Regulation objectives.

⁵⁸⁰ See EurActiv, 18 June 2008, Watered-down waste directive gets MEPs' green light, <http://www.euractiv.com/en/climate-environment/watered-waste-directive-gets-meps-green-light/article-173447> (20 December 2010).

Implementation problems

There are several problems of implementation in waste legislation. The most recent reports from Member States for the 2004-2006 period show that implementation and enforcement of EU waste law remain poor, particularly regarding the WFD, the Landfill Directive, and the Waste Shipment Regulation. In many cases, adequate waste treatment infrastructure is missing in Member States and waste is not collected separately. This results in reuse, recycling and recovery targets for waste streams such as WEEE, ELVs or packaging being missed.⁵⁸¹

The Commission is said to receive on a daily basis a vast number of complaints related to illegal landfills lacking the permits required by EU waste legislation. These complaints demonstrate the general and persistent nature of significant implementation deficiencies in a large part of the EU. According to preliminary information received from Member States an estimated figure of over thousand landfills do not comply with the requirements of the Landfill Directive. If the outcome of the Commission's investigation confirms this figure a high number of Member States would not have met the deadline of 16 July 2009 by which all sub-standard landfills that existed before the introduction of the Landfill Directive need to comply with its requirements.⁵⁸² In 2009, 13 non-conformity cases and 11 bad application cases related to the Landfill Directive were pending against Member States.

Only one third of WEEE in the Community is reported as appropriately treated. The other two thirds are going to landfills and potentially to sub-standard treatment sites inside or outside the EU. The illegal trade and shipment of WEEE to non-EU countries continues to be widespread.⁵⁸³

There are also a high number of cases of illegal shipments of waste due to lack of adequate controls and inspections. Thus the problems of poor implementation or enforcement have doubtless hampered the attainment of the objectives.

Financial resources

Given that waste and resource policy is still mostly based on command-and-control measures, financial resources in the sense of subsidies or tax favours do not play an important role in the waste, products or natural resources areas. Waste fees designed in a way to favour waste prevention and recycling would need to be worked out on municipal level and are not treated here.

Public opinion

⁵⁸¹ Waste management: Commission calls for better implementation of EU waste law by Member States, Press Release EU Commission, 20 November 2009, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1795&format=HTML&aged=0&language=EN&guiLanguage=en>

⁵⁸² http://ec.europa.eu/environment/waste/reporting/pdf/waste_report.pdf (11 December 2010).

⁵⁸³ Commission report on the implementation of waste law, http://ec.europa.eu/environment/waste/reporting/pdf/waste_report.pdf, p. 7.

Public opinion plays a considerable role in waste policy. Media coverage of illegal hazardous waste exports and illegal dumping of such waste raised awareness of the problems related to waste shipment, and might well have paved the way for tightening the standards of the Waste Shipment Regulation. Public opinion polls regularly put recycling at the top of environmentally-related activities being done. In general, public opinion concerning waste and its management or waste dumping helps waste policy to evolve in a sustainable way; however the extent to which public opinion has been decisive in shaping certain measures cannot be measured.

Competing/complementary EU priorities

A few other strategies and policy papers support the aims laid down in the 6EAP for natural resources and waste. For example, the 2001 EU Sustainable Development Strategy mentioned as an objective to break the links between economic growth, the use of resources and the generation of waste. The renewed EU Sustainable Development Strategy (SDS) of 2006 chose another wording. It included among its resource- and waste-related aims: decoupling economic growth from environmental degradation; improving resource efficiency; avoiding overexploitation of natural resources; avoiding the generation of waste and enhancing efficient use of natural resources by applying the concept of life-cycle thinking and promoting reuse and recycling. In many aspects, the SDS forms an additional basis for current resource and waste policy development; however, it cannot be said to what extent the SDS has directly affected the debates in waste policy. The **Lisbon Strategy** emphasised the importance of decoupling waste generation and resource use from economic growth. The 2005 review of the Lisbon Strategy in turn, narrowed the priorities of the Strategy to promoting growth and jobs, focusing primarily on ways to increase the EU's competitiveness.⁵⁸⁴ The issue of decoupling of resource use/waste generation and economic growth therefore did not seem to be of primary importance any more. According to stakeholders interviewed in the context of this study, the Lisbon Strategy did not have an effect on waste policy developments.

International Commitments

International commitments play a certain role when it comes to the issue of waste shipment. The adaptation of the Waste Shipment Regulation was *inter alia* called for by the amendments to the Basel Convention and an OECD Decision.⁵⁸⁵

⁵⁸⁴ See EU Parliament, Directorate General for internal policies, Welcome Package Environment, p. 11 http://www.europarl.europa.eu/meetdocs/2009_2014/documents/envi/dv/environment_welcome_package_environment_welcome_package_en.pdf. (11 December 2010).

⁵⁸⁵ See George Kiayias, The EU Waste Shipment Regulation – Enforcement and Implementation, 2008, http://www.bipro.de/waste-events/doc/events08/hu_pres_1_eu_gk.pdf (11 July 2010).

1.4.4 Assessment of the policy mix and approach of the 6EAP

Policy mix

The 6EAP lays down rather vague qualitative objectives for the issue of resources and waste, e.g. reducing waste, increasing recycling, and more sustainable production and consumption patterns. In general, no quantitative targets were laid down in the 6EAP for natural resources and waste, therefore the assessment of the policy mix and the approach of the 6EAP can only be assessed with a view to whether policy measures have been developed to contribute to the objectives of the 6EAP.

The measures taken to achieve the aims of the 6EAP were in part suitable to fulfil its overall aims and specific objectives, especially in the field of improving resource efficiency and waste management to bring about more sustainable production and consumption patterns. The measures taken include legislation (Directives, Decisions and Regulations), Thematic Strategies and Strategy Papers/Action Plans. The **binding measures** such as directives and regulations can be identified as having had the strongest impact bringing about the desired changes, especially in the field of reducing disposal of waste in landfill, improving management of landfills, and increasing the recycling and recovery of waste. Waste-related measures, especially the Landfill Directive (and related Commission Decisions), the new WFD and the Recycling Directives, which include minimum reuse/recycling/recovery targets, have contributed to improved waste management. The Ecodesign Directive contributes to rendering the production and operation of energy-related appliances more sustainable, the implementing measures concentrate on energy efficiency. Voluntary instruments like Ecolabel, EMAS and GPP extend well beyond energy issues but have not yet reached their full potential.

The measures taken on the issue of waste recycling are the most promising and concrete, whilst the measures taken in the field of waste prevention or decoupling resource use from economic growth are rather weak. As a consequence, there are clear success stories in the field of product-related measures and waste recycling, whereas no real progress can be observed in waste prevention and the decoupling of waste generation and resource use from economic growth.

The **Thematic Strategies** were helpful in devising programmatic steps to be taken in the corresponding policy fields, but were not far-reaching enough. The Strategies had the benefit of making the vision and plans of the Commission in certain policy fields transparent, even if their concrete contents were at times rather vague. The Thematic Strategy on Waste did however clearly serve as an intermediate vehicle between the 6EAP and the concrete proposals of new directives or regulations, acting as a driver for legislation.

Stakeholders have emphasized that while the binding measures based on the 6EAP may have had the most profound impact in directing Member States' and citizens' actions towards achievement of the 6EAP aims/objectives, binding instruments alone cannot guarantee the evolution of policies and legislation in favour of the 6EAP's aims. The issue of awareness raising and synergies e.g. between environmental and economic issues is a vital issue to convince Member States and policy makers to support the 6EAP's waste and resource management aims. The link between resources and waste management, i.e. the potential of

high-quality processing of waste into secondary products, is a very important driver instituted by the 6EAP to motivate Member States and citizens/business to make progress towards the aims of the 6EAP.

Timing of measures and the 6EAP 10-year timeframe

Given that the 6EAP mostly formulates broad and qualitative objectives, the period of 10 years appears to have been an ideal time span for policymakers to design and enforce measures to approximately achieve the objectives. The 10-year timeframe has allowed policymakers to set more concrete objectives on the basis of the 6EAP's aims, and to develop measures to direct the development of waste management as well as resource use in a direction compatible with these aims. Thus, the 10-year timeframe allowed sufficient time for policy makers to develop policy measures, for Member States to implement those measures set at the European level, and to gauge their initial effects with regard to the objectives of the 6EAP.

Most of the directives enacted under the 6EAP have set short-term objectives that allow the achievement of the objectives to be monitored after a few years. As for recycling targets, these have been tightened over the 10-year period, for example in the case of batteries, packaging and WEEE. Thus the objectives are mostly short-term, but are tightened on a reasonably regular basis.

For this reason, the 2002-2010 time period has already seen many developments and leaves enough time to study the impacts of measures to be taken into account when laying down new objectives.

1.4.5 Impact of the 6EAP on the adoption of measures

1.4.5.1 Impact of the 6EAP

In relation to **waste**, the 6EAP is not the only, nor even the most decisive, reason why measures have been adopted in this area. For example the WEEE and RoHS Directives adopted in 2003 foresaw their own review in 2008, obliging the Commission to take action, the review of the Waste Shipment Regulation was necessary as a result of amendments to international agreements and decisions, and the Directive on Waste needed to be updated *also* in order to react to rulings of the European Court of Justice.

In the field of waste management, the 6EAP principally builds on and perpetuates policy choices that had been made prior to its adoption – e.g. prioritising waste prevention and recycling over the disposal of waste, and reducing hazardous waste. The objectives laid down in the 6EAP continue and intensify these approaches, without adding any completely new policy options, approaches or targets. Bearing this in mind, while the measures adopted after the 6EAP could potentially have been taken without the 6EAP, it can be argued that the 6EAP provided one further motivation to take action in a certain direction. The 6EAP served to solidify a specific direction that European waste policy had taken since the 1990s, and also defended these choices against ideas to liberalise waste policy and water down the high environmental standard of waste management. One indication sign of the relevance of the 6EAP is that many of the adopted directives refer to it in their preliminaries. Stakeholder

interviews concluded that negotiators of waste legislation were well aware of the 6EAP and that it was useful as it spelled out the details and directions that EU waste policy should take.

The 6EAP also clearly provided the basis of the Thematic Strategies on Resources and Waste, which in turn acted as transparent documents offering an insight into the position of the Commission on various waste- and resource-related issues. In this way, the Thematic Strategies act as a linking instrument between the 6EAP and the final adopted directives and regulations. In this context, it can be observed that while the Thematic Strategies were not closely aligned with the 6EAP's requirements (see above), the legislation that stems from the Strategies (e.g. the final WFD) tend to better take the 6EAP's objectives into account. At least with regard to the example of the new WFD it can be argued that it was the European Parliament to have ensured that the objectives are well taken into account in concrete policymaking (e.g. with regard to waste recycling targets and waste prevention).

In the **resources** field, the 6EAP did not lay down particularly concrete objectives for resource use or resource policy. Given that resource policy is a rather new policy field, the 6EAP could not build on entrenched policy choices, which it might have been able to reinforce. Given the absence of concrete objectives, the 6EAP did not succeed in shaping European resource policy to a considerable extent. The 6EAP was clearly the basis for the development of the TS on Resource Use, which in turn did not fulfil most of requirements set by the 6 EAP, in particular the setting of targets. The creation of new institutions has been achieved by the TS on Resource Use as well as the kick-off of research.

A series of Action Plans and product-related directives that could contribute to improving resource efficiency have been published contributing to the resource-related objectives of the 6EAP.

1.4.5.2 Impact of the 6EAP vis-à-vis other EU strategies and international commitments

Waste prevention and the efficient use of natural resources by applying the concept of lifecycle thinking and promoting reuse and recycling is mentioned in the EU SDS (2006), breaking the links between economic growth, the use of resources and the generation of waste figured in the EU SDS 2001, thus the different editions of the SDS support key objectives of the 6EAP. However, the extent to which the SDS significantly affected the ambition of EU waste and natural resource policy cannot be measured.

The Lisbon Strategy included different aspects of resource use and natural resource management. The original Lisbon Strategy issued in 2000 included the aspect of decoupling resource use and waste production from economic growth, but this issue was not repeated in the revised Lisbon Strategy in 2005. This exclusion can be interpreted to imply that resource efficiency and waste prevention were no longer priority issues in the context of the Lisbon Strategy.

1.5 International Issues

1.5.1 Achievement of objectives

1.5.1.1 Integration of environment protection in the EU's development policies

Relevant objectives

The **overall aims** of the 6EAP in relation to **international issues** include:

- the integration of environmental concerns and objectives into all aspects of the Community's external relations' (Article 2(6)).

One of the **priority actions** relating to international issues is:

- 'integrating environment protection requirements into all the Community's external policies, including trade and development cooperation, in order to achieve sustainable development by inter alia the elaboration of guidelines' (Article 9(2)).

Overview of measures

Prior to the adoption of the 6EAP, the Commission presented a **Strategy on Integrating the Environment in EC Development Cooperation Policy**⁵⁸⁶ in 2001. The Strategy examines how EU economic and development co-operation can assist developing country partners in responding to environmental challenges and identifies actions to implement the Strategy. The Strategy did not however set out the Commission's objectives and priorities for financing environmental projects and programmes and a report by the Court of Auditors in 2006 criticized the Commission for failing to sufficiently integrate environmental concerns in development cooperation policy⁵⁸⁷. In 2006, the Commission committed to reviewing and updating the 2001 Environment Integration Strategy. In 2007, an inter-service group of the Commission was formed to update and revise the Strategy. In June 2009, the Environment Council called on the Commission to set up a framework to monitor implementation of the EU's approach to integrating the environment in EU development policy and to prepare an ambitious EU-wide integration strategy. An expert group comprising of Commission officials, Member State experts and civil society representatives has been established and is currently developing a proposal for a joint EC-Member State Environment Integration Strategy expected to be presented in 2011. Key elements of the revised Strategy are expected to include action to expand the environmental knowledge base, improve tools for environmental integration and capacity building, achieve better mainstreaming of the environment in new

⁵⁸⁶ CEC (2001): Commission Staff Working Paper, Integrating the Environment into EC Economic and Development Co-operation, (SEC(2001)609). Commission of the European Communities. 10 April 2001.

⁵⁸⁷ Court of Auditors. (2006). SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39.

development issues, integrate the environment in budget support, improve monitoring, evaluation and reporting on environmental issues and coordination and division of labour⁵⁸⁸.

The **European Consensus on Development**, a joint statement by the Council, the European Parliament and the Commission adopted in 2005, sets out the framework for EU development policy. The primary and overarching objective of EU development policy is 'the eradication of poverty in the context of sustainable development'⁵⁸⁹. The 'environment and the sustainable management of natural resources' is one of nine priority areas for EU funding. Under this area, the EU is to support efforts by partner countries to incorporate environmental considerations in development, increase capacity to implement multilateral environmental agreements (MEAs) (in particular those relating to climate change, biodiversity, desertification, waste and chemicals), support national and regional strategies to ensure sustainable management and preservation of natural resources, and contribute to relevant European and global initiatives. Environmental sustainability is also to be treated as a cross-cutting issue which is mainstreamed / integrated in all development activities. The 2005 Consensus recognises that 'cross-cutting issues are at once objectives in themselves and vital factors in strengthening the impact and sustainability of cooperation'⁵⁹⁰. Strategic environmental assessments (SEAs) and environmental impact assessments (EIAs) are to be carried out systematically at the sector and project level. The EU is also to lead global efforts to curb unsustainable consumption and production patterns and promote pro-poor environment-related initiatives. The Consensus reflects the EU's increased prioritization of the environment; it does not however specify how the Commission will ensure that this policy priority is translated into environment programmes and projects in partner countries.

Other relevant policy initiatives adopted include the 2006 **renewed EU SDS**, which has an explicit external dimension with the objective of promoting sustainable development worldwide and ensuring that the EU's internal and external policies are consistent with global sustainable development and its international commitments. A number of measures in specific policy areas have also been adopted such as the **Global Climate Change Alliance (GCCA)**⁵⁹¹ which aims to integrate climate change in development strategies of vulnerable countries and provide assistance for adaptation measures, the **EU Water Initiative (EUWI)**⁵⁹² led by various countries in the regions which co-ordinates development assistance to third countries regarding water projects, and the **Forest Law Enforcement, Governance**

⁵⁸⁸ Council of the EU (2009): Council Conclusions on Integrating Environment in Development Cooperation, 11474/09, Brussels, 26/06/2009.

⁵⁸⁹ EP, Council, Commission. (2005): The European Consensus on Development. Joint statement by the Council and the representatives of the governments of the Member States within the Council, the European Parliament and the Commission on European Union Development Policy: 'The European Consensus'. 2006/C 46/01. 24 February 2006.

⁵⁹⁰ EP, Council, Commission. (2005): The European Consensus on Development. Joint statement by the Council and the representatives of the governments of the Member States within the Council, the European Parliament and the Commission on European Union Development Policy: 'The European Consensus'. 2006/C 46/01. 24 February 2006

⁵⁹¹ CEC (2007): Communication from the European Commission to the Parliament and the Council - Building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to climate change, (COM(2007)540).

⁵⁹² EU Water Initiative, <http://www.euwi.net>.

and Trade (FLEGT)⁵⁹³ initiative which aims to reduce illegal logging in partner countries. The EU has also been an advocate of **policy coherence for development (PCD)** as a means of enhancing synergies between EU development objectives and actions in other policy areas⁵⁹⁴. The Maastricht Treaty introduced the legal requirement to improve the coherence of EU policies on the promotion of development (now Article 208 TFEU). PCD requires that internal and external EU policies do not undermine development objectives or have negative impacts on developing countries. In 2005, the Commission adopted a Communication on PCD⁵⁹⁵ which sets out how to apply the PCD approach to a number of policy areas including environment, climate change, agriculture, fisheries, transport and energy that could accelerate progress towards the Millennium Development Goals (MDGs). In April 2010, the Commission presented the PCD Work Programme 2010-2013⁵⁹⁶ which translates the concept into specific actions in relation to five global challenges (trade and finance; climate change; global food security; migration and security).

A number of **tools and procedures** have been introduced which seek to integrate the environment in EU development cooperation activities. Country and Regional Strategy Papers (CSPs and RSPs), developed jointly by the Commission and partner countries for the 2007-2013 programming cycle, include several elements related to environmental integration. A summary of the Country Environmental Profile (CEP) / Regional Environment Profile (REP) is required to be annexed to the CSP/RSP and an analysis or assessment on the environmental situation in the partner country/region is to be drafted on this basis. These requirements were introduced in the 2006 guidelines on drafting CSP/RSP⁵⁹⁷; previous programming cycles only included political, economic and social analyses⁵⁹⁸. The CEP should include information on the state of the environment, environmental policies, legislative framework, institutional capacities, and environmental cooperation experience, and should set out recommendations on integrating the environment in the CSP. The environment may also be selected as one of the focal or non-focal sectors of the CSPs or RSPs and should be mainstreamed into focal and non-focal sector strategies and programmes. CSPs/RSPs are

⁵⁹³ Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community, OJ L 347, 30.12.2005, p. 1-6.

⁵⁹⁴ CEC (2005): Commission Communication, Policy Coherence for Development Accelerating progress towards attaining the Millennium Development Goals, (COM(2005)134), 12/4/2005.

⁵⁹⁵ CEC (2005): Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee - Policy Coherence for Development - Accelerating progress towards attaining the Millennium Development Goals, 12/04/2005, (COM(2005)134).

⁵⁹⁶ CEC (2010a): Commission Staff Working Document - Policy Coherence for Development Work Programme 2010- 2013, accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions - A twelve-point EU action plan in support of the Millennium Development Goals, (SEC(2010)421). 21/04/2010.

⁵⁹⁷ CEC (2006b): Communication from the Commission to the Council and the European Parliament in Increasing the Impact of EU Aid: A Common Framework for Drafting Country Strategy Papers and Joint Multi Annual Programming, (COM(2006)88), 2/3/2006.

⁵⁹⁸ Olearius, A., Leal Riesco, I., Nicholson, S., (2008): From a European Court of Auditors' Report to a learning process? The challenge to integrate the environment into the European EU's development assistance, Paper prepared for the EASY-ECO Vienna Conference, 11-14 March 2008: 'Governance by Evaluation: Institutional Capacities and Learning for Sustainable Development'.

accompanied by a National Indicative Programmes (NIPs) / Regional Indicative Programmes (RIPs) which define actions to reach the objectives set out in the CSPs/RSPs. All proposals must be screened to identify potential environmental impacts, and an SEA or EIA prepared where relevant.

Guidance, support and training have been provided to facilitate the uptake of the above mentioned tools and procedures. In 2006, an **Environmental Integration Handbook for EC Development Cooperation** was finalized⁵⁹⁹ which set out the main tools and procedures for integrating environmental concerns in EU development cooperation activities. In November 2009, the Handbook was replaced by **Guidelines on the Integration of Environment and Climate Change in Development Cooperation**⁶⁰⁰. The Guidelines act as a reference framework on integrating the environment and climate change considerations in EU development cooperation policy in all stages of the cycle of operations. A **Helpdesk** on environmental integration was set up to provide *ad hoc* support services and training to Commission staff and stakeholders. **Training seminars** have been organised for staff involved in the programming and/or management of EU development co-operation activities in EU delegations and partner countries. Efforts have also been made to promote harmonised approaches between development partners to integrating climate change mitigation and adaptation and documentation for the preparation of projects has been revised to *inter alia* strengthen links to integration procedures⁶⁰¹.

In 2006, a number of EU instruments for funding external assistance, including ones relating to environmental integration, expired and were replaced by a single framework comprising of six financing instruments covering the 2007-2013 period. One of these is the **Development Cooperation Instrument (DCI)** (Regulation (EC) No 1905/2006). Assistance under the DCI is implemented through a number of geographic or regional programmes (which are based on the CSPs/RSPs and NIPs/RIPs and constitute the main framework for EU cooperation with third countries) and thematic programmes (which are subsidiary to the geographic programmes and cover specific areas of activity of interest to a group of partner countries not determined by geography). In 2006, a thematic programme on environment and natural resources (ENRTP)⁶⁰² was created with the objective of integrating environmental protection requirements in the EU's development and other external policies and promoting the EU's environmental and energy policies abroad. A total budget of €889.5 million⁶⁰³ is foreseen to support this thematic programme from 2007-2013. In addition to the ENRTP, the regional or

⁵⁹⁹ CEC (2006): Environmental Integration Handbook for EC Development Cooperation. European Communities. Brussels. 2007.

⁶⁰⁰ CEC (2009): Guidelines on the Integration of Environment and Climate Change in Development Cooperation - November 2009. Tools and Methods Series – Guidelines No. 4. European Union. Luxembourg. 2010.

⁶⁰¹ CEC (2010): Accompanying Document to the Report from the Commission to the Council and the European Parliament, Annual Report on the European Union's development and external assistance policies and their implementation in 2009, SEC(2010)773), 28/06/2010.

⁶⁰² CEC (2007): Thematic Strategy for the Environment and Sustainable Management of Natural Resources, including energy (ENRTP), CEC, Brussels.

⁶⁰³ As a result of various increases for GCCA, for low carbon development strategies and for carbon capture and storage, the total amount of expenditure foreseen through ENRTP is currently €1055 million, excluding the €50 million fast track financing for climate agreed at UNFCCC COP in Copenhagen in 2009.

geographic programmes include relevant environmental cross-cutting objectives and actions such as the promotion of sustainable management of natural resources and sustainable consumption and production patterns. The DCI also requires appropriate environmental screening and impact assessments to be undertaken for project- and sector-level interventions.

Contribution of measures to achievement of 6EAP objectives

There has been an increasing emphasis on the environment in EU development cooperation policy, as is evident in the adoption of the policy documents, tools and procedures mentioned above. This commitment to integrating the environment in development policy is also reflected in increasing EU funding (from the EU budget, i.e. not including Member State bilateral aid) for environment programmes and the creation in 2006 of a specific thematic programme dedicated to the environment and natural resources (ENRTP) under the DCI. Spending on environment related issues is spread across different categories and is difficult to accurately assess. According to a 2009 Commission report, the average yearly amount of **EU financing of environment and sustainable management of natural resources in developing countries** is around €295 million, with funding for environment programmes representing approximately 4.3% of EC external assistance⁶⁰⁴.

Integrating environmental protection requirements in the EU's development cooperation policy

The EU has adopted an overarching policy framework and a number of tools and procedures for integrating the environment in the EU's development cooperation policy. The elaboration of guidelines on integrating the environment and climate change in development cooperation policy (as called for in the 6EAP) as well as the provision of *ad hoc* support services and training seek to facilitate the uptake of these tools and procedures. However, to date, the use of these tools has been limited and their recommendations have not been effectively implemented in practice. For example, despite evidence of a 'modest increase' in the use of EIAs and SEAs, in general they remain underutilized, have had limited influence on the policy formulation process, and their recommendations are often not followed-up⁶⁰⁵. A 2006 evaluation by the Court of Auditors found a number of shortcomings in the approach to conducting SEAs and EIAs and concluded that there is a 'considerable risk' that EIAs are not carried out even when they should be⁶⁰⁶.

The planning and programming phase of development cooperation activities is crucial for environmental integration as important decisions concerning the overall EU cooperation process are made that may be difficult to adjust in later stages⁶⁰⁷. A review by the Court of

⁶⁰⁴ CEC (2009a): Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009.

⁶⁰⁵ Ibid.

⁶⁰⁶ Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39.

⁶⁰⁷ CEC (2009): Guidelines on the Integration of Environment and Climate Change in Development Cooperation - November 2009. Tools and Methods Series – Guidelines No. 4. European Union. Luxembourg. 2010.

Auditors of the first generation of Country Strategy Papers (CSPs) (2001- 2006) showed that the environment had not been satisfactorily mainstreamed into these programmes. In general, the analysis of environmental issues in the CSPs were found to be weak and the Commission's response strategies were found to not adequately address environmental considerations in priority funding areas⁶⁰⁸. An independent evaluation of the first generation of CSPs for African countries found that the environmental content of the CSPs was not reasonably adequate, that there was no coherent integration of environmental protection measures in the CSPs and that overall the programmes failed to effectively integrate environmental protection measures⁶⁰⁹.

CEPs and REPs are meant to provide the necessary environmental information to prepare a 'balanced' country strategy⁶¹⁰ and are a compulsory requirement for the planning process of CSPs/RSPs in the 2007-2013 programming period. An increasing number of CEPs have been developed - a survey of 60 countries in 2002 found only six countries had adopted CEPs, whereas in 2008, 51 countries had developed detailed CEPs⁶¹¹. However, despite increasing the profile of environmental issues, in the majority of cases CEPs have had limited influence on the programming process and their findings are often not incorporated in adopted CSPs/NIPs⁶¹². An independent evaluation of a number of CEPs and REPs in the 2007-2013 programming period revealed numerous and significant gaps in the analysis and coverage of environmental issues including a lack of good quality environmental data such as where biodiversity was being lost and what the causes of that loss were, failure to provide in-depth analysis in relation to climate change, environmental protection and waste management, inadequate consideration of land tenure issues, and inadequate analysis of implementation of environmental legislation and MEAs⁶¹³. These are worrying omissions in documents specifically designed to consider environmental issues in countries where the EU operates and to integrate these issues in subsequent planning and programming decisions. If environmental issues are not raised in CEPs, it is very difficult for them to find their way into the CSPs/RSPs and related actions in the NIPs.

⁶⁰⁸ Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39

⁶⁰⁹ Williams, R. (2007): The integration of environmental protection requirements into EC development cooperation policy. Draft Paper Presented at the first EPIGOV conference 'Better Integration: Mainstreaming Environmental Concerns in European Governance'. 15 February 2007, Brussels.

⁶¹⁰ CEC (2009): Guidelines on the Integration of Environment and Climate Change in Development Cooperation - November 2009. Tools and Methods Series – Guidelines No. 4. European Union. Luxembourg. 2010

⁶¹¹ Olearius, A., Leal Riesco, I., Nicholson, S., (2008), From an European Court of Auditors' Report to a learning process? The challenge to integrate the environment into the European Community's development assistance, Paper prepared for the EASY-ECO Vienna Conference, 11-14 March 2008: 'Governance by Evaluation: Institutional Capacities and Learning for Sustainable Development'.

⁶¹² CEC (2009a): Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009.

⁶¹³ WWF, Fern, Birdlife International. (2008). Environmental tools in EC development cooperation: An analysis of country and regional environmental profiles, FERN. April 2008. Brussels.

Finally, the extent to which the environment is successfully mainstreamed in EC development cooperation policy is dependent on how high a priority both beneficiary countries and the Commission attach to addressing environmental issues raised by the CEPs/REPs in CSP/RSPs and subsequent NIPs/RIPs. At the programme level, beneficiary countries and regions are required to concentrate funding on one or two focal sectors. Although the environment is one of these focal sectors, it is rarely considered an urgent priority by beneficiaries as other issues such as tackling hunger, improving health care and basic education tend to take priority; thus EU funding at the country level is rarely focused on the environment⁶¹⁴.

Despite an increasing emphasis on the environment in EU development cooperation policy, this priority has not been translated into environmental programmes and projects in beneficiary countries and is only rarely reflected in budgetary allocations. 'Overall, lessons learned show that the EC and other donors have not been consistent or effective enough in mainstreaming environmental issues'⁶¹⁵. To a large extent, this can be explained by the fact that, in the majority of cases, partner countries do not select the environment as a focal area for support (see section below on drivers and barriers for further discussion on this issue). Despite a number of tools to promote integration, such as CEPs, only limited use is made of these tools in shaping strategies, programmes and projects in beneficiary countries. Thus it can be concluded that only limited progress has been made towards the 6EAP objective of integrating the environment in EC development cooperation policy⁶¹⁶. The extent to which this objective will be better achieved under the revised integration strategy remains to be seen. Furthermore, it should be noted that the increasing political attention to climate change is creating momentum for 'climate-proofing' development cooperation as well as 'development-proofing' environmental policies⁶¹⁷ and is likely to have a significant impact on the extent to which the environment integration objective can and will be met in the future.

⁶¹⁴ CEC (2009a): Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009.

⁶¹⁵ CEC (2009b): Improving environment integration in development cooperation, Issues paper, March 2009.

⁶¹⁶ See Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39 and CEC. (2009a). Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009.

⁶¹⁷ Wolff, S., Seters, J., (2010): European Development Cooperation. Brokering environmental knowledge beyond Lisbon, Maastricht/The Hague, ECDPM and Clingendael Institute, Discussion Paper No. 102, September 2010.

1.5.1.2 Environment and development targets for WSSD 2002

Relevant objectives

One of the **overall aims** of the 6EAP in relation to international issues is to stimulate:

- ‘the positive and constructive role of the European Union as a leading partner in the protection of the global environment and in the pursuit of a sustainable development’ (Article 2(6)).

One of the **priority actions** relating to international issues is to:

- ‘establish a coherent set of environment and development targets to be promoted for adoption as part of ‘a new global deal or pact’ at the World Summit on Sustainable Development in 2002’ (Article 9(2)).

Overview of measures

The EU has established environment and development targets in a variety of official documents, including the renewed EU SDS⁶¹⁸ and the 2005 Consensus on Development⁶¹⁹. The 2002 World Summit on Sustainable Development (WSSD) resulted in the so-called Johannesburg Plan of Implementation.⁶²⁰ The 65-page Plan contains a wide range of environment and development targets on *inter alia* poverty eradication, sustainable production and consumption, and health as well as region-specific objectives, e.g. for Africa, small-island states. Before the Summit, the then Environment Commissioner stated that the ‘European Union will again need to play the leading role among rich countries in achieving an ambitious and action-oriented outcome to the Johannesburg Summit’⁶²¹.

Contribution of measures to achievement of 6EAP objectives

It is doubtful whether the EU has managed to fully implement the 6EAP priority action of ‘*establishing a coherent set of environment and development targets to be promoted for adoption as part of ‘a new global deal or pact’ at the World Summit on Sustainable Development in 2002*’. The Johannesburg Plan of Implementation contained only few quantified, time-bound measurable targets⁶²² (e.g. on sanitation) and no specific commitments by individual governments. The Plan set out a number of vaguely worded objectives rather than a coherent set of targets or a new global deal. The objectives of the

⁶¹⁸ Council of the European Union, Renewed EU Sustainable Development Strategy, 10917/06, 26 June 2006, <http://register.consilium.europa.eu/pdf/en/06/st10/st10917.en06.pdf>.

⁶¹⁹ Joint declaration by the Council and the representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission on the development policy of the European Union entitled ‘The European Consensus’, OJ C 46, 24.2.2006..

⁶²⁰ http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter1.htm

⁶²¹ Margot Wallström, European Commissioner for Environment, A wake-up call for global sustainability , Brussels, 26 February 2002, <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/02/84&format=HTML&aged=0&language=EN&language=en>.

⁶²² An important shortcoming in this regard is that Parties failed to agree a time-bound target for the contribution of renewables to overall energy use.

Plan on the recovery of fish stocks, action on chemicals and a potential benefit-sharing regime under the Convention on Biological Diversity (CBD) have been described as 'modest'⁶²³. However, it must also be noted that the Johannesburg WSSD was not mandated with developing a new convention, but rather with implementing existing commitments.⁶²⁴ Moreover, the EU is not the only or main party responsible for this outcome. The EU had in fact proposed more ambitious targets to be included in the Plan, e.g. a target of 15% renewable in energy consumption by 2010⁶²⁵ and a target of halting and reversing the current loss of natural resources and biodiversity by 2015⁶²⁶, however these were not acceptable to some other countries and consequently did not feature in the final Plan.

1.5.1.3 Multilateral environmental agreements and international environmental governance

Relevant objectives

The **overall aims** of the 6EAP in relation to international issues and relevant to multilateral, regional and international environmental governance is to stimulate:

- 'the positive and constructive role of the European Union as a leading partner in the protection of the global environment and in the pursuit of a sustainable development;' and
- 'the development of a global partnership for environment and sustainable development' (Article 2(6)).

The 6EAP also includes the following **specific objective**:

- 'the pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment' Article 9(1).

Priority actions relating to international issues include:

- 'Work[ing] towards strengthening international environmental governance by the gradual reinforcement of multilateral cooperation and the institutional framework including resources;
- aiming for swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment where the Community is a Party;
- promoting a better policy coherence by linking the work done within the framework of the different conventions, including the assessment of interlinkages between

⁶²³ Earth Negotiations Bulletin Summary of the World Summit on Sustainable Development, 26 August – 4 September 2002, Vol. 22:51.p. 16.

⁶²⁴ La Viña, Antonio G. M/ Hoff, Gretchen/ DeRose, Anne Marie (2003), The Outcomes Of Johannesburg: Assessing The World Summit On Sustainable Development, p. 2, http://pdf.wri.org/wssd_sais_outcomes.pdf

⁶²⁵ Ibid.

⁶²⁶ See Lightfoot, Simon/Burchell, Jon (2005): The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?, Journal of Common Market Studies, Vol. 43:1, p. 75-95, 84.

biodiversity and climate change, and the integration of biodiversity considerations into the implementation of the UNFCCC and the Kyoto Protocol' (Article 9(2)).

Overview of measures

Since 2002, the EU has concluded several **regional and multilateral environmental treaties**, only one of which has been a genuinely new multilateral agreement - the 2006 International Tropical Timber Agreement⁶²⁷. Several **new protocols** supplementing existing agreements have also been negotiated and concluded: the Protocol on Strategic Environmental Assessment to the 1991 UN/ECE Espoo Convention on Environmental Impact Assessment in a Transboundary Context,⁶²⁸ the Protocol on Integrated Coastal Zone Management in the Mediterranean to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean⁶²⁹ and the Protocol on Pollutant Release and Transfer Registers⁶³⁰.

Furthermore, the EU has approved a number of **conventions** adopted at the international level before the 6EAP was adopted: the Stockholm Convention on Persistent Organic Pollutants⁶³¹, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade⁶³², the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the Aarhus Convention)⁶³³, the International Treaty on Plant Genetic Resources⁶³⁴, the International Plant Protection Convention⁶³⁵, the Convention on the Conservation and

⁶²⁷ 2007/648/EC: Council Decision of 26 September 2007 on the signing, on behalf of the European Community, and provisional application of the International Tropical Timber Agreement, 2006. OJ L 262, 9.10.2007, p. 6–7.

⁶²⁸ 2008/871/EC: Council Decision of 20 October 2008 on the approval, on behalf of the European Community, of the Protocol on Strategic Environmental Assessment to the 1991 UN/ECE Espoo Convention on Environmental Impact Assessment in a Transboundary Context. OJ L 308, 19.11.2008, p. 33–34.

⁶²⁹ 2009/89/EC: Council Decision of 4 December 2008 on the signing, on behalf of the European Community, of the Protocol on Integrated Coastal Zone Management in the Mediterranean to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean. OJ L 34, 4.2.2009, p. 17–18.

⁶³⁰ 2006/61/EC: Council Decision of 2 December 2005 on the conclusion, on behalf of the European Community, of the UN-ECE Protocol on Pollutant Release and Transfer Registers. OJ L 32, 4.2.2006, p. 54–55.

⁶³¹ 2006/507/EC: Council Decision of 14 October 2004 concerning the conclusion, on behalf of the European Community, of the Stockholm Convention on Persistent Organic Pollutants Stockholm Convention on Persistent Organic Pollutants. OJ L 209, 31.7.2006, p. 1–29.

⁶³² 2003/106/EC: Council Decision of 19 December 2002 concerning the approval, on behalf of the European Community, of the Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous chemicals and pesticides in international trade. OJ L 63, 6.3.2003, p. 27–28.

⁶³³ 2005/370/EC: Council Decision of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters. OJ L 124, 17.5.2005, p. 1–3.

⁶³⁴ 2004/869/EC: 2004/869/EC: Council decision of 24 February 2004 concerning the conclusion, on behalf of the European Community, of the International Treaty on Plant Genetic Resources for Food and Agriculture. OJ L 378, 23.12.2004, p. 1–21.

⁶³⁵ 2004/597/EC: Council Decision of 19 July 2004 approving the accession of the European Community to the International Plant Protection Convention, as revised and approved by Resolution 12/97 of the 29th Session of the FAO Conference in November 1997. OJ L 267, 14.8.2004, p. 39–53.

Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean⁶³⁶ and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds⁶³⁷. The EU has also approved **protocols** which had been agreed at the international level before the 6EAP was adopted: the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution concerning cooperation in preventing pollution from ships and in cases of emergency, combating pollution of the Mediterranean Sea⁶³⁸, the Cartagena Protocol on Biosafety to the Convention on Biological Diversity⁶³⁹, the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution to abate acidification, eutrophication and ground-level ozone (Gothenburg Protocol)⁶⁴⁰, the Protocol on the Implementation of the Alpine Convention of 1991 in the field of Energy,⁶⁴¹ the Protocol on the Implementation of the Alpine Convention of 1991 in the field of Soil Conservation⁶⁴², the Protocol on the Implementation of the Alpine Convention of 1991 in the field of Tourism⁶⁴³, and the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants⁶⁴⁴.

Apart from the EU activities on multilateral environmental conventions and protocols, the **EU's role in ongoing multilateral negotiations** also needs to be taken into consideration⁶⁴⁵. Notably, the EU has actively participated in international climate change negotiations under the UNFCCC (see section 1.1.2.8) for further details in this regard) and has encouraged the adoption of ambitious biodiversity related targets under the CBD (see

⁶³⁶ 2005/75/EC: Council Decision of 26 April 2004 on the accession of the Community to the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. OJ L 32, 4.2.2005, p. 1–2.

⁶³⁷ 2006/871/EC: Council Decision of 18 July 2005 on the conclusion on behalf of the European Community of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds. OJ L 345, 8.12.2006, p. 24–25.

⁶³⁸ 2004/575/EC: Council Decision of 29 April 2004 on the conclusion, on behalf of the European Community, of the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea. OJ L 261, 6.8.2004, p. 40–40.

⁶³⁹ 2002/628/EC: Council Decision of 25 June 2002 concerning the conclusion, on behalf of the European Community, of the Cartagena Protocol on Biosafety. OJ L 201, 31.7.2002, p. 48–49.

⁶⁴⁰ 2003/507/EC: Council Decision of 13 June 2003 on the accession of the European Community, to the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-Level Ozone. OJ L 179, 17.7.2003, p. 1–2.

⁶⁴¹ 2005/923/EC: Council Decision of 2 December 2005 on the signing on behalf of the European Community of the Protocol on Soil Protection, the Protocol on Energy and the Protocol on Tourism to the Alpine Convention. OJ L 337, 22.12.2005, p. 27–49.

⁶⁴² 2005/923/EC: Council Decision of 2 December 2005 on the signing on behalf of the European Community of the Protocol on Soil Protection, the Protocol on Energy and the Protocol on Tourism to the Alpine Convention. OJ L 337, 22.12.2005, p. 27–49.

⁶⁴³ 2005/923/EC: Council Decision of 2 December 2005 on the signing on behalf of the European Community of the Protocol on Soil Protection, the Protocol on Energy and the Protocol on Tourism to the Alpine Convention. OJ L 337, 22.12.2005, p. 27–49.

⁶⁴⁴ 2004/259/EC: Council Decision of 19 February 2004 concerning the conclusion, on behalf of the European Community, of the Protocol to the 1979 Convention on Long Range Transboundary Air Pollution on Persistent Organic Pollutants. OJ L 81, 19.3.2004, p. 35–36.

⁶⁴⁵ For the EU involvement in international climate change negotiations, see the chapter on climate change.

chapter 0). The EU also contributed⁶⁴⁶ to multilateral negotiations on a Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, which was adopted by the 10th COP of the CBD in Nagoya in October 2010.⁶⁴⁷ Other areas the EU has played an active role in include international negotiations on the use of mercury⁶⁴⁸. The Commission convened an International Mercury Conference in Brussels in 2006⁶⁴⁹ and in the subsequent meeting of the first *ad hoc* Open-Ended Working Group in 2007 the EU supported the undertaking of long-term action and legally binding commitments to establish an international ban on the trade of elemental mercury⁶⁵⁰.

Efforts to promote **better coherence between different environmental agreements** have also been made at the international level. For example, steps have been taken towards improving policy coherence between biodiversity and climate change policies. At the eighth Conference of the Parties (COP8) to the United Nations Framework Convention on Climate Change (UNFCCC), Parties requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to enhance cooperation with subsidiary bodies of the United Nations Convention to Combat Desertification (UNCCD) and Convention on Biological Diversity (CBD), and urged the Joint Liaison Group (JLG) of the CBD, the UNFCCC and the UNCCD to continue its efforts to enhance coordination between the three conventions and their secretariats. Several workshops and meetings followed and options for the promotion of synergies between the conventions have been developed.⁶⁵¹ Furthermore, the CBD has established an *ad hoc* Technical Expert Group (AHTEG) on Biodiversity and Climate Change⁶⁵². The AHTEG has been mandated by the COP of CBD⁶⁵³ to develop scientific and technical advice on biodiversity, in so far as it relates to climate change; in addition the AHTEG has been mandated by the UNFCCC COP to support the enhanced implementation

⁶⁴⁶ For an account of the EU's role see for example IISD, Eighth meeting of the *Ad Hoc* Open-ended Working Group on Access and Benefit-sharing of the Convention on Biological Diversity (CBD ABS 8), 10 November 2009, *Earth Negotiations Bulletin*, Vol. 9, No. 484.

⁶⁴⁷ The advance, un-edited version of the text is online at: <http://www.cbd.int/cop/cop-10/doc/advance-final-unedited-texts/advance-unedited-version-ABS-Protocol-footnote-en.doc>.

⁶⁴⁸ Council of the European Union, 2912th Meeting Brussels 4 December 2008, Global Mercury Challenges – Council Conclusions, Press Release, <http://europa.eu/rapid/pressReleasesAction.do?reference=PRES/08/355&format=PDF&aged=0&language=EN&guiLanguage=en>.

⁶⁴⁹ IISD, First Meeting of the *ad hoc* OEWG to review and assess measures to address the global issue of mercury 12-16 November 2007, *Earth Negotiations Bulletin*, Vol. 16 No. 61.

⁶⁵⁰ IISD, Summary of the First Meeting of the *ad hoc* OEWG to review and assess measures to address the global issue of mercury 12-16 November 2007, *Earth Negotiations Bulletin*, Vol. 16 Nr. 62; ENB, Second Meeting of the *ad hoc* OEWG to review and assess measures to address the global issue of mercury 6 October 2008, *Earth Negotiations Bulletin*, Vol. 16 No. 68.

⁶⁵¹ See http://unfccc.int/cooperation_and_support/cooperation_with_international_organizations/items/2970.php

⁶⁵² Conference of the Parties to the Convention on Biological Diversity. Seventh meeting Kuala Lumpur, 9-20 and 27 February 2004. UNEP/CBD/COP/DEC/VII/15. *Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its seventh meeting*. Available at <http://www.cbd.int/doc/decisions/cop-07/cop-07-dec-15-en.pdf>.

⁶⁵³ See decision IX/16.

of synergies.⁶⁵⁴ The EU actively promoted the coordination between biodiversity and climate change policies at the international level. For example, at 7th COP of the CBD in 2004, the EU encouraged discussion on synergetic pilot projects⁶⁵⁵. In a submission to the SBSTA of the UNFCCC, the EU declared its full support of the work of the JLG and made proposals for further options for enhanced cooperation⁶⁵⁶. Another example of efforts to promote better policy coherence is the simultaneous extraordinary meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions (ExCOPs).⁶⁵⁷ The ExCOPs were preceded by meetings of the *ad hoc* Joint Working Group on Enhancing Cooperation and Coordination among the Basel, Rotterdam and Stockholm Conventions (AHJWG) which had been established pursuant to decisions by the COPs of the three conventions⁶⁵⁸. The group was mandated to prepare joint recommendations on enhanced cooperation and coordination. The EU supported this process and submitted proposals which contributed substantially to the debate⁶⁵⁹.

In the field of **international environmental governance** and the reform of the United Nations Environment Programme (UNEP), the EU has consistently pursued the idea of establishing a specialised UN agency for the environment, based on UNEP, with a revised and strengthened mandate, supported by stable, adequate and predictable financial contributions and operating on an equal footing with other UN specialised agencies⁶⁶⁰. At UNEP's 10th Global Ministerial Environment Forum in Nairobi 2009, the EU continued to raise the issue of reform of the institutional architecture⁶⁶¹. However, the EU position was not supported by other key players, and institutional debates at the meeting instead focused on procedural aspects⁶⁶². Thus, the Governing Council established a consultative group of ministers or high-level representatives to work on options to improve international

⁶⁵⁴ See decision 1/CP.13.

⁶⁵⁵ See IISD, *Earth Negotiations Bulletin*. Vol. 9 No.280, <http://www.iisd.ca/download/pdf/enb09279e.pdf>

⁶⁵⁶ Subsidiary Body for Scientific and Technological Advice, Twenty-fourth session, Bonn, 18–26 May 2006, FCCC/SBSTA/2006/MISC.4. Views on the paper on options for enhanced cooperation among the three Rio Conventions, <http://unfccc.int/resource/docs/2006/sbsta/eng/misc04.pdf>.

⁶⁵⁷ The actual ExCOPs took place only in February 2010, thus after the time period that this report covers; preparatory works started before, of course.

⁶⁵⁸ The relevant decisions are Decisions SC-2/15 of the Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants, COP decision RC-3/8 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and COP decision VIII/8 of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

⁶⁵⁹ See: *ad hoc* joint working group on enhancing cooperation and coordination among the Basel, Rotterdam and Stockholm conventions, First Meeting, Helsinki, 26-28 March 2007, *Comments received on the supplementary report on cooperation and coordination between these three conventions*, BC-RC-SC/AHJWG.1/3, <http://ahjwg.chem.unep.ch/documents/stmeeting/03a1e.pdf>; for proposals on key procedural questions and on funding and on nomination of experts, see IISD, *Earth Negotiations Bulletin*, Vol 15. Nr. 147, <http://www.iisd.ca/download/pdf/enb15147e.pdf>.

⁶⁶⁰ Brussels European Council, 16 and 17 June 2005, Presidency Conclusions, Doc. 10255/1/05 REV 1, para. 39.

⁶⁶¹ See IISD, *Earth Negotiations Bulletin*. Vol. 16 No.78, p. 3, <http://www.iisd.ca/download/pdf/enb1678e.pdf>.

⁶⁶² See IISD, *Earth Negotiations Bulletin*, Vol. 16 No.78, pp. 10,13.

environmental governance⁶⁶³. In a recent note on reforming the system of international environmental governance issued by the Presidency of the European Council, the EU's continued endorsement for a reform of international environmental governance was stressed⁶⁶⁴. Finally, it should be noted that the Commission concluded a Memorandum of Understanding with UNEP in 2004 which outlines the rules of cooperation between the two entities⁶⁶⁵.

In order to promote **environmental integration in EU external policies**, in 2003 the European Council created an informal network of environment experts within foreign ministries, the so-called Green Diplomacy Network⁶⁶⁶. The network brings together officials from the Ministries of Foreign Affairs of the Member States and pre-accession countries and a representative from the European Commission⁶⁶⁷. The goal of the Green Diplomacy Network is to increase coherence, consistency and effectiveness of European actions in the field of environment. The EU also holds regular environmental dialogues with key emerging economies like China, India and Brazil,⁶⁶⁸ in addition to the dialogues it has with key developed countries. These dialogues steer bilateral cooperation and support decision making in the multilateral context.

The level of **EU financial support** for international environmental governance, multilateral environmental agreements, and international environmental agreements has varied over the years. The development of the Budget line 'International Environment 070101' under the 2000-2006 Financial Framework decreased between 2002 and 2004 from €6.4 million to €5.7 million, but increased to €8.6 million in 2005 and to €9.8 million in 2006⁶⁶⁹. EU Member States are also a major source of funding for UNEP⁶⁷⁰. The ENRTP, mentioned above, is an important EU funding instrument relating to international environmental governance which has priorities promoting the implementation of EU initiatives and agreed commitments

⁶⁶³ See IISD, *Earth Negotiations Bulletin*, Vol. 16 No.78, p. 11. In the subsequent so-called Belgrade process reform proposals were elaborated, see The co-Chair's summary, Belgrade Process. First meeting of the Consultative Group of Ministers or High-level Representatives on International Environmental Governance Belgrade, 27 – 28 June 2009; UNEP Executive Director. The Belgrade Process. Developing a Set of options for improving international environmental governance (with Annex). September 2009. Both available at: <http://www.unep.org/environmentalgovernance/IEGReform/tabid/2227/Default.aspx>

⁶⁶⁴ Council of the European Union, Brussels, 16 December 2009, 17524/09, Note on reforming the system of international environmental governance (IEG), p. 4.

⁶⁶⁵ Memorandum of Understanding concerning the strengthening of cooperation between the Commission of the European Communities and the United Nations Environment Programme in the field of environment, http://ec.europa.eu/environment/international_issues/pdf/com_unep_mou_final.pdf.

⁶⁶⁶ Commission of the European Communities. 2003. Working Guidelines for the 'Green Diplomacy Network', http://ec.europa.eu/environment/international_issues/pdf/gd_working_guidelines.pdf.

⁶⁶⁷ Green Diplomacy Network, (2003), Network of Diplomats and Experts on European Diplomacy on Environment and Sustainable Development - Action Plan, July 2003, http://ec.europa.eu/environment/international_issues/pdf/gd_action_plan.pdf.

⁶⁶⁸ Commission of the European Communities. Brussels, 14 May 2007. Thematic Strategy for the Environment and Sustainable Management of Natural Resources, Including Energy (ENRTP), p.9.

⁶⁶⁹ Commission of the European Communities. Brussels, 14 May 2007. Thematic Strategy for the Environment and Sustainable Management of Natural Resources, Including Energy (ENRTP), p.6.

⁶⁷⁰ Vogler/Stephan (2007), p. 403 observe that the EU has provided a 'disproportionate amount' of funding for UNEP.

(including those under MEAs) on environment and sustainable management of natural resources at the international and regional level and across national boundaries, and promoting EU environmental policies abroad by strengthening international environmental governance, negotiation and monitoring and assisting the operation of MEAs and other processes.⁶⁷¹ About €640 million is allocated to these two priorities for the period 2007-2013.

Contribution of measures to achievement of 6EAP objectives

The EU has made consistent efforts towards the 6EAP objective of strengthening international environmental governance by the gradual reinforcement of multilateral cooperation and the institutional framework including resources. The global leadership of the EU in this field is largely undisputed among observers⁶⁷². The number of environmental agreements approved and the EU's active role in environmental negotiations are indicators of the EU's constructive role in this regard. The EU's unfaltering support for a specialised UN environment agency is another indicator of the EU's willingness to push for change in international environmental governance. Although these EU proposals have not yet met with full approval of the international community, it has been noted that the US and China, two key players, have backed down in their opposition to serious deliberations on the issue⁶⁷³. This has in part been related to the consistent efforts of the EU.⁶⁷⁴ However, it must also be noted that few new institutional frameworks for multilateral environmental cooperation have been set up since the adoption of the 6EAP. For example, the 2006 International Tropical Timber Agreement does not establish new structures of multilateral cooperation, but continues the 1994 International Tropical Timber Agreement. The level of funding for many MEAs has been described as insufficient⁶⁷⁵; however this is by no means the responsibility of the EU alone, which has for example made substantial contributions to financing UNEP.

The EU has demonstrated serious commitment to the 6EAP objective of **swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment** where the EU is a Party. The EU has worked towards the implementation of existing conventions by endorsing supplementing protocols. The pace of ratification has not however increased considerably. While several earlier conventions and protocols such as the Convention on the Protection of the Rhine, the UNFCCC, the CBD, the Protocol on Biosafety, and the Convention on the Protection of the Marine Environment of

⁶⁷¹ EU Commission, Thematic Strategy For The Environment And Sustainable Management Of Natural Resources, [Including Energy \(ENRTP\), 14 May 2007.](http://ec.europa.eu/development/icenter/repository/env_ENRTP_Strategy_final_en.pdf)
http://ec.europa.eu/development/icenter/repository/env_ENRTP_Strategy_final_en.pdf

⁶⁷² See for example Kelemen, Daniel. (2010): Globalizing European Union environmental policy. *Journal of European Public Policy* pp. 335-349, 347. However, some observers also claim that 'EU's self-proclaimed leadership role in GEG may frequently be more rhetorical than real.', see Vogler, John/Stephan, Hannes R. (2007). The European Union in global environmental governance: Leadership in the making? *Int Enviro Agreements* Vol. 7, pp. 389–413, 392.

⁶⁷³ Beisheim, Marianne/Nils Simon (2010): *Neuer Schwung für die Reform der internationalen Umweltgovernance*. SWP Aktuell No. 37, p. 3.

⁶⁷⁴ Vogler, John/Stephan, Hannes R. (2007). The European Union in global environmental governance: Leadership in the making? *Int Environ Agreements* Vol. 7, pp. 389–413, 410.

⁶⁷⁵ Tadanori Inomata, Management Review of Environmental Governance within the United Nations System, UN Joint Inspection Unit, JIU/REP/2008/3, UN, Geneva, 2008, p. iii.

the Baltic Sea Area were ratified within approximately one to two years from the signature of the EC; the ratification of the Stockholm Convention on Persistent Organic Pollutants took more than three years to be ratified, the Rotterdam Convention on the Prior informed Consent Procedure took more than four years, while the Aarhus Convention took more than six years. Conventions, such as the 2006 International Tropical Timber Agreement or the International Treaty on Plant Genetic Resources, were ratified in a relatively short time. However a general improvement towards swift ratification as called for in the 6EAP is not visible.

The EU has also taken important steps with regard to the **promotion of better policy coherence by linking the work done within the framework of the different conventions, including the assessment of interlinkages between biodiversity and climate change, and the integration of biodiversity considerations into the implementation of the UNFCCC and the Kyoto Protocol**. The active contribution of the EU to international processes towards coordination of MEAs and the fact that simultaneous extraordinary COPs to the Basel, Rotterdam and Stockholm Conventions took place in February 2010 can be assessed as a positive output of the EU under the 6EAP. The realization of the first simultaneous extraordinary COPs and the following adoption of a so-called omnibus decision on the implementation of joint activities⁶⁷⁶ demonstrate that improved international environmental governance by identifying and enabling synergies is possible. To what extent the implementation of joint activities finally contributes to better policy coherence, remains to be seen in the future process.

These activities also imply that the EU has made good progress towards the objective of **pursuing ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment**. However, in general, international environmental politics have not been successful to date in reducing environmental pollution and the use of natural resources to the carrying capacity of the global environment⁶⁷⁷. The EU's activities demonstrate the commitment towards the general objective of **stimulating the positive and constructive role of the European Union as a leading partner in the protection of the global environment** and in the pursuit of a sustainable development and the **development of a global partnership for environment and sustainable development**. Again, this does not mean that these objectives have been fully reached at the international level. For example, the international environmental governance system has been characterised as being 'weakened by institutional fragmentation and specialization and the lack of a holistic approach to environmental issues and sustainable development' in a recent UN report⁶⁷⁸ while at the Copenhagen climate

⁶⁷⁶ The omnibus decision has been adopted in a substantially identical form by the conferences, see: Report of the simultaneous extraordinary meetings of the conferences of the Parties to the Basel, Rotterdam and Stockholm conventions. UNEP/FAO/CHW/RC/POPS/EXCOPS.1/8, Available at <http://excops.unep.ch/documents/meetingdocs/08e.pdf>.

⁶⁷⁷ One prominent indicator to measure global consumption in natural resources compared to the world's carrying capacity is the ecological footprint. Currently, humanity uses the equivalent of 1.5 earth annually, see World – Footprint, Do we fit on the planet, http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/.

⁶⁷⁸ Tadanori Inomata, Management Review of Environmental Governance within the United Nations System, UN Joint Inspection Unit, JIU/REP/2008/3, UN, Geneva, 2008, p. iii.

change conference in December 2009, it became evident that the EU's leadership on environmental issues in the global context cannot simply be assumed.

1.5.1.4 Trade, foreign investment and export credits

Relevant objectives

An **overall aim** of the 6EAP in relation to international issues and relevant to trade and foreign investment is:

- 'the integration of environmental concerns and objectives into all aspects of the Community's external relations' (Article 2(6)).

The 6EAP includes the following **specific objectives**:

- 'the further promotion of sustainable consumption and production patterns at the international level;
- making progress to ensure that trade and environment policies and measures are mutually supportive' (Article 9(1)).

Priority actions relating to international issues include:

- 'integrating environment protection requirements into all the Community's external policies, including trade...;
- promoting sustainable environmental practices in foreign investment and export credits;
- achieving mutual supportiveness between trade and the needs for environmental protection, by taking due account of the environmental dimension in Sustainability Impact Assessments of multilateral trade agreements to be carried out at an early stage of their negotiation and by acting accordingly;
- further promoting a world trade system that fully recognises Multilateral or Regional Environmental Agreements and the precautionary principle, enhancing opportunities for trade in sustainable and environmentally friendly products and services' (Article 9(2)).

Overview of measures

In 2006, DG Trade published its **Global Europe Strategy**.⁶⁷⁹ The Strategy 'set out the contribution of trade policy to stimulating growth and creating jobs in Europe.'⁶⁸⁰ Although the Strategy mentions environmental objectives several times (e.g. in the context of FTAs), its main priorities relate to the multilateral liberalisation of markets and tackling restrictions on access to resources such as energy, metals, scrap and primary raw materials. The 'Global Europe' strategy states that when considering new FTAs, the EU will 'need to work to strengthen sustainable development through...bilateral trade relations. This could include

⁶⁷⁹ European Commission DG Trade (2006): Global Europe – competing in the world - A Contribution to the EU's Growth and Jobs Strategy, http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130376.pdf

⁶⁸⁰ European Commission DG Trade (2006): Global Europe – competing in the world - A Contribution to the EU's Growth and Jobs Strategy, p.2, http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130376.pdf.

incorporating new co-operative provisions in areas relating to labour standards and environmental protection.⁶⁸¹

The EU adopted **Council Regulation (EC) No 732/2008 applying a scheme of generalized tariff preferences⁶⁸² (GSP)** in July 2008. Previously, the GSP was governed by Council Regulation (EC) No 980/2005⁶⁸³. Through the GSP+, which is part of the GSP scheme, goods from 16 vulnerable developing countries and territories⁶⁸⁴ have preferential access to the EU market. In order to qualify, participating countries must have ratified and implemented international conventions regarding human rights, core labour standards, sustainable development, environment and good governance. The international environmental conventions that are part of the GSP+ are: the Montreal Protocol on Substances that Deplete the Ozone Layer, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention on Persistent Organic Pollutants, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention on Biological Diversity, the Cartagena Protocol on Biosafety, and the Kyoto Protocol.

One instrument, regulating trade in a specific product of environmental significance is Council Regulation (EC) No 2173/2005 on the establishment of a **FLEGT licensing scheme for imports of timber into the EU⁶⁸⁵**. Voluntary Partnership Agreements (VPAs) are the cornerstone of this Regulation. To date, VPAs have been agreed with Ghana, the Republic of Congo, and Cameroon. The negotiation process is ongoing with the Central African Republic, Indonesia, Liberia and Malaysia⁶⁸⁶. Gabon and Vietnam are in the pre-negotiation stage and a less advanced preparatory process has started with the Democratic Republic of Congo and Guyana⁶⁸⁷. A new **Regulation laying down the obligations of operators who place timber and timber products on the market** was adopted in 2010⁶⁸⁸. The Regulation requires operators to apply a due diligence system to minimize the risk of placing illegally harvested timber and timber products on the EU market (see 1.2.1.6).

An instrument used to integrate environmental concerns in the EU's trade policies are **Sustainability Impact Assessments (SIAs)**, which evaluate the likely economic, social and environmental impacts of trade agreements that the EU concludes with other countries. SIAs

⁶⁸¹ Global Europe, p. 12.

⁶⁸² Council Regulation (EC) No 732/2008 of 22 July 2008 applying a scheme of generalised tariff preferences for the period from 1 January 2009 to 31 December 2011 and amending Regulations (EC) No 552/97, (EC) No 1933/2006 and Commission Regulations (EC) No 1100/2006 and (EC) No 964/2007, OJ L 211, 6.8. 2008, p. 1-39.

⁶⁸³ Council Regulation No 980/2005 of 27 June 2005 applying a scheme of generalised tariff preferences, OJ L 169, 30.6.2005, p. 1–43.

⁶⁸⁴ The list of countries is available at http://trade.ec.europa.eu/doclib/docs/2010/may/tradoc_146196.pdf.

⁶⁸⁵ Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community, OJ L 347, 30.12.2005, p. 1-6.

⁶⁸⁶ See http://www.illegal-logging.info/approach.php?a_id=121.

⁶⁸⁷ Saskia Ozinga and Iola Leal (2010), Forest Watch Special Report – Update report on FLEGT Voluntary Partnership Agreements, EU Forest Watch February 2010, <http://www.illegal-logging.info/uploads/VPAupdate.pdf>

⁶⁸⁸ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market , OJ L 295, 12.11.2010, p. 23–34.

are carried out by independent, external consultants chosen on the basis of an open call for tender after the Council has given the Commission a mandate to begin trade negotiations. Since 1999, when the EU first developed a methodological framework for SIAs, these instruments have become a component of all major EU trade negotiations. The Commission has continuously sought to improve the quality of SIAs. In 2004, the Commission took steps to further improve its methodology⁶⁸⁹ in terms of simplifying the process, making more resources available, ensuring external expertise, and involving other trade-related concerns. The Commission also established certain principles that impact assessments should adhere to: transparency, a focus on the most significant effects of trade, and consideration of economic, social, and environmental dimensions. All SIAs and the Commission's formal response to them are published online⁶⁹⁰. Between 2002 and 2009 a number of trade SIAs were completed by the EU, e.g. Andean Community Association Agreement, the EU-Central America Association Agreement, the EU-Libya Free Trade Agreement, EU-ASEAN Countries Free Trade Agreement, EU-India Free Trade Agreement, the EU-Korea Free Trade Agreement, the EU-Ukraine Free Trade Agreement, the EU-China Partnership and Cooperation Agreement, the EU-Mercosur Association Agreement, the Euro-Mediterranean Free Trade Area, the EU and the Cooperation Council for the Arab States of the Gulf Trade Negotiations, the EU-ACP Economic Partnership Agreements (EPAs), and the EU-Chile Association Agreement. Trade agreements have only been concluded with some of these countries or regions so far, including Korea, Columbia, Peru, Central America, several Mediterranean countries⁶⁹¹ and a number of Economic Partnership Agreements (EPAs) between the EU and the African, Caribbean and Pacific (ACP) group of countries⁶⁹². In some of these agreements, environmental concerns are often addressed in a **trade and sustainable development chapter**. Such a chapter may, for example, include commitments to enforce environmental and labour standards.⁶⁹³ Other agreements, however, hardly mention environmental concerns at all⁶⁹⁴.

Another important aspect of fostering coherence between trade and environmental objectives are **World Trade Organization (WTO) negotiations on trade and environment**. The EU has been a strong advocate of WTO negotiations on environmental issues. The Doha Declaration⁶⁹⁵ provided a rather narrow mandate for negotiations on trade and the environment, Paragraph 31 of the Declaration calls for negotiations on the relationship

⁶⁸⁹ Commission Staff Working Paper, Impact Assessment: Next Steps - In support of competitiveness and sustainable development, 21 October 2004, SEC(2004)1377

⁶⁹⁰ See <http://ec.europa.eu/trade/analysis/sustainability-impact-assessments/assessments/>

⁶⁹¹ See for an overview of EU bilateral trade negotiations, European Commission, Overview of FTA and other trade negotiations (20 October 2010), http://trade.ec.europa.eu/doclib/docs/2006/december/tradoc_118238.pdf

⁶⁹² For an overview see the list at http://trade.ec.europa.eu/doclib/docs/2009/september/tradoc_144912.pdf.

⁶⁹³ See for example the trade and sustainable development chapter of the EU FTA with Korea, http://trade.ec.europa.eu/doclib/docs/2009/october/tradoc_145185.pdf.

⁶⁹⁴ See for example, the EPA with Côte d'Ivoire, where the environment is only mentioned in two of the 82 articles, and in a manner rather restricting action on environmental grounds (see Art. 16 (2) of the EPA). The EPA is available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:059:0003:0273:EN:PDF>

⁶⁹⁵ http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm.

between WTO rules and MEAs, on procedures to guide communication between MEA Secretariats and the WTO, and on the reduction or elimination of barriers to trade in environmental goods and services. With regards to the WTO-MEA relationship, the EU considers both sets of rules equal but closely linked bodies of international law, thus governments should consider WTO rules during MEA negotiations and vice-versa. For the EU, the global character of environmental problems renders MEAs preferable to unilateral action⁶⁹⁶ and the EU has advocated a mutually supportive relationship between both sets of rules in the WTO negotiations⁶⁹⁷. The EU has also demanded that 'core' MEA Secretariats (those that participated in previous informal information exchange sessions) should be granted observer status at special sessions of the Committee on Trade and Environment (CTE),⁶⁹⁸ which is responsible for the environmental negotiations at the WTO. In negotiations on environmental goods and services (EGS), the EU maintains that liberalizing markets in environmental products would encourage demand for greener products and support producers that invest in environmentally friendly practices and technologies⁶⁹⁹.

In the area of **investment**, there are currently few binding European rules that directly bear on the accountability of EU companies for environmental damage caused by investments outside the EU. However, there have been a number of activities concerning voluntary mechanisms within the wider field of **corporate social responsibility** (CSR) in the EU in the past few years⁷⁰⁰. In July 2002, the Commission published a Communication concerning **CSR**⁷⁰¹ which built on an earlier Green Paper. With the Communication, the Commission launched the Multi-Stakeholder Forum on CSR, which published its final report in 2004⁷⁰² and concentrated on how to improve CSR mechanisms at the EU and Member State level. The Commission launched another Communication on CSR in 2006⁷⁰³ which calls on EU companies to behave responsibly not only when operating both inside and outside the EU. In

⁶⁹⁶ EC (2000): *The Relationship Between WTO Rules and MEAs in the Context of the Global Governance System*, TN/TE/W/39., p. 4, <http://trade.ec.europa.eu/doclib/html/140513.htm>.

⁶⁹⁷ EC (2002): *Multilateral Environmental Agreements (MEAs): Implementation of the Doha Development Agenda*, TN/TE/W/1, p. 3, http://www.jmcti.org/2000round/com/doha/tn/tn_te_w_001.pdf. For the principles that the EU suggests should govern the WTO-MEA relationship, see also EC Submission to the CTE-SS, *Putting MEA/WTO governance into practice: the ES's experience In the negotiation and implementation of MEAs*, TN/TE/W/53, 4 July 2005, http://trade.ec.europa.eu/doclib/docs/2008/september/tradoc_140513.pdf.

⁶⁹⁸ EC (2006): *Continued Work Under Paragraph 31(li) of the Doha Declaration*, TN/TE/W/66, p. 4, <http://trade.ec.europa.eu/doclib/html/140516.htm>.

⁶⁹⁹ EC (2005): *Market Access for Environmental Goods*, TN/TE/W/47, p.2, <http://trade.ec.europa.eu/doclib/html/140514.htm>.

⁷⁰⁰ For a comprehensive overview see Oxford Pro Bono Publico, *Corporate Social Responsibility - Soft Law Developments in the European Union*, A research brief prepared for Professor John Ruggie UN Secretary-General's Special Representative on Business & Human Rights, Oxford 2009.

⁷⁰¹ Communication from the Commission concerning Corporate Social Responsibility: A business contribution to Sustainable Development (COM/2002/0347 final).

⁷⁰² European Multi-Stakeholder Forum on CSR, Final Report and Recommendations, 2004, available at http://circa.europa.eu/irc/empl/csr_eu_multi_stakeholder_forum/info/data/en/CSR%20Forum%20final%20report.pdf.

⁷⁰³ Communication from the Commission to the European Parliament, the Council and The European Economic and Social Committee: Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on Corporate Social Responsibility, COM(2006) 136 final.

2007, the European Parliament adopted a resolution on CSR calling on the Commission to improve the EU regulatory framework, and, in particular, to 'implement a mechanism by which victims, including third-country nationals, can seek redress against European companies in the national courts of the Member States'⁷⁰⁴. In 2009, DG Enterprise and Industry commissioned a study on how the EU legal framework on human rights and the environment applicable to European enterprises operating outside the EU could be improved.⁷⁰⁵

Another important element of the EU's overall investment policies are the practices of the **European Investment Bank (EIB)**. In 2006, five European-based Multilateral Financing Institutions (MFIs)⁷⁰⁶, including the EIB, adopted the 'European Principles for the Environment' (EPE) in a bid to increase harmonisation of environmental principles, practices and standards associated with the financing of their projects⁷⁰⁷. The EIB was a driving force behind the adoption of these principles.⁷⁰⁸ These principles are comprised of the guiding environmental principles in the Treaty and the practices and standards incorporated in EU secondary environmental legislation⁷⁰⁹. The five MFIs consider the EPE as a common legal framework to be promoted and exported in their regions of operation. For investment in projects outside the EU and candidate countries, projects should comply with appropriate EU environmental principles, practices, and standards 'subject to local conditions'⁷¹⁰. According to its Statement of Social and Environmental Principles, the EIB is also committed to prioritizing environmental considerations in its lending objectives and requires all projects to pass certain environmental and social standards⁷¹¹. Projects outside the EU are required 'to comply with national legislation, including international conventions ratified by the host country, as well as EU standards. Where EU standards are more stringent than national standards the higher EU standards are required, if practical and feasible'⁷¹². The Bank also finances projects that aim to directly protect and enhance the natural environment and / or promote sustainable environmental practices in local communities. In 2009, the Bank lent a

⁷⁰⁴ European Parliament Resolution of 13 March 2007 on corporate social responsibility: a new partnership (2006/2133(INI), para.32.

⁷⁰⁵ The study has been completed, see Augenstein, D. (2010), Study of the Legal Framework on Human Rights and the Environment Applicable to European Enterprises Operating Outside the EU, University of Manchester, http://ec.europa.eu/enterprise/policies/sustainable-business/corporate-social-responsibility/human-rights/index_en.htm.

⁷⁰⁶ The Council of Europe Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Nordic Environment Finance Corporation and the Nordic Investment Bank.

⁷⁰⁷ EIB (2006): The European Principles for the Environment adopted by five European Multilateral Financing Institutions, see on Internet in <http://www.eib.org/about/press/2006/>

⁷⁰⁸ Stakeholder consultation, interview.

⁷⁰⁹ See Pallemmaerts, M, (ed.) (2008): Sourcebook on EU Environmental Law, Prepared by IEEP for the EPE Banks, <http://www.eib.org/attachments/strategies/sourcebook-on-eu-environmental-law.pdf>.

⁷¹⁰ EIB (2006): The European Principles for the Environment adopted by five European Multilateral Financing Institutions, see on Internet in <http://www.eib.org/about/press/2006/>.

⁷¹¹ EIB (2009): *The EIB Statement of Environmental and Social Principles and Standards*, p.10, <http://www.eib.org/about/publications/environmental-and-social-principles-and-standards.htm>.

⁷¹² EIB (2009): *The EIB Statement of Environmental and Social Principles and Standards*, p.16, <http://www.eib.org/about/publications/environmental-and-social-principles-and-standards.htm>.

total of €25.3 billion (32% of total EIB lending) to finance 176 environmental projects. Most of the projects dealt with climate change, environment and health, and sustainable transport within the EU⁷¹³. An example of a funding instrument administered by the EIB and aimed at environmental improvement outside the EU is the Global Energy Efficiency and Renewable Energy Fund (GEEREF)⁷¹⁴ which provides capital for investments in clean energy in developing countries.

With regards to the promotion of sustainable environmental practices in **export credits**, the most important activities have taken place at the OECD⁷¹⁵ rather than the EU level. Since 2003, export credit agencies (ECAs) of OECD countries have committed themselves to common environmental assessment procedures and standards, known as the OECD 'Common Approaches on Environment for Officially Supported Export Credits'.⁷¹⁶ The OECD Council issued a Revised Council Recommendation on Common Approaches on the Environment and Officially Supported Export Credits in 2007⁷¹⁷ which OECD Member Countries agreed to.⁷¹⁸ The legally non-binding Common Approaches of 2007 set out strengthened environment-related requirements for export deals to qualify for official export credit support from OECD Members.⁷¹⁹ The EU has taken steps to integrate the OECD Common Approaches into EU law⁷²⁰. In 2006, the Commission issued a Proposal for a Council Decision on the application of certain guidelines in the field of officially supported export credits⁷²¹ which would make the OECD Common Approaches to the Environment applicable in EU law. However, a decision on the Proposal has not yet been reached although it remains on the legislative agenda.⁷²² In October 2010, the Parliament's

⁷¹³ See <http://www.eib.org/projects/topics/environment/index.htm>.

⁷¹⁴ <http://www.geeref.com>.

⁷¹⁵ The European Commission has quasi-member status at the OECD, based on a Supplementary Protocol to the OECD Convention in which the signatory states decided that the Commission of the European Community shall 'participate in the work' of the Organization, Supplementary Protocol No. 1 to the Convention on the OECD of 14 December 1960, at http://www.oecd.org/document/36/0,3343,en_2649_201185_39982234_1_1_1_1,00.html. 20 of the EU member states are also members of the OECD.

⁷¹⁶ See http://www.oecd.org/department/0,3355,en_2649_34181_1_1_1_1_1,00.html.

⁷¹⁷ Working Party on Export Credits and Credit Guarantees, Revised Council Recommendation on Common Approaches on the Environment and Officially Supported Export Credits, [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/ECG\(2007\)10/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/ECG(2007)10/FINAL&docLanguage=En).

⁷¹⁸ 'OECD adopts stronger environmental rules for export credits' at: http://www.oecd.org/document/4/0,3343,en_2649_34181_38752004_1_1_1_1,00.html.

⁷¹⁹ http://www.oecd.org/document/26/0,3343,en_2649_34181_39960154_1_1_1_1,00.html.

⁷²⁰ Earlier versions of the OECD environmental rules for export credits had been incorporated into EU law through Council Decisions 2001/76/EC and 2001/77/EC.

⁷²¹ Proposal for a Council Decision on the application of certain guidelines in the field of officially supported export credits, COM(2006)456, Brussels 10.08.2006, as amended by the Corrigendum of 12.09.2006, COM(2006)456 final/2, [http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com\(2006\)0456\(cor1\)_com_com\(2006\)0456\(cor1\)_en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2006)0456(cor1)_com_com(2006)0456(cor1)_en.pdf).

⁷²² Thus, the Commission issued a Corrigendum on the Consequences of the entry into force of the Treaty of Lisbon for ongoing inter-institutional decision-making procedures on 11 December 2009, p. 18, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0665:FIN:EN:PDF>.

Committee on International Trade published its Draft Report on the Proposal⁷²³ in which it suggests several amendments to the Proposal, with the objectives of making ECA practice more transparent and environmentally friendly. As of November 2010, the Proposal is still awaiting its first reading in Parliament, which is scheduled to take place in February 2011.⁷²⁴

Contribution of measures to achievement of 6EAP objectives

In the trade area, the EU has promoted the **integration of environmental concerns into its trade policies** procedurally, notably through the introduction of SIAs of multilateral trade agreements. The EU has also taken several measures in response to the 6EAP priority action of achieving **mutual supportiveness between trade and the needs for environmental protection**, by taking due account of the environmental dimension in Sustainability Impact Assessments of multilateral trade agreements to be carried out at an early stage of their negotiation and by acting accordingly; and the priority action of **promoting a world trade system that fully recognises Multilateral or Regional Environmental Agreements and the precautionary principle and enhancing opportunities for trade in sustainable and environmentally friendly products and services**. Relevant measures include the completion of many trade SIAs and an active role in WTO negotiations on the environment. However, it is not evident that the EU has been active in promoting the precautionary principle in relation to trade policies or more generally at the international level during the 6EAP period. Concerning the use of SIAs and their impact on multilateral trade agreement, it is doubtful whether the EU has fully achieved its objective of taking 'due account' of the environmental dimension in multilateral trade agreements as it has been observed that trade SIAs have mostly had little direct impact on the positions in trade negotiations⁷²⁵. In addition, some SIAs have been criticised for not fully taking account of the environmental impacts of trade agreements.⁷²⁶ With regards to the EPAs, the CARIFORUM⁷²⁷ EPA has several references to sustainable development, and also establishes a monitoring system to keep track of its impacts, including social and environmental concerns. Other interim EPAs do not yet include provisions on sustainable development or the environment. However, many regions have agreed, in principle, to discuss this.⁷²⁸ The actual environmental impact of FTAs is hard to measure as it is doubtful,

⁷²³ Draft Report on the proposal for a decision of the European Parliament and of the Council on the application of certain guidelines in the field of officially supported export credits (COM(2006)0456), Rapporteur: Yannick Jadot, available at <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+COMPARL+PE-452.514+01+DOC+PDF+V0//EN&language=EN>.

⁷²⁴ <http://www.europarl.europa.eu/oeil/FindByProcnum.do?lang=2&procnum=COD/2006/0167>.

⁷²⁵ Clive George and Colin Kirkpatrick, Creation of processes: sustainability impact assessments, in: Diana Tussie, The Politics of Trade - The Role of Research in Trade Policy and Negotiation, Republic of Letters/Brill/IDRC, 2009, http://www.idrc.ca/en/ev-141041-201-1-DO_TOPIC.html.

⁷²⁶ See Hall, Ronnie (2008) Undercutting Africa: Economic Partnership Agreements, Forests and the European Union's Quest for Africa's Raw Materials. Friends of the Earth, London, p. 18, http://www.foe.co.uk/resource/reports/undercutting_africa.pdf.

⁷²⁷ The following countries are part of the CARIFORUM EAP: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

⁷²⁸ Stakeholder consultation, interview.

given the indirect impact of EPAs on environmental aspects, that even the monitoring system can establish clear and concrete effects as suggested. The main effects that the EPA may have on the environment will come via the promotion of trade and growth of goods and services and the support to good economic governance and promotion of respect of international standards.⁷²⁹ Nonetheless, some critics have voiced concern that the EPAs are likely to have a serious impact on the environment in many ACP countries, especially those that are rich in forests and biodiversity.⁷³⁰

In terms of **promoting sustainable consumption and production patterns at the international level**, a 2006 public consultation on additional options to combat illegal logging⁷³¹ and the proposal on a regulative instrument addressing illegal logging⁷³², suggested that the bilateral VPA approach of the FLEGT Regulation and the limited range of timber products covered meant that the Regulation as it stood was insufficient to combat illegal logging⁷³³. The negotiations of VPAs also proceeded slower than envisaged. The impact of the FLEGT Regulation has also been limited by its focus on legality issues and licensing of timber products rather than on addressing the manner in which they are produced⁷³⁴. The Regulation does not specifically address sustainable production/management aspects (with the exception of prohibiting the import of species protected under Regulation (EC) No 338/97) or outline necessary environmental standards on top of fulfilling legality requirements. Although the assumption of FLEGT is that national legislation adequately reflects requirements of sustainable forest management, this may not always be the case in practice. Thus, the contribution of the FLEGT Regulation to promoting sustainable consumption and production patterns and the international level can be considered to have been marginal. While it is still too early to assess whether the new Regulation laying down the obligations of operators who place timber and timber products on the market⁷³⁵ will remedy some of the weaknesses of the FLEGT Regulation, the fact that the EU is making efforts to improve the system can be considered a positive step towards the 6EAP objective of promoting sustainable production patterns at the international level.

Overall, progress towards the 6EAP objectives of promoting sustainable consumption and production patterns at the international level and ensuring that trade and environmental policies and measures are mutually supportive may be described as modest. While efforts

⁷²⁹ Stakeholder consultation, interview.

⁷³⁰ Hall, Ronnie (2008) :Undercutting Africa: Economic Partnership Agreements, Forests and the European Union's Quest for Africa's Raw Materials. Friends of the Earth, London, p. 16, http://www.foe.co.uk/resource/reports/undercutting_africa.pdf.

⁷³¹ The synthesis report on the public consultation is available at <http://ec.europa.eu/environment/forests/pdf/addloptionssynthfinal.pdf>.

⁷³² Commission of the European Communities, (2008), Proposal for a Regulation of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (COM(2008)644).

⁷³³ EU Commission, Public Consultation on 'Additional Options To Combat Illegal Logging' - Analysis And Report, p. 3.

⁷³⁴ The report of the public consultation states that any measures 'should also contribute to addressing the root causes, and not just the symptoms.' p.4.

⁷³⁵ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market , OJ L 295, 12.11.2010, p. 23–34.

have certainly been made and success is evident in some areas, this is not true across the board. For example, despite EU efforts, little has been achieved in terms of making trade and environmental policies mutually supportive at the international level. The Doha Round of WTO negotiations has not yet been concluded and disagreement on the environmental topics of the Doha Round negotiations – which were defined narrowly from the beginning – persists. The GSP+ scheme has been evaluated as being effective in promoting the ratification of environmental agreements, which was identified as contributing to attracting additional funding for environmental measures in developing countries.⁷³⁶ However, a positive impact on implementation could not be found, and given that only implementation will produce an actual positive environmental impact, the contribution of the GSP+ scheme to the 6EAP objectives has been limited. Moreover, the EU has failed to fully integrate environmental concerns into all of its trade policies and strategies as can be seen in the Global Europe Strategy which focuses on securing the EU's access to natural resources worldwide rather than addressing the issue of reducing the use of resources.

Limited progress has also been made concerning the priority action of **promoting sustainable environmental practices in foreign investment and export credits**. As described above, the EU legislative framework to govern the foreign direct investment of EU companies is still weak, and little action has been taken so far beyond non-binding declarations. As a standard procedure, the EIB assesses the environmental impacts of all projects that it funds.⁷³⁷ Nonetheless, the EIB's environmental record has been described as 'controversial'⁷³⁸, although even critics of the EIB have noted improvements in more recent years.⁷³⁹ In certain cases public campaigns have led the Bank to withdraw from projects with a questionable environmental record⁷⁴⁰. However, in most cases where the EIB has withdrawn from or not funded a project, this was not due to its environmental impact alone, but the cumulative impact of the project, on the environment, the local population and development.⁷⁴¹

The EU does not appear to have made much progress in relation to **export credits**, and has not yet been able to incorporate OECD Common Approaches into EU law. Moreover, as pointed out in the Draft Report by the European Parliament's Committee on International Trade, 'ECAs are estimated to support twice the amount of oil, gas and mining projects as do all Multilateral Development Banks together. Half of all CO₂-emission-intensive industrial

⁷³⁶ Michael Gasiorek, Mid-term Evaluation of the EU's Generalised System of Preferences, CARIS, year not indicated, http://trade.ec.europa.eu/doclib/docs/2010/may/tradoc_146196.pdf, paras. 30, 31, 36.

⁷³⁷ EIB, Environmental Assessment, <http://www.eib.org/attachments/thematic/environmental-assessment.pdf>.

⁷³⁸ Adelle, C., Fajardo del Castillo, T., Pallemaerts, M., Withana, S., Van Den Bossche, K., (2010), The External Dimension of the Sixth Environment Action Programme: An Evaluation of Implementing Policy Instruments, Report for the IBGE-BIM, IEEP, London, p. 49.

⁷³⁹ As one critical observer writes, 'Civil society pressure, as well as repeated requests from the European Parliament over the last decade, have lead to improvements in some of the EIB's policies in this regard, although actual practice on the ground remains questionable in several cases', Tricarico, A.(2010), Hit and run development - Some things the EIB would rather you didn't know about its lending practices in Africa, and some things that can no longer be covered up, http://www.counterbalance-eib.org/images/mediaroom/doc/hit_run_development_web.pdf, p. 21.

⁷⁴⁰ See ENDS Europe DAILY, Friday 23 July 2010, EIB drops controversial Ethiopian dam project

⁷⁴¹ Stakeholder consultation, interview.

projects in developing countries have some form of ECA support.⁷⁴² This also casts some doubt on the extent to which environmental concerns have been fully integrated in the lending practices of Member States' ECAs.

1.5.1.5 Cross-border environmental cooperation

The **overall aims** of the 6EAP in relation to **international issues** include:

- the integration of environmental concerns and objectives into all aspects of the Community's external relations' (Article 2(6)).

The **priority actions** of the 6EAP relating to international issues includes:

- 'integrating environment protection requirements into all the Community's external policies, including trade and development cooperation, in order to achieve sustainable development by inter alia the elaboration of guidelines', and
- 'promoting cross-border environmental cooperation with neighbouring countries and regions' (Article 9(2)).

Overview of measures

The **European Neighbourhood Policy** (ENP) was conceived in light of the 2004 enlargement of the EU to promote cooperation and enhance relations between the enlarged EU and its newly acquired neighbours. The policy was first outlined in a Commission Communication in 2003 on Wider Europe - Neighbourhood: A new framework for relations with our eastern and southern neighbours⁷⁴³, which was followed by a more detailed Strategy Paper on the ENP in 2004⁷⁴⁴. These documents set out the overall framework for the ENP, which aims to support economic and political reform processes, promote closer economic integration, and sustainable development⁷⁴⁵ in 16 of the EU's neighbouring countries⁷⁴⁶ as a means of promoting stability, security and prosperity along the EU's borders. In 2006⁷⁴⁷ and 2007⁷⁴⁸ the Commission made proposals on how the ENP could be strengthened which highlighted the environment as a key dimension both at the national and regional level.

⁷⁴² Draft Report on the proposal for a decision of the European Parliament and of the Council on the application of certain guidelines in the field of officially supported export credits (COM(2006)0456), p. 13, <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+COMPARL+PE-452.514+01+DOC+PDF+V0//EN&language=EN>.

⁷⁴³ CEC (2003) Wider Europe — Neighbourhood: A New Framework for Relations with our Eastern and Southern Neighbours. (COM(2003)104). CEC. Brussels

⁷⁴⁴ CEC (2004) European Neighbourhood Policy: Strategy Paper. (COM (2004) 373). CEC.

⁷⁴⁵ CEC (2003) Wider Europe — Neighbourhood: A New Framework for Relations with our Eastern and Southern Neighbours. (COM(2003)104). CEC. Brussels

⁷⁴⁶ The ENP covers the following countries: Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestinian Authority, Syria, Tunisia and Ukraine. Relations with Russia are developed through a special 'Strategic Partnership'.

⁷⁴⁷ CEC (2006a): Communication from the Commission to the Council and the European Parliament on Strengthening the European Neighbourhood Policy. (COM(2006)726). Brussels. 4/12/2006.

⁷⁴⁸ CEC. (2007). Communication from the Commission to the Council and the European Parliament – A strong European Neighbourhood Policy. (COM(2007)774). Brussels. 5/12/2007.

The central elements of the ENP are **Action Plans** drawn up jointly by neighbouring countries and the EU setting out planned economic and political reforms and priorities covering a number of key areas including transport, energy and environment. The Action Plans are to 'promote good environmental governance in partner countries to prevent environmental degradation and pollution, protect human health, and achieve a more rational use of natural resources'⁷⁴⁹; identify priorities in key areas such as water quality, waste management, air pollution, and desertification; promote regional cooperation between partner countries; and encourage ratification and implementation of international agreements. The Action Plans also incorporate cross-border energy issues which include energy security, renewable energy, energy efficiency and energy savings; transport issues which include promotion of efficient and sustainable transport systems; and research and innovation which includes increasing the participation of partner countries in EU research and technical development (RTD) activities. The ENP recognises the importance of fostering closer cooperation among the EU's neighbours themselves and EU support is also provided to regional cooperation. Environment, nuclear safety and natural resources is a priority cooperation sector for EU support along its eastern border, with water and air pollution and the gradual harmonization of environmental standards and legislation some of the areas regional cooperation is to focus on⁷⁵⁰. In the Mediterranean region, environment is one of the stated priority areas for cooperation which could include action on environmental policy issues to address problems which are better dealt with at regional or sub-regional level, e.g. marine pollution and water resources management⁷⁵¹.

Since January 2007, the main EU financing mechanism to support implementation of the ENP (and the Strategic Partnership with Russia) has been the **European Neighbourhood Partnership Instrument (ENPI)**. The ENPI Regulation (EC) No 1638/2006 identifies the promotion of sustainable development, environmental protection, nature conservation and sustainable management of natural resources including fresh water and marine resources among the areas of cooperation to be addressed. Approximately €11.5 billion of EU funding has been allocated to the ENPI for the 2007-2013 programming cycle. The ENPI comprises of country programmes, regional / multi-country programmes (Euro-Med regional programme, the Neighbourhood-wide regional programme covering all ENP countries, and the regional programme for Eastern Neighbours), cross-border cooperation programmes, and the thematic programme. At the end of 2007, the **Neighbourhood Investment Facility (NIF)** was established which funds projects of common interest focusing primarily on establishing better energy and transport infrastructure interconnections between the EU and neighbouring countries as well as between the neighbouring countries themselves and addressing threats to the environment including climate change. The EU has allocated €700m to the Facility for the 2007-2013 period. The EU budget grant contribution amounted to €185 million in 2007-09 which was complemented by Member State grant funding worth

⁷⁴⁹ CEC (2004) European Neighbourhood Policy: Strategy Paper. (COM (2004) 373). CEC. p.18

⁷⁵⁰ CEC (2004) European Neighbourhood Policy: Strategy Paper. (COM (2004) 373). CEC.

⁷⁵¹ CEC (2004) European Neighbourhood Policy: Strategy Paper. (COM (2004) 373). CEC.

approximately €47 million⁷⁵². Various forms of **technical assistance** are also provided to ENP partners, e.g. legislative approximation, regulatory convergence and institution-building which are supported through targeted expert assistance (Technical Assistance and Information Exchange - TAIEX), twinning arrangements and participation in relevant EU programmes and agencies. The extension of TAIEX to the ENP region has helped transfer know-how to neighbouring countries.

The ENP process is complemented by a number of regional and multilateral cooperation initiatives including the Euro-Mediterranean Partnership, formerly known as the Barcelona Process, which was re-launched in July 2008 as the **Union for the Mediterranean (UfM)**. In 2006 the Commission presented a Communication on establishing an Environment Strategy for the Mediterranean⁷⁵³, a key pillar of which is the **'Horizon 2020'** initiative which aims to tackle the top sources of pollution in the Mediterranean by 2020. The **Eastern Partnership (EaP)** was launched in May 2009 and has a number of flagship initiatives including one on environmental governance and one on regional energy markets and energy efficiency. The EU has also pushed forward regional cooperation on trans-boundary environmental problems through *ad hoc* initiatives such as the **Black Sea Synergy** launched in February 2008 and the **Baku Initiative on transport and energy** launched in 2004. In June 2009, the Commission published a proposal for an **EU Strategy for the Baltic Sea Region** which was subsequently endorsed by the Council in October 2009. The Strategy brings together stakeholders from eight EU Member States surrounding the Baltic Sea and Russia and aims to provide an integrated multi-sectoral and multi-level approach to the development of the macro-region. The Strategy is expected to act as a model for EU cooperation in other regions, such as the Danube and the Adriatic. The European Parliament has also taken preliminary steps to set up the EU Neighbourhood East Parliamentary Assembly (Euro-Nest), while the Committee of the Regions intends to establish an Eastern Europe and South Caucasus Local and Regional Assembly⁷⁵⁴.

Contribution of measures to achievement of 6EAP objectives

Although the main emphasis of the **ENP** is on political reform and economic cooperation, environmental protection, nature conservation and sustainable management of natural resources are among the priority areas of cooperation with neighbouring countries. According to the Commission's 2010 report on the ENP, many neighbouring countries are showing an increasing interest in EU experiences and are ready to converge with key elements of the EU's environmental legislation, the ENP has enabled neighbouring countries to work with the European Environment Agency (EEA) to strengthen collection and management of environmental data, and the ENP has contributed to greater openness and accountability in environment policy by facilitating the involvement of NGOs in policy making

⁷⁵² CEC (2010d). Commission Staff Working Document Accompanying the Communication from the Commission to the European Parliament and the Council - Taking stock of the European Neighbourhood Policy (ENP) Implementation of the European Neighbourhood Policy in 2009 Sectoral Progress Report. (SEC(2010)512). 12/05/2010.

⁷⁵³ CEC,(2006), Communication from the Commission to the Council and the European Parliament - Establishing an Environment Strategy for the Mediterranean, (COM(2006)475) .

⁷⁵⁴ CEC (2010c). Communication from the Commission to the European Parliament and the Council - Taking stock of the European Neighbourhood Policy. (COM(2010)207). 12/05/2010.

processes⁷⁵⁵. The environment is also a key area for cooperation in various **regional and multilateral cooperation initiatives** including the UfM which has a number of flagship initiatives related to the environment such as Horizon 2020 and the Mediterranean Solar Plan. Thus, a number of strategies and tools have been adopted that contribute to the 6EAP objectives to **promote cross-border environmental cooperation and to integrate environmental considerations in the EU's external policies**. However, there remains a gap between what is set out in these documents and their implementation in practice⁷⁵⁶. Some of the reasons for this are further elaborated below and in the section on drivers and barriers.

The **objectives in ENP Action Plans**⁷⁵⁷ are in general very broad and only have an implicit deadline (the Action Plans were drawn up with an envisaged lifetime of four-five years). While there was limited transparency in the negotiations on the original Action Plans, increased openness and the participation of civil society in the development of more recent Action Plans has led to the increased consideration of environmental issues and overall the objectives in the newer Action Plans are more precise and concrete⁷⁵⁸. However, although the environment and sustainable development are included among the priorities of the Action Plans, few specific proposals in this area are made and 'the wording makes it clear that environment is regarded as a low priority in relation to economic development, security considerations, migration issues and governance and legal/judicial reform'⁷⁵⁹. This is perhaps somewhat unsurprising given that main emphasis of the ENP is on political reform and economic cooperation. Commitments in the Action Plans are often not implemented in practice and only limited support has been provided to environmental projects and programmes to date. Country programmes represent about 75% of total financing under the ENPI and provide the best channels to provide support to country-specific environmental issues. However, the environment is rarely a priority in country programmes⁷⁶⁰. This in part reflects the fact that it is mostly up to the partner countries themselves to define specific national priorities. Therefore, the fact that environment is often not considered adequately is a reflection of the priorities the countries themselves attach to the issue. Similarly in the regional context, while the environment has been identified as a priority sector in regional programmes, there is a tendency to earmark these funds for particular EU initiatives, e.g. UfM in the southern regional programme, and a number of environmental issues are not adequately addressed⁷⁶¹. Despite the introduction of environment type initiatives under the UfM on renewable energy (Mediterranean Solar Plan) and de-pollution (Horizon 2020

⁷⁵⁵ CEC (2010c). Communication from the Commission to the European Parliament and the Council - Taking stock of the European Neighbourhood Policy. (COM(2010)207). 12/05/2010.

⁷⁵⁶ Stakeholder consultation, interview.

⁷⁵⁷ To date, 12 ENP countries have signed ENP Action Plans: http://ec.europa.eu/world/enp/documents_en.htm.

⁷⁵⁸ WWF, HBS. (2009). A Handbook to assess Implementation of the Action Plans in the Field of the Environment - April 2009. WWF-World Wide Fund for Nature (formerly World Wildlife Fund) and Heinrich Böll Stiftung EU Regional Office Brussels.

⁷⁵⁹ WWF. (2005). Greening the European Neighbourhood Policy (ENP). WWF Briefing. April 2005.

⁷⁶⁰ WWF. (2009). WWF position on the ENPI mid-term review. March 2009.

⁷⁶¹ WWF. (2009). WWF position on the ENPI mid-term review. March 2009.

initiative) and the EaP on environmental governance, with the exception of Horizon 2020, these initiatives are developing very slowly and un-transparently with little or no civil society involvement⁷⁶². Such initiatives are designed to tackle specific problems (pollution, renewable energy, water management) and there is insufficient attention to other environmental issues such as forests, woodlands, coastal zones, biodiversity in general, climate change adaptation, fisheries and marine protected areas⁷⁶³.

EC financing of environment and sustainable management of natural resources under the ENP process over the 2007-2010 period amounted to €250 million⁷⁶⁴. The ENPI Regulation does not contain strict requirements for the environmental evaluation of ENP programmes/projects⁷⁶⁵ and although the EU cannot impose requirements on the neighbouring countries, there is some degree of indirect conditionality in the allocation of funding given the objective of gradual convergence with EU policies, including on the environment⁷⁶⁶. However, it has been noted by some NGOs that investments and technical and development cooperation under the ENPI in the energy sector has been dominated by infrastructure projects, notably highways and pipelines which do not serve sustainable energy supply, climate protection or other environmental and social concerns⁷⁶⁷. According to some NGOs, despite increasing attention to renewable energy, energy efficiency, the environment generally, and adaptation, this remains marginal when compared to other budget lines. Moreover these NGOs maintain that energy, transport and environment investments are often not coherent in their impacts. The approach to the energy sector remains focused on issues of energy security and transferring market liberalization concepts to the neighbourhood rather than issues relating to renewable energies and energy efficiency⁷⁶⁸.

The identification of priorities in ENP Action Plans is ultimately the responsibility of the partner country and the EU has a limited role in this selection process. Thus, certain issues such as energy security and infrastructure tend to receive more attention than others (e.g. biodiversity), reflecting the underlying political priorities of the partner countries. Despite an increasing awareness of environmental issues such as climate change or sustainable consumption and production, this is not yet reflected in concrete action on the ground⁷⁶⁹. The

⁷⁶² Quintet Group of Brussels-based NGOs, (2010), Joint Memorandum to Štefan Füle, European Commissioner for Enlargement on Concerns and Recommendations on European Neighbourhood Policy, September 2010.

⁷⁶³ WWF (2010), Is the Union for the Mediterranean paving the way for sustainability?- Discussion Paper -Revised October 2010.

⁷⁶⁴ CEC. (2009a). Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009

⁷⁶⁵ WWF. (2006). WWF Proposals for the European Neighbourhood and Partnership Instrument (ENPI) Implementation.

⁷⁶⁶ Stakeholder consultation, interview.

⁷⁶⁷ NGO Representatives. (2007). Letter from representatives of several non-governmental organisations from the EU and neighbouring countries who participated in the conference on 'Working Together – Strengthening the ENP' held in Brussels on 3 September 2007. Brussels. 8/10/2007.

⁷⁶⁸ NGO Representatives. (2007). Letter from representatives of several non-governmental organisations from the EU and neighbouring countries who participated in the conference on 'Working Together – Strengthening the ENP' held in Brussels on 3 September 2007. Brussels. 8/10/2007.

⁷⁶⁹ Stakeholder consultation, interview.

Commission's 2010 report on the ENP recognises that 'despite the compelling economic arguments in favour of strong action on environment in order to avoid much higher future clean-up costs, their allocated resources are not sufficient. While numerous international commitments and processes exist, implementation often lags behind'⁷⁷⁰. These factors undermine the achievement of the 6EAP objectives of promoting cross-border cooperation on environmental issues and integrating environmental considerations in its neighbourhood policies.

1.5.2 Drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the International area. Some factors have helped achieve objectives whereas other factors have undermined or prevented progress. The main drivers and barriers that have affected the attainment of 6EAP objectives in this area, as identified through our research and stakeholder consultation, are set out below.

Since 2001, there has been an increasing emphasis on country ownership of development activities, thus **integration of the environment in EU development cooperation policy** is dependent on the extent to which beneficiary countries and regions prioritize the environment in their planning and programming activities. Beneficiary countries and regions are required to concentrate funding on one or two focal sectors, given that the environment is rarely considered an urgent priority by beneficiaries it is often not picked as a focal sector and thus EU funding at the country level is rarely focused on the environment⁷⁷¹. The environment remains a lower priority on the agenda of many beneficiary countries due to the **relatively low policy profile and the lack of information⁷⁷² or understanding of the links between the environment, development and poverty⁷⁷³**, thus acting as a **barrier** to achieving the 6EAP objective of integrating the environment in EU development cooperation policy. The Court of Auditors came to a similar conclusion and maintained that 'due to the generally limited weight of environmental issues compared to other political priorities in beneficiary countries/regions, such commitment in practice is not always as firm and strong as declared, and does not always translate into an adequate level of counterpart cooperation and support at an operational level'⁷⁷⁴. Moreover, in many developing countries, government budgets are

⁷⁷⁰ CEC (2010c). Communication from the Commission to the European Parliament and the Council - Taking stock of the European Neighbourhood Policy. (COM(2010)207). 12/05/2010.

⁷⁷¹ It should be noted however that the environment is a more common intervention sector in regional programmes such as the ACP regional programmes for Central Africa and the Pacific and SWITCH-Asia given the trans-boundary nature of many environmental issues. CEC (2009), Improving environment integration in development cooperation, Issues paper, March 2009.

⁷⁷² Although an increasing number of studies examining the economic costs of environmental degradation are available, the results of these studies are often not widely shared.

⁷⁷³ CEC. (2009a). Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC (2009)555). Brussels. 21/04/2009.

⁷⁷⁴ Court of Auditors. (2006). SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. p 1-39.

not sufficient to finance conservation activities and in the short term, more financial benefit may be derived from depleting the natural resource base given that externalities are not taken into consideration⁷⁷⁵.

The 2006 Court of Auditors Report also criticizes the Commission for the **limited progress in building up environmental awareness and mainstreaming capacity in beneficiary countries** and for the **limited resources and capacity within the Commission services** to ensure implementation of environmental integration activities. In certain countries, the involvement of civil society organizations has improved; however there remains a need for more discussion at the national level and calls have been made for the public availability of CEPs/REPs, EIAs and SEAs to allow civil society organizations to participate in programming and implementation of activities⁷⁷⁶. Although training for existing staff on environmental mainstreaming began in 2005, it was not compulsory for key officials and thus suffered from low levels of attendance. The preparation of the environmental integration handbook was delayed (it was only finalized in 2006), and there has been limited attention to monitoring, evaluating and reporting on the environmental performance of the Commission's development cooperation activities⁷⁷⁷. The lack of awareness in beneficiary countries and capacity constraints within DG Development⁷⁷⁸ have thus acted as a barrier to achieving the 6EAP objective to integrate the environment in EU development cooperation activities. Another barrier has been the **limited use of the tools and procedures** for integrating environmental protection requirements in the EU's development cooperation policy in practice including EIAs and CEPs.

The main drivers behind the integration of the environment into the EU's development cooperation activities include the integration requirement in the Treaty, critical oversight (for example the 2006 report by the European Court of Auditors), and the EU commitment to Policy Coherence for Development⁷⁷⁹. A number of Member States (including Sweden, the Netherlands and Austria) have been consistently involved in, and supportive of, the process. The Czech Republic picked up the issue during its Presidency of the Council in 2009 and this was important in reinitiating efforts to take forward the 2005 Development Consensus following a lull in attention to this. Furthermore, a number of international developments have been influential factors behind the EU's increasing emphasis on integrating environment in development cooperation policies. The link between the environment, poverty and development has been on the international agenda since the 1972 UN conference on Human Environment. The subsequent conference in Rio in 1992, the adoption of the Millennium Development Goals in 2000 and the 2002 World Summit on Sustainable Development have helped to sustain momentum on these issues. The Paris Declaration on Aid Effectiveness,

⁷⁷⁵ CEC (2009b), Improving environment integration in development cooperation, Issues paper, March 2009.

⁷⁷⁶ WWF, Fern, Birdlife International, (2007), Environmental tools in EC development cooperation: Transparency and public availability of documentation - A review, September 2007, Brussels.

⁷⁷⁷ Court of Auditors. (2006). SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. p 1-39.

⁷⁷⁸ Stakeholder consultation, interview.

⁷⁷⁹ Stakeholder consultation, interview.

which was signed by the EU and Member States in March 2005, led to increased recognition of the need to harmonise approaches to environmental assessment and the need to strengthen these approaches in order to address the impacts of global environmental issues such as climate change, loss of biodiversity and desertification⁷⁸⁰. A number of high level forums on aid effectiveness were held following the adoption of the Paris Declaration including a meeting in Accra, Ghana in September 2008 at which the Accra Agenda for Action was adopted. The EU played an active role in the formulation of both the Paris Declaration and the Accra Agenda for Action⁷⁸¹. In Accra, for example the EU pushed for the environment to be included as a key issue for ‘effective’ development assistance⁷⁸². The EU also sits on the OECD Development Assistance Committee Network on Environment and Development Co-operation (ENVIRONET) which discusses issues relating to integration in development cooperation policy. This involvement may also have helped push forward EU efforts in this area⁷⁸³.

With regard to the **drivers** behind the EU’s constructive role in **international environmental governance**, it should be noted that this role is not limited to the time period of the 6EAP. Instead, the EU emerged as a global ‘green leader’ in the second half of the 1980s.⁷⁸⁴ Observers have identified, among other factors, the withdrawal of the US as a leader in international environmental policy making,⁷⁸⁵ the EU’s (competitive) interest in promoting its own rather stringent environmental standards at the international level,⁷⁸⁶ and the EU’s desire to shape its identity as a civilian world power⁷⁸⁷ as possible reasons for the active role of the EU in international environmental policy making. Thus, while specific factors behind individual measures should not be disregarded, more general factors are likely to have played a significant role in the EU’s approach towards international environmental governance throughout the 6EAP period. Nonetheless, a number of factors have played a role in further promoting this role, including **public opinion** favouring stringent EU action and public scrutiny, e.g. the EU’s role in the adoption of the Cartagena Protocol on Biosafety and its later approval, in international climate negotiations and in negotiations of an Access and Benefit Sharing (ABS) regime under the CBD. **Competence for environmental agreements**

⁷⁸⁰ CEC. (2009a). Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC (2009)555). Brussels. 21/04/2009.

⁷⁸¹ Wolff, S., Seters, J., (2010), European Development Cooperation. Brokering environmental knowledge beyond Lisbon, Maastricht/The Hague, ECDPM and Clingendael Institute, September 2010.

⁷⁸² Stakeholder consultation, interview.

⁷⁸³ Stakeholder consultation, interview.

⁷⁸⁴ See e.g. Vanden Brande, Edith (2006). *The role of the European Union in global environmental politics: green civilian power Europe?* Ghent University. p. 7, <http://www.keele.ac.uk/research/lpj/ecprsumschool/Papers/E.BrandeGnCivPower.pdf>.

⁷⁸⁵ See e.g. Vanden Brande, Edith (2006). *The role of the European Union in global environmental politics: green civilian power Europe?* Ghent University. p. 7, <http://www.keele.ac.uk/research/lpj/ecprsumschool/Papers/E.BrandeGnCivPower.pdf>.

⁷⁸⁶ See Kelemen, R. Daniel (2010). Globalizing European Union environmental policy, *Journal of European Public Policy* Vol. 17, No. 3, pp. 335–349.

⁷⁸⁷ See the references in Kelemen, R. Daniel (2010). Globalizing European Union environmental policy, *Journal of European Public Policy* Vol. 17, No. 3, pp. 335–349, 338.

is frequently shared between the EU and the Member States, and in some cases only EU Member States had full standing in debates and negotiations. Even in cases where the Commission was not the sole negotiator on behalf of the EU, the EU has nonetheless been observed to have been a relatively influential⁷⁸⁸ and coherent⁷⁸⁹ actor in international negotiations. However, in some instances the fact that competence is split between Member States and the EU has been stated to have had a negative impact on the EU's attainment of its objectives, e.g. during the 2002 WSSD given the lack of agreement between different DGs.⁷⁹⁰ **External factors** have also contributed to the extent that the substantial policy objectives of the EU were attained, e.g. EU proposals for UNEP reform have so far not been agreed at the international level given the reluctance of some other key parties.

In relation to **trade and investment**, in certain instances, **decision-making procedures** have led to the adoption of more ambitious legislative measures, e.g. the changes introduced by the Parliament to the Commission's proposal on illegal logging. Sometimes, the Parliament's position has also been described as important in making EU policies more environmentally friendly, e.g. in the case of EIB lending practices.⁷⁹¹ In certain areas, high **public scrutiny** has also influenced EU decisions, e.g. the conclusion of certain trade agreements, in particular with developing countries and CSR,⁷⁹² and investment decisions by the EIB.⁷⁹³ Stakeholder interests may have had an impact on the level of ambition of certain measures, e.g. in the CSR field, stakeholders are very divided about the right approach to CSR, with enterprises generally emphasizing the voluntary nature of CSR, and NGOs and trade unions stressing the need for binding rules⁷⁹⁴. **External factors** arguably beyond EU control have also played a role in this area. Concerning WTO negotiations, the most important factor preventing progress to date is the failure to reach consensus among WTO members in the negotiations. This is related to different economic and political interests of the members, in particular developed and developing countries. The fact that the Doha Round follows a unified approach, i.e. consensus needs to be reached on all of the

⁷⁸⁸ Chaban/Elgström/Holland also made a similar observation for three international trade or environment negotiation processes for which the distribution of competences between the EU and the member states was different. They observe that 'the EU was seen as one actor, and as an extremely important actor, regardless of its formal position.', Natalie Chaban/Ole Egström/Martin Holland (2006), *The European Union As Others See It*, European Foreign Affairs Review, Vol 11, pp 245-262, 251.

⁷⁸⁹ Vogler, John, Hannes Stephan (2007). *The European Union in global environmental governance: Leadership in the making?* *International Environmental Agreements* (2007) 7: 389-413, p. 408.

⁷⁹⁰ See Lightfoot, Simon/Burchell, Jon (2005), *The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?*, *Journal of Common Market Studies*, Vol. 43:1, p. 75-95, 82f.

⁷⁹¹ Tricarico, A. (2010), *Hit and run development - Some things the EIB would rather you didn't know about its lending practices in Africa, and some things that can no longer be covered up*, http://www.counterbalance-eib.org/images/mediaroom/doc/hit_run_development_web.pdf, p. 21.

⁷⁹² At the EU level, there is for example the 'European Coalition for Corporate Justice' (ECCJ), which involves a substantial number of NGOs from many member states and campaigns for legal reforms to improve corporate accountability. In individual member states there have been some high-profile law cases on corporate misbehaviour outside the EU, which received a certain amount of public attention (e.g. the case of the company Trafigura case fined for waste-dumping in Ivory Coast).

⁷⁹³ Stakeholder consultation, interview.

⁷⁹⁴ Bernhard Perchinig (n.y), *Antidiscrimination: A European Perspective*, EIF Working Paper No. 10, p. 6

negotiation items identified in the Doha agenda, does not facilitate the conclusion of the negotiations. A similar picture may be drawn with regard to the EU's own trade negotiations, where the interests and positions of the parties involved and the resulting compromises largely determine outcomes. The EU position is, in turn shaped by many factors, including the negotiation mandate given to the Commission by Member States, the views of the European Parliament, Member States, civil society, and business actors.⁷⁹⁵ The limited impact of the GSP+ scheme on improving environmental conditions in the eligible developing countries has been attributed to the lack of **implementation** in these countries, a factor also arguably beyond the control of the EU.

Despite the existence of several **ENP/regional** initiatives dealing with environment and climate change, and the progressive alignment of the environmental policies of ENP countries with the EU, a major problem remains the lack of **implementation** of all such initiatives, laws and policies. 'Even if the implementing instruments attach high priority to sustainable development and environmental objectives, actual implementation in these areas may be undermined by lack of awareness, weaknesses within environmental administrations, and competition with other priorities'⁷⁹⁶. This in part reflects the fact that it is mostly up to the partner countries themselves to define specific national priorities, and the fact that environment is often not considered adequately is a reflection of the priorities the countries themselves attach to the issue. This is perhaps somewhat unsurprising given that main emphasis of the ENP is on political reform and economic cooperation. Improved capacity and participation of environmental civil society organisations would help reduce some of these implementation gaps; however the procedures and timeframes under the ENPI remain burdensome for civil society organisations and local authorities⁷⁹⁷, only a limited proportion of funds available to civil society organisations is actually dispersed due to the selected implementation modes, the focus on budget support which targets national government activity, and the limited budget allocated for non-state actors and local authorities⁷⁹⁸. Moreover, the unclear relationship between the ENP as a framework policy and regional initiatives such as the Black Sea Synergy and the Union for the Mediterranean has led to a lack of coordination among these initiatives and the different EU assistance instruments⁷⁹⁹. Some of the drivers in the area include a good team working on the issue within the Commission, pressure from NGOs, some good capacity building activities, and the establishment of thematic sub-groups of Commission officials and experts from neighbouring countries which have also started to discuss environmental issues⁸⁰⁰.

⁷⁹⁵ Stakeholder consultation, interview .

⁷⁹⁶ WWF. (2006). WWF Proposals for the European Neighbourhood and Partnership Instrument (ENPI) Implementation.

⁷⁹⁷ EP . (2009). European Parliament resolution of 19 February 2009 on the review of the European Neighbourhood and Partnership Instrument (2008/2236(INI))

⁷⁹⁸ WWF. (2009). WWF position on the ENPI mid-term review. March 2009

⁷⁹⁹ EP . (2009). European Parliament resolution of 19 February 2009 on the review of the European Neighbourhood and Partnership Instrument (2008/2236(INI)).

⁸⁰⁰ Stakeholder consultation, interview.

1.6 Strategic approaches and instruments

1.6.1 Achievement of objectives

1.6.1.1 Public participation and EIA/SEA

The 6th EAP calls for public participation in several articles as follows:

- Article 2(3) refers to, 'extensive dialogue with stakeholders, raising environmental awareness and public participation;'
- Article 3(9) refers to participation of European citizens specifically requiring '...access to information, participation and justice through early ratification of the Aarhus Convention by the Community and by Member States;...'
- Article (15) refers to, 'Provision for access to environmental information and to justice and for public participation in policy-making will be important to the success of the Programme.'
- Article 10(a), and to a certain degree (b), refer to priority actions in environmental policy making including good governance involving consultation with stakeholders and strengthening participation by ENGOs.

The EU has been a party to the Aarhus Convention since 17 May 2005. The Aarhus Convention is highly influential in promoting the public participation aspects of the 6th EAP and is directly responsible for the adoption of Directive 2003/35/EC. Directive 2003/35/EC, in force as of 2005, amended the EIA process using public participation principles and guidelines from the Aarhus Convention. Before being amended by Directive 2003/35/EC, the IPPC directive only used the term public and only had to consider comments before the decision was made. The Directive 2003/35/EC adds the 'public concerned' as determined by member states. In addition, the Aarhus Convention, earlier EIA amendments such as Directive 97/11/EC were guided by the UN/ECE Espoo Convention on EIA in a transboundary context.

The SEA Directive 2001/42/EC is worth mentioning here although it was established before the 6EAP was launched. As of 11 July, 2010 the Protocol on Strategic Environmental Assessment to the UN/ECE Espoo Convention, signed by the EU in Kiev, Ukraine May 2003, entered into force.

The Directive 2003/35/EC is concerned with 'providing for public participation in respect of drawing up of certain plans and programmes relating to the environment' (Article 1 (a): Objectives) 'improving public participation and providing for provisions on access to justice within Council Directives 85/337/EEC [the Environmental Impact Assessment Directive] and and 96/61/EC [the IPPC Directive, codified version 2008/1/EC]' (Article 1 (b) Objectives). Several plans and programmes related to the environment are considered including waste, water, and air issues. More recently in 2010, different directives govern different plans and voluntary agreements regarding the plans of member states are asserted⁸⁰¹

⁸⁰¹ COM (2010)143.

Several directives have furthermore facilitated the public participation goals of the 6th EAP including Directive 85/337/EEC as amended by Directive 97/11/EC (the EIA Directive); Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC. Also see, the guidance document on reporting about the experience gained in the application of Directive 2003/4/EC concerning on public access to environmental information. Additionally, Directive 2001/42/EC of June 27 2001 on the assessment of plans and programmes related to the environment and Directive 2000/60/EC of October 23 2000 establishing a framework for Community action in the field of water policy⁸⁰² were also important in contributing toward that goal. IMPEL (European Union Network for the Implementation and Enforcement of Environmental Law) [referred to in Article 3(2) of 6EAP], Multi-Annual Work Programme 2007-2010, Adopted in Espoo, 6-8 Dec. 2006 refers to the 6EAP and related directives (including 2003/35/EC). Other important EU initiatives that support the 6th EAP call for public participation include the launch of the Register of Interest Representatives in June 2008 related to the European Transparency Initiative. I

The 6th EAP specifically asserts the importance of the strategic and integrative instruments: Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) as follows:

- Article 3(3) refers to, 'full and effective use and implementation of EIA and SEA'
- Article 10(a), and to a certain degree (b), refer to priority actions in environmental policy making including good governance involving consultation with stakeholders and strengthening participation by ENGOs.

Directive 2003/35/EC contributes to, 'full and effective use and implementation of EIA and SEA' by integrating relevant aspects of the Aarhus Convention, namely Articles 6, 7, and 9(2) and (4).

The 1973 First Environmental Action Programme is attributed with the origins of 85/337/EEC on Environmental Impact Assessment. The Fifth Environmental Action Programme is mentioned in the Preamble of Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC Directive, codified version 2008/1/EC) and the 'Report from the Commission to the European Parliament and the Council on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC) - How successful are the Member States in implementing the EIA Directive'⁸⁰³

The Commission Staff Working Document SEC(2007) 546 an accompanying document to the Communication from the Commission the European Parliament, the Council and the European Econ. And Social Committee and the Committee of the Regions on the Mid-term review of the 6EAP notes that in 2006 the Commission clarified Article 2(3) of the EIA Directive to facilitate its application at the national level. Article 2(3) with the amendment of

⁸⁰² see Water Framework Directive.

⁸⁰³ see COM (2003) 0334.

25 June 2005 by Directive 2003/35/EC dissolves member state discretion regarding the public availability of information on alternative forms of assessment.⁸⁰⁴,

Summary assessment of the thematic area Directive 2003/35/EC was considered in a report by the Commission which was adopted 14 April 2010.⁸⁰⁵ The opportunities of the Directive include that, according to some states, the 'standard' of public information is increased, officials and authorities are more attentive to the role of the public in the development of plans and programmes.⁸⁰⁶ Public consultation is associated with project changes and the identification of public priorities.⁸⁰⁷

The application and effectiveness of Directive 2003/35/EC is complicated by factors that ultimately challenge public consultation processes in general: namely, time and resource requirements, and questionability of relevant or verifiable concerns.⁸⁰⁸

Impact assessment is part of the Commission's efforts to affirm quality legislation and policies. Since 2002, an impact assessment system accomplishing over 400 impact assessments has developed.⁸⁰⁹ According to the 15 January 2009 Impact Assessment Guidelines, this system continues to be improved in terms of 'Better stakeholder consultation' and 'More transparent presentation of results' among other considerations.⁸¹⁰

In a Commission Staff Working Document, the Impact Assessment Board Report for 2009 was asserted.⁸¹¹ In this report, the Impact Assessment Board, asserts the importance of transparency and better planning as key to impact assessment quality.⁸¹² Regarding environmental impacts, the Board recommends more attention to indirect environmental impacts.⁸¹³

Both the EIA and SEA have been critically considered in various reports and communications. For example, a report was adopted regarding the application and effectiveness of the SEA.⁸¹⁴ An earlier report before Directive 2003/35/EC was in force, refers to, 'the adoption of the 5th Environmental Action Programme with its emphasis on an integrated approach to environmental protection and management.'⁸¹⁵ The report concluded

⁸⁰⁴ EC Clarification of the Application of Article 2(3) of the EIA Directive.

⁸⁰⁵ COM(2010)143 final.

⁸⁰⁶ COM(2010)143 final.

⁸⁰⁷ COM(2010)143 final.

⁸⁰⁸ COM(2010)143 final.

⁸⁰⁹ SEC(2009) 92.

⁸¹⁰ SEC(2009) 92.

⁸¹¹ SEC(2009) 1728 final.

⁸¹² SEC(2009) 1728 final.

⁸¹³ SEC(2009) 1728 final.

⁸¹⁴ COM(2009) 469 final.

⁸¹⁵ EC (2003): Report from the Commission to the European Parliament and the Council on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC): How successful are the Member States in implementing the EIA Directive.

that at that point in time, 'It appears that the main problem lies with the application and implementation of the Directive [EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC) and not, for the most part, with the transposition of the legal requirements of the Directive.'⁸¹⁶

More recently, assessment of the challenges of the EIA instrument include:

1. varied or vague definitions of important concepts such as 'the public' and the 'public concerned or 'early and effective';
2. timing of public participation;
3. monitoring and reporting requirements; and⁸¹⁷
4. public not aware of its rights⁸¹⁸

The Committee of Regions, 'stresses that public consultation for EIAs should begin as early as possible, for instance at the scoping and screening stage, and that minimum requirements must be prepared on how to make the EIA documentation available to the public concerned.'⁸¹⁹

1.6.1.2 Improvement of the process of policy making through evaluation

This sub-area deals with Article 10 (c) 6EAP 'Improvement of the process of policy making through evaluation'. Article 10 (c) requires this to be done by using ex-ante and ex-post evaluations. Though the EU has been active in both fields during the 6EAP's lifetime, the introduction of the EU's Impact Assessment (IA) system was a major new initiative for ex-ante evaluation in which great efforts have been invested. IA therefore builds the focus of the following sections which analyse the IA guidelines identified as priority measure for Article 10 (c). However, the EU has also put in place several measures on evaluation in a broader sense of which IA is a part. Though the following will not deal with them in greater detail they will be mentioned where appropriate. This for example includes ex-post evaluation or measures taken in the context of IA and the simplification and administrative burden reduction programme. Furthermore, one should not forget the Member States also being active in evaluation. This does not only include the implementation of the Environmental Impact Assessment and Strategic Environmental Assessment Directives but environmental policy also promotes, though more indirectly, better evaluation in the Member States through the planning required for River Basin Management Plans under the Water Framework Directive for example.

⁸¹⁶ COM(2003) 334 final; see p. 6.

⁸¹⁷ COWI, 2009; Regina Schneider's article, 'Environmental Impact Assessment –A potentially strong tool for environmental protection' in Newsletter #57, April 2010.

⁸¹⁸ COM(2010)143 final.

⁸¹⁹ Committee of Regions, 84th plenary session 14 and 15 April 2010 Opinion of the Committee of the Regions on Improving the EIA and SEA Directives

Overview of objectives

The Impact Assessment Guidelines do not directly affect the content of policies or the choice of instruments. Rather, they address the way the content of policies is elaborated by providing guidance on assessing their expected impacts. Of the **objectives** listed in Article 2, therefore, some objectives directly relate to this sub-area others relate more indirectly.

This sub-area is considered to contribute most to the following overall objectives:

- The Programme shall ensure that environmental objectives, which should focus on the environmental outcomes to be achieved, are met by the most effective and appropriate means available;
- Policy making should be based on an analysis of benefits and costs, taking into account the need to internalise environmental costs;
- Policy making should be based on the best available scientific evidence and the further improvement of scientific knowledge through research and technological development.

The Impact Assessment Guidelines may – more indirectly – also contribute to achieve the following strategic objectives:

- The Programme shall form a basis for the environmental dimension of the EU SDS and contribute to the integration of environmental concerns into all Community policies, inter alia by setting out environmental priorities for the Strategy;
- Measures proposed and adopted in favour of the environment should be coherent with the objectives of the economic and social dimensions of sustainable development and vice versa.

What comes most closely to an **output requirement** are the two bullet points mentioned in Article 10 (c):

- ‘ex-ante evaluation of the possible impacts, in particular the environmental impacts of new policies including the alternative of no action and of the proposals for legislation and publication of results.’
- ‘ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives.’

Overview of measures

With the Gothenburg European Council Conclusions in 2001 calling for a sustainability assessment of the main policy proposals (SIA) and the Laeken European Council in 2001 endorsing the recommendations of the Mandelkern group exploring the options for Regulatory Impact Assessment the EU had come at the same issue of ex-ante assessment approaches from two different sides, with slightly hasidifferent emp. In the end the two possible IA approaches were merged into one single procedure: The EU Impact Assessment.

This is recorded in the Commission's Communication Simplifying and Improving the Regulatory Environment⁸²⁰ that proposed to introduce 'a coherent method for impact analysis' for all major Commission proposals, by the end of 2002. This method was intended to bring together in a single integrated system all existing internal procedures for impact assessment. In its 2002 Communication on Impact Assessment⁸²¹ the Commission provided more details of how the new system was intended to operate. This was followed by detailed methodological and procedural guidelines issued by the Commission in 2002, the Impact Assessment Guidelines. They have been revised several times and the Commission published its latest impact assessment (IA) guidelines⁸²² in 2009. The guidelines define the key analytical steps to be taken in order to carry out an IA.

The EU's overall approach to evaluation is spelled out in Communication to the Commission - 'Responding to Strategic Needs: Reinforcing the use of evaluation' SEC(2007)213 and its Annexes. Though making reference to the EU's IA system and seeing it as a core approach to ex-ante evaluation, the Communication takes a broader look at the EU's overall use of evaluation. Next to IA as a specific form of ex-ante evaluations of legislation it also includes ex-ante evaluation as well as ex-post evaluation of expenditure programmes and non-spending activities. Responsibility for the evaluation system is with the Secretariat General (formerly with DG Budget). The communication also includes a set of standards for conducting evaluations.

Core to the EU's evaluation system for spending activities is the Financial Regulation.⁸²³ It requires all programmes and activities involving significant spending to be evaluated both ex-ante (before the event) and ex-post (after the event). The requirements are set out in more detail in the Financial Regulation's implementing rules. Two other major evaluation initiatives were set up in the context of EuropeAid projects and investment projects co-financed by ERDF, CF and IPA in the framework of EU Cohesion Policy. A forward looking evaluation plan is available on the EU's evaluation website.⁸²⁴

Both, the EU's IA system as well as its overall approach to evaluation are not directly targeted to environmental policy. However, as the EU's IA system explicitly includes environmental aspects and both, the IA system as well as the EU's evaluation system are applied to environmental spending and non-spending activities we assume in the following that if for example the use of most effective means available has increased as a result of the EU's evaluation activities that this then also applies to environmental issues.

⁸²⁰ COM (2001) 726.

⁸²¹ COM (2002) 276.

⁸²² SEC (2009) 92.

⁸²³ Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 27 and Commission Regulation (EC, Euratom) No 2342/2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 21.

⁸²⁴ http://ec.europa.eu/dgs/secretariat_general/evaluation/docs/evaluation_plan_2010_2015_en.pdf.

Contribution of Important Measures to Objective Achievement

Though the EU's Impact Assessment system is firmly rooted in the mentioned Commission Communications and Council Conclusions the IA guidelines are the means making the introduction of an ex-ante assessment of policies (proposals for legislation) operational. The following sections therefore focus on the IA guidelines. Where applicable the following sections also deal with the broader approach to evaluation as set out in the Commission Communication - 'Responding to Strategic Needs: Reinforcing the use of evaluation' SEC(2007)213 and its Annexes.

In terms of implementing the IA guidelines a general development which has helped to improve implementation of the IA guidelines was the setting up of the IA Board. The IA Board was established in 2006. It regularly reports on the quality of the IAs. The 2010 report states that there has been an improvement of IA quality over time: In contrast to 2008 in 2009 the quality of most IAs done has improved⁸²⁵. This was confirmed by the Court of Auditor Report.⁸²⁶ The increasing level of ambition of the IA guidelines over time has contributed to the positive developments regarding the choice of most effective means; more Cost-Benefit-Analysis; use of best available scientific evidence especially the set-up of the IA board.

There is no evidence for a direct influence on improved environmental conditions through impact assessment though indirect improvements may have occurred. The following sections, therefore, do not discuss environmental or other trends.

Objective 'Use of most effective and appropriate means available'

Assessing the effectiveness of potential instruments as well as choosing the appropriate means for tackling a certain problem is a major issue in the IA guidelines⁸²⁷. One of the questions to be answered in the course of an IA is for example: How do the main regulatory options compare in terms of effectiveness, efficiency and coherence in solving the problems? Impact Assessment therefore has the potential to considerably contribute to increase the use of the most effective and appropriate means available. In order to assess administrative costs, the Commission has introduced the Standard Cost Model to the IA guidelines. An independent evaluation of the Commission's IA system in 2007 comes to the conclusion that the SCM was given high priority in the EU institutions. However, it also highlights the limitations to this instrument: In practice political decisions were often made with administrative costs playing a less important role.⁸²⁸

Also, the Commission's better regulation activities beyond IA are designed to make sure that policy-makers are using the right tools to get the job done.⁸²⁹ To this end, the Commission has taken several initiatives which have made 'legislation clearer and more accessible,

⁸²⁵ European Commission 2010a, 7.

⁸²⁶ European Court of Auditors (2010): Impact assessments in the EU Institutions: Do they support decision-making? Special report no 3. Luxemburg.

⁸²⁷ European Commission 2009b, 4; 6; 30.

⁸²⁸ The Evaluation Partnership 2007, 96.

⁸²⁹ http://ec.europa.eu/governance/better_regulation/key_docs_en.htm.

bringing tangible benefits for companies and citizens.⁸³⁰ The Commission has implemented a mapping of the 27 Member States in 13 priority areas assessing the administrative burdens produced by EU legislation. This 'has provided a much better understanding of how Member States transpose and implement EU legislation, and what this means for businesses in terms of information obligations. The exercise has increased the awareness of public authorities of administrative burdens, and provided them with an opportunity to revisit the effectiveness and efficiency of the rules in place.'⁸³¹

The extent to which the most effective and appropriate means available has been used more often remains unclear. The 'The Evaluation Partnership study takes a more critical assessment while the Commission itself seems to be more positive.'⁸³² Also, the Court of Auditor Report considers the system to be effective.⁸³³ Whether the IA system has led to the adoption of more effective and appropriate policy-instruments in practice, also remains open. This is not only because empirical data on the effectiveness and appropriateness of policy instruments is lacking but also because the 6EAP does not define what exactly 'most effective and appropriate' as well as 'more use' means.

With regard to the Commission's evaluation system as set out in the Communication on the use of evaluation (SEC(2007)213), the Communication itself offers the following insights as regards the use of most effective and appropriate means available: The Communication cites a report by the Court of Auditors,⁸³⁴ which concluded that evaluation had become an established management tool, which is widely used to improve the preparation, implementation and performance of individual policy instruments.⁸³⁵ Furthermore, it states that since 1996, when the Commission started its generalised evaluation policy the number of evaluations carried out annually has more than doubled from around 80 to around 170 in 2005.⁸³⁶

Objective 'Use of analysis of benefits and costs'

The quantification of benefits and costs is required by the IA guidelines.⁸³⁷ It is quite likely, that the amount of analysis of benefits and costs in IA has increased since the 6EAP's adoption. Still, the IA Board has on a number of occasions recommended that further efforts are made to quantify impacts with regard to benefits and costs.⁸³⁸ So, the IA Board's recommendations suggest that there is more room for use of cost-benefit analysis. This finding is also confirmed by the independent evaluation of the Commission's IA system,

⁸³⁰ European Commission 2009c.

⁸³¹ European Commission 2009c.

⁸³² European Commission 2009c.

⁸³³ European Court of Auditors (2010): Impact assessments in the EU Institutions: Do they support decision-making? Special report no 3. Luxemburg, p. 6.

⁸³⁴ Presidential letter of 19 September 2005.

⁸³⁵ SEC(2007)213, 15.

⁸³⁶ Ibid.

⁸³⁷ European Commission 2009b, 10.

⁸³⁸ European Commission 2009b, 10.

which found that of the 155 IAs screened during the evaluation only 14% quantified impacts (though not necessarily in monetary terms). It goes on to state that cost-benefit analysis (CBA) or cost-effectiveness analysis (CEA), are often not employed for the comparison of alternative scenarios.⁸³⁹ These findings have to be interpreted with a view to the fact that the study had been done in the early days of the EU's IA system. Since then the system has been revised and improved considerably not at least by setting up the IA Board. Another indication for judging the extent of CBA use in the Commission is to compare it with Member State practice. Compared to the Member States the EU makes more frequent use of monetarisation.

A study on the use of CEA in the EU's evaluations has reviewed 117 reports which include a substantial conclusion on efficiency, of which 23 of them include a CEA and seven a cost-benefit analysis. While a majority of the reviewed reports focus on operational efficiency, effects are assessed quantitatively in 16 reports. Seven reports include a CEA reasoning with no quantified estimate of effect. The study qualifies 11 reports as 'good CEAs'.⁸⁴⁰

The finding that the use of analysing benefits and costs could be improved may be due to the fact that the use of cost-benefit analysis is still methodologically difficult in many cases especially for environmental issues. Again, this was confirmed by the independent evaluation mentioned earlier: Economic costs usually are much easier to assess the long-term environmental benefits which are difficult to anticipate. Interviews conducted in the context of the evaluation confirmed this finding by highlighting the fact that adequately quantifying social and environmental benefits is a major problem.⁸⁴¹ One of the arguments for IA was specifically to make sure that all impacts were taken account of together, regardless of whether they were qualitative, quantified or monetised. The evaluation should therefore recognise the risk of un-quantified environmental benefits being ignored at the expense of other quantified benefits which may lead to a biased analysis.

Objective 'Use of best available scientific evidence'

The IA guidelines acknowledge the role of and encourage the use of scientific evidence in IA.⁸⁴² Otherwise, the use of scientific evidence in IA is not researched. The external evaluation of the IA system in 2007, however, looked at the extent of external work done for IAs. The externalised work ranged from expert support, both in terms of support specific to the policy area and methodological expertise (e.g. legal specificities and sophisticated modelling), to the need for independent assessments (e.g. due to the political sensitivities, or the need to ensure data confidentially and in ensuring buy-in from the public or industry), to the need for additional human resources. Such type of external work was of assistance in implementing Impact Assessments: Consultancy reports were the second most commonly used tool for collecting data. Furthermore, some 80% of respondent to the information request believed that external work had added value to Impact Assessments, with the

⁸³⁹ The Evaluation Partnership 2007, 140.

⁸⁴⁰ Eureval-C3E, 29.

⁸⁴¹ The Evaluation Partnership 2007, 42.

⁸⁴² European Commission 2009b, 18.

remaining responding neutrally.⁸⁴³

The increased use of best available scientific evidence in IA (and therefore indirectly also in legislation) has been influenced by the impact assessment system as such, its guidelines, and the Impact Assessment Board. This conclusion has been confirmed in personal conversations with DG Environment officials.

In how far a similar trend can be established as regards the EU's overall evaluation system remains open.

Relevant overall aims and specific objectives

The EU IA guidelines have also contributed to the following two overall aims:

- The Programme shall form a basis for the environmental dimension of the EU SDS and contribute to the integration of environmental concerns into all Community policies, inter alia by setting out environmental priorities for the Strategy;
- Measures proposed and adopted in favour of the environment should be coherent with the objectives of the economic and social dimensions of sustainable development and vice versa.

As one of the driving forces to introduce the IA system was the EU-SDS the guidelines help to implement the EU Sustainable Development Strategy. All three pillars of sustainable development are mentioned in the IA guidelines, which explicitly require all IAs to consider environmental, economic and social impacts likewise. The IA guidelines require IAs to address the likely economic, social and environmental impacts for each option, as well as potential trade-offs and synergies.⁸⁴⁴ Though the 2009 report of the IAB mentions a number of qualitative concerns with regard to economic (more than 60% of the cases needed improved analysis), social (more than 40% of the cases needed improved analysis) and environmental (about 25% of the cases needed improved analysis) impact analysis⁸⁴⁵, it does not provide any assessment of the integration of the three SD pillars.

In this regard the independent TEP evaluation of the Commission's IA helps. It concludes that 'overall, 53% of IAs identified impacts in all three pillars, 31% in two pillars, and 7% in only one. The remaining 9% did not identify any impacts at all.'⁸⁴⁶ This suggests that a little more than half of the IAs studied at least took impacts in all three pillars into account at the same time. This finding has to be interpreted in view of the fact that some policies – such as those related to patent law or the banking sector – may have no environmental impacts and so justify no environmental analysis. It does not necessarily mean that they also assessed them in an integrated way. Also the extent to which impacts in each of the three pillars have been taken into account varies:

'The screening of all IA reports showed that 86% of all IAs identified at least one economic

⁸⁴³ The Evaluation Partnership 2007, 58.

⁸⁴⁴ IAG, 31.

⁸⁴⁵ IAB 2009, 10.

⁸⁴⁶ The Evaluation Partnership (2007): Evaluation of the Commission's Impact Assessment System. Final Report.

impact, 87% identified social impacts, and 55% identified environmental impacts of at least one relevant option explicitly assessed (independently of the level of detail).⁸⁴⁷ Though this looks as if environmental aspects have been considerably less assessed than economic impacts the TEP study finds that the non-consideration of specific types of impacts in the IAs and proposals adopted in 2006 seems justified in almost all cases by the nature of the proposed intervention.⁸⁴⁸ Differentiating this finding even further, the study shows that there is an obvious imbalance in the extent to which impacts in the different pillars were quantified. This is due to the fact, mentioned above, that economic impacts (especially costs) are generally much easier to quantify than social and environmental benefits, for which adequate and generally accepted methodologies are much scarcer.⁸⁴⁹

Output Requirements

With the IA guidelines the EU has introduced an ex-ante evaluation of possible impacts in policy making. The system is integrated (including social, economic and environmental impacts). It requires the assessment to contain a no-action alternative. Last but not least, the impact assessment report is published on the Commission website on Impact Assessment. The priority measure, therefore, meets all output requirements as set out in the 6EAP.

As regards the output requirement 'Ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives', it is harder to say whether the EU has met this requirement. Though ex-post evaluation is part of the elaborate EU evaluation system they are not explicitly designed to evaluate the effectiveness of existing measures in meeting their environmental objectives, though their application also includes environmental measures such as the LIFE+ Programme.

1.6.1.3 Environment in Community Research Programme

Overall aims, specific objectives and priority actions of the 6EAP

According to the 6EAP, the Community should adopt an integrated approach to environmental policy-making with an emphasis on *inter alia* the 'best available scientific evidence, and the further improvement of scientific knowledge through research and technological development' (Article 2 (3)). The promotion of research is included as a priority action in each of the four thematic areas of the 6EAP. Moreover, Article 10(d) of the 6EAP sets out the following specific priority actions relating to research:

- 'ensuring that environment and notably the priority areas identified in this Programme are a major priority for Community research programmes. Regular reviews of environmental research needs and priorities should be undertaken within the context of the Community Framework Programme of research and technological development. Ensuring better coordination of research related to the

⁸⁴⁷ Ibid.

⁸⁴⁸ Ibid.

⁸⁴⁹ Ibid.

environment conducted in Member States inter alia to improve the application of results;

- development of bridges between environmental and other actors in the fields of information, training, research, education and policies;'

Overview of measures adopted by the EU

Decision No 1513/2002/EC⁸⁵⁰ concerning the **6th Framework Programme (6FP) of the European Community for research, technological development and demonstration activities** for the 2002 to 2006 period was adopted in August 2002. The 6FP had a total budget of €16.7 billion and was structured around three headings. The major part of research efforts focused on activities under the heading of 'focusing and integrating Community research' which included sustainable development, global change and ecosystems as one of seven thematic priorities. This priority area was allocated a budget of €2.12 billion (€810 million for sustainable energy systems, €610 million for sustainable surface transport, and €700 million for global change and ecosystems), representing almost 19% of the total budget for 'focusing and integrating Community research'. The 6FP also included a budget of €555 million for specific activities covering a wider field of research which included support of EU policies and anticipating scientific and technological needs in areas such as 'sustainable development, in particular the Community policy objectives relating to environment (including those set out in the sixth environment action programme), transport and energy'.⁸⁵¹ One of the research priorities identified was the sustainable management of Europe's natural resources.

Decision No 1982/2006/EC⁸⁵² concerning the **7th Framework Programme (7FP) of the European Community for research, technological development and demonstration activities** for the 2007 to 2013 period was adopted in December 2006. The total budget of the 7FP is €50.5 billion. Objectives and activities are organized under four main programmes, namely Cooperation, Ideas, People and Capacities. The majority of funding (€32.4 billion, 64%) is allocated to the Cooperation Programme which has ten themes including: Energy (€2.35 billion, 7% of the Cooperation programme); Environment (including climate change) (€1.89 billion, 6%); Transport (€4.16 billion, 13%); and Food, Agriculture and Fisheries, and Biotechnology (€1.94 billion, 6%). Across all these themes, support for trans-national cooperation is to be implemented through: collaborative research, Joint Technology Initiatives, coordination of non-Community research programmes, and international cooperation. The 6EAP's priorities of climate change, environment and health are addressed under the Environment Theme, specifically under the Climate change, pollution and risks activity; while the 6EAP priorities of nature and biodiversity and natural resources and waste

⁸⁵⁰ Decision No 1513/2002/EC concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006), *OJ L 232, 29.8.2002*.

⁸⁵¹ Decision 1513/2002/EC.

⁸⁵² Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), *OJ L 412/1, 30/12/2006*.

are addressed under the Sustainable management of resources activity of the Environment Theme.⁸⁵³

Decision 1639/2006/EC establishing a **Competitiveness and Innovation Framework Programme (2007-2013)**⁸⁵⁴ was adopted in November 2006. The CIP supports innovation activities (including eco-innovation) in the EU. It runs from 2007-2013 and has an overall budget of around €3.6 billion. It is implemented through three programmes, namely Entrepreneurship and Innovation, ITC Policy Support and Intelligent Energy Europe. One of the objectives of the Entrepreneurship and Innovation programme is to support innovation and small and medium enterprises in the area of eco-efficient innovative products, services and technologies, with nearly €200 million available between 2008 and 2013. This activity forms the CIP contribution to the Environment Technologies Action Plan. The Intelligent Energy Europe Programme (IEE) is concerned with energy management and energy efficiency and has a budget of €727 million. One of the objectives of IEE is to promote energy efficiency and the use of new renewable energy sources, with a particular focus on the transport sector. Different strands have been adopted under the IEE programme: SAVE focuses on energy efficiency and a rational use of resources, in particular for the building and industry sectors; ALTENER is designed to help promote new and renewable energy resources in the production of electricity, heat and cooling; and STEER is directed toward the promotion of energy efficiency and renewable energies in the transport sector.

RTD and innovation are also supported by the 2007-2013 **Structural Funds**, particularly the European Regional Development Fund (ERDF). The financial support from the Funds should be complementary and consistent with the 7FP and the CIP. Article 3 of Council Regulation 1083/2006/EC stipulates that investments in 'innovation and the promotion of knowledge society' are key to ensuring convergence of least-developed regions and strengthening the competitiveness and attractiveness of more advanced regions.⁸⁵⁵ Furthermore, Article 9 requires that Member States gear 60% of expenditure in Convergence regions and 75% in Competitiveness regions to meeting the objectives of the renewed Lisbon Strategy. The Community Strategic Guidelines (CSG) for Cohesion, establishing the strategic orientations of the current Policy set out that Cohesion Policy should target resources towards three priorities one of which is 'encouraging innovation, entrepreneurship and the growth of the knowledge economy by research and innovation capacities, including new information and communication technologies'.

The Structural Funds thus provide targeted financial support for three priority themes: research and technological development, innovation and entrepreneurship; information society and human capital. In total, the contribution for the 2007-2013 period amounts to €86 billion for the three themes (25% of the Structural Funds' resources). For R&D and

⁸⁵³ see Annex I, Decision No 1982/2006/EC.

⁸⁵⁴ Decision No 1639/2006/EC establishing a Competitiveness and Innovation Framework Programme (2007 to 2013), OJ L 310/15, 9/11/2006.

⁸⁵⁵ Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, OJL 210/25, 31.7.2006.

innovation investments alone, the Structural Funds provide €50 billion. Targeted allocation for R&D and innovation investments is relatively high in the EU 15 (in some countries such as Denmark, Finland and Austria it is up to 50-70% of the total funds available to the country) whereas in the EU 12 it amounts to approximately 20%.⁸⁵⁶ It must be noted however that R&D and innovation investments within the framework of the Structural Funds is seen largely in a broader perspective of aiding the private sector in addressing the innovation and research gap and ensuring that all regions are capable of absorbing and making effective use of innovation. Although the CSG highlight the need to find synergies between environmental investments and economic growth, there has not been much focus granted to environmental research and eco-innovation. Concrete environmentally relevant interventions are foreseen mainly through one category of expenditure - 'assistance to SMEs for the promotion of environmentally-friendly products and production processes' (€2.5 billion has been allocated in Member States for such interventions). Various environmentally relevant projects could also be financed under the broader R&D and innovation categories of expenditure; however, it is difficult to identify these as the decision-making lies in the managing authorities at national and regional levels of governance.

Contribution of important measures

Ensuring environment and the priority areas are a major priority for Community research

The **6FP** included sustainable development, global change and ecosystems as a thematic priority area. Actions envisaged under this area included sustainable energy systems (e.g. clean energy in particular renewable energy sources, energy savings, energy efficiency), sustainable transport systems, and global change and ecosystems (e.g. impact and mechanisms for GHG emissions and atmospheric pollutants from all sources, ozone depletion and carbon sinks, water cycle, marine and terrestrial biodiversity, desertification, natural disasters, and strategies for sustainable land management)⁸⁵⁷. These activities are closely related to many of the environmental priorities of the 6EAP. The **7FP** includes a separate environment theme, covering activities including climate change, natural hazards, environment and health, natural resources management, biodiversity, marine environment, land and urban management, environmental technologies including cultural heritage, earth observation, and assessment tools for sustainable development. Activities under other themes of the 7FP such as energy and transport include for example reducing the impact of transport on climate change and promoting research, development and demonstration of concepts and technologies to improve energy efficiency⁸⁵⁸. These activities are closely related to many of the environmental priorities of the 6EAP.

⁸⁵⁶ Commission of the European Communities. 2008. Communication on the results of the negotiations concerning Cohesion Policy strategies and programmes for the programming period 2007-2013. (COM(2008)301), Brussels, 14.5.2008.

⁸⁵⁷ Decision No 1513/2002/EC concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006), *OJ L 232, 29.8.2002*.

⁸⁵⁸ Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), *OJ L 412/1, 30/12/2006*.

This inclusion of ring-fenced funding for environmental projects helps ensure that research funding is directed towards some of the priorities of the 6EAP. The Impact Assessment and Ex Ante Evaluation of the 7FP included a figure showing the evolution of priorities under the successive Framework Programmes (FPs). According to data from DG Research, environment peaked at around 10% of overall funding under 4FP, then fell to around 8% under 5FP and fell further to around 6% under 6FP⁸⁵⁹. Under the 6FP, €2.1 billion was allocated to the sustainable development, global change and ecosystems thematic area (Sustainable energy systems: €810 million; Sustainable surface transport: €610 million; Global change and ecosystems: €700 million).⁸⁶⁰ At the end of the 6FP, €2.29 billion was spent on contracts in the sustainable development, global change and ecosystems area⁸⁶¹. This represents 13.7% of the total budget under the heading of ‘focusing and integrating Community research’, which ranks this area third out of the seven priority thematic areas (after Information society technologies on 22.8% and Life sciences, genomics and biotechnology for health on 13.9%). Under the 7FP, the majority of funding (€32.4 billion, 64%) is allocated to the Cooperation Programme which includes: Energy (€2.35 billion, 7% of Cooperation programme); Environment (including climate change) (€1.89 billion, 6%); Transport (€4.16 billion, 13%); and Food, Agriculture and Fisheries, and Biotechnology (€1.94 billion, 6%).⁸⁶² The 2009 Commission report on progress under the 7FP^{863,864} maintains that across the ten themes of the Cooperation Programme, 59% of topics in the 2007, 2008 and 2009 work programmes aim to contribute to one or more sustainability objectives. For the first two years (2007 and 2008), this resulted in a share of 44% of the total budget allocated to sustainable development-related research, mainly through projects targeting the environment, energy and food, agriculture and biotechnology themes. It is worth noting here that there are multiple trade-offs between broader sustainability objectives and specific environmental objectives, particularly in areas such as agriculture, biotechnology and energy. The 44% figure should therefore be viewed with some caution and not taken as an indication of achievement of the 6EAP objectives. ‘Sustainability’ projects may not be directly beneficial to the environment, and in certain cases may be detrimental in environmental terms.

As stated in the ex-ante evaluation of the 7FP, ‘since the 5FP, each project’s environmental targets and objectives must be detailed in the project proposal. This plays an important role in the evaluation and selection of projects to be funded. Nonetheless, the detail provided on these targets and objectives is seldom sufficient to allow for subsequent systematic

⁸⁵⁹ CEC (2005b): COMMISSION STAFF WORKING PAPER Annex to the Proposal for the Council and European Parliament decisions on the 7th Framework Programme (EC and Euratom) Main Report: Overall summary IMPACT ASSESSMENT AND EX ANTE EVALUATION, SEC (2005)430, 6/4/2005.

⁸⁶⁰ Annex II, Decision 1513/2002/EC.

⁸⁶¹ CEC, (2008), FP6 Final Review: Subscription, Implementation, Participation, June 2008, Brussels.

⁸⁶² Annex II, Decision 1982/2006/EC.

⁸⁶³ CEC, (2009), Commission Communication on the progress made under the Seventh European Framework Programme for Research, (COM(2009)209), 29/04/2009.

⁸⁶⁴ CEC, (2009a), Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

monitoring and evaluation at the programme level. Therefore, it is difficult to quantitatively assess the environmental effects of these projects (e.g. in the form of reduced emissions, or decreased health risks, etc) at an aggregate level. Even so it is widely recognized that most RTD projects funded by the FP generate either directly or indirectly positive environmental impacts⁸⁶⁵, and thus contribute to some 6EAP environmental objectives. The 2009 progress report of the 7FP notes a number of achievements of the Programme including: multi-scale analysis of biodiversity, development of economic activities from ecosystem services, implementation of Global Earth Observation System of Systems (GEOSS); support to the development of environmental technologies in the areas of water treatment, water, soil rehabilitation and protection, enhanced links with the UN International Panel on Climate Change; launch of the Sustainable Development Network in the Commission to maintain attention in the FP on the objectives of the EU SDS, and launch of new ERA-NETs in the field of environmental research, including Environment and Health.⁸⁶⁶

Regular reviews of environmental research needs and priorities

From 1995 to 2006 the system of evaluation and monitoring of the FPs was based on an annual monitoring of implementation and a five year assessment of implementation and achievements or research carried out in the preceding five years. Under the 7FP, changes to the overall system of FP evaluation and monitoring were introduced. An annual monitoring report provides an indicator-based assessment of programme implementation, a progress report was presented in 2009 and an interim evaluation is to be carried out with the help of external experts by 2010.

The ex-post evaluation of the 6FP⁸⁶⁷ was designed to provide an assessment of the rationale, implementation and achievements of the 6FP, including an illustration of the wide range of results obtained through the different thematic programmes. It recognised that the level of support for environment issues slightly decreased compared to the 5FP. It also summarised the achievements of the sustainable development priority area and concluded that sustainable energy projects were a mix of scientific and technological research, with a significant proportion of the work involving engineering and technology rather than science. The results therefore appear in a mixture of scientific literature, reports, guidelines and regulations. Gaps were deemed to exist in technology development for bridging technologies to interface new and existing technologies, underlining the need for system approaches to technological change, especially in areas such as energy. Surface transport projects were chiefly orientated towards improving the environmental performance of engines and vehicles through increased efficiency, lighter weight, better interaction with the infrastructure and improved safety. Global change and ecosystems projects aimed largely to inform policy.

⁸⁶⁵ CEC, (2005), Proposal for a Decision of the European Parliament and of the Council concerning the seventh framework programme of the European Community for research, technological development and demonstration activities (2007 to 2013); (COM(2005)119). 6/4/2005.

⁸⁶⁶ CEC, (2009a), Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

⁸⁶⁷ Rietschel, E. et al (2009): EVALUATION OF THE SIXTH FRAMEWORK PROGRAMMES FOR RESEARCH AND TECHNOLOGICAL DEVELOPMENT 2002-2006: Report of the Expert Group, February 2009.

As the majority of environmental research projects funded under the 6FP were undertaken through this sub-priority (from 2002-2006, the sub-priority supported 280 projects to the tune of €852 million EU financing), a separate ex-post impact assessment⁸⁶⁸ of the sub-priority was carried out. This specific ex-post assessment found that the work was of high scientific quality and also produced a large number of results concerned with improving scientific understanding and supporting policy. The policy relevance and impact of the projects varied, with some being very influential. The overall conclusions were that EU environmental research was leading in several environmental research areas; that EU research was contributing to the development of tools for environmental policy; that, in all areas, there are genuine potential economic and social impacts; and that dissemination and exploitation of results and best practices remain a challenge. Specific achievements of projects in the various areas of the global change and ecosystems sub-priority of particular relevance to the 6EAP priorities include the following:

On **climate change**, projects addressed important emerging issues including marine aerosols, the role of ocean biology in the variability of the tropical climate system, carbon sequestration and storage in forest and grassland systems, new knowledge on climate variability and change, and research that contributed to the International Panel on Climate Change (IPCC);

On **environment and health**, new and scientifically sound approaches for test methods for chemicals and micro-biological agents, strong links were identified with the implementation of the EHAP and various Directives, and project results were put forward with the view to adoption of new OECD test methods for endocrine disruptors;

On **nature and biodiversity**, large projects were seen as particularly beneficial in assessing biodiversity and ecosystems at a larger scale and furthering the management of comprehensive databanks on ecosystems, strong linkages and relevance to policy were observed, notably to the BAP and the CBD; and

On **natural resources and waste**, Europe has emerged as leader in the area of water and soils; a large number of new scientific methods and new knowledge have been discovered, and good examples of how research and policy can interact were observed, including projects that played a large role in the formulation and implementation of the WFD.⁸⁶⁹

The 2009 **Commission report on progress under the 7FP**^{870,871} maintains that 'one of the key objectives of FP7 is to contribute to sustainable development'⁸⁷² and that the 'FP7 is fully

⁸⁶⁸ Technopolis, Ex-post Impact Assessment of the FP6 Sub-priority 'Global Change and Ecosystems', London: EPECs, 2008.

⁸⁶⁹ Technopolis, Ex-post Impact Assessment of the FP6 Sub-priority 'Global Change and Ecosystems', London: EPECs, 2008.

⁸⁷⁰ CEC, (2009), Commission Communication on the progress made under the Seventh European Framework Programme for Research, (COM(2009)209), 29/04/2009.

⁸⁷¹ CEC, (2009a), Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010

⁸⁷² CEC, (2009), Commission Communication on the progress made under the Seventh European Framework Programme for Research, (COM(2009)209), 29/04/2009.

contributing to the 7 key challenges of the renewed Sustainable Development Strategy⁸⁷³. The report also notes that the 7FP plays an important role in addressing environmental challenges, 'notably in the context of the Climate Action and Renewable Energy package', and includes issues relating to biodiversity, disaster reduction and earth observation⁸⁷⁴. Progress in relation to inter- and multi-disciplinary challenges across areas such as environment, energy and transport is also noted in the report. However, whilst the report emphasises the contributions of research to the broad concept of sustainable development, it fails to make any explicit link to the priorities of the 6EAP. To assist the interim evaluation of the 7FP, a public consultation process was held between July and August 2010. Following this consultation, a group of external experts will provide a comprehensive assessment of the rationale, implementation and impact of 7FP on the basis of the evidence available after three years. The final report of the expert group has not yet been published; it is expected in late 2010⁸⁷⁵.

Better coordination of research related to the environment conducted in Member States

The 6FP took a considerable step forward towards coordination of EU and Member State RTD policies through the introduction of initiatives to help stakeholders identify and explain their needs jointly, thus easing the process of developing mutually supportive policies at European and Member State levels⁸⁷⁶. The 6FP included a specific action dedicated to the coordination of national and regional research programmes: the **ERA-NET scheme**. The scheme, launched in 2002, was designed to develop and strengthen the cooperation and coordination of research activities carried out at national and regional level through the networking of research activities, including mutual opening and the development of joint activities. The scheme is considered to have helped overcome barriers to the coordination of national and regional research activities; reduce fragmentation of the European Research Area; facilitate mutual learning; encourage coordination of policy responses to shared challenges; establish critical research masses in key areas; and help minimize duplication⁸⁷⁷. Under the 7FP, the ERA-NET scheme is no longer a 'stand-alone' action but an implementation tool used mainly in the context of the Cooperation Programme, as well as in parts of the Capacities Programme. Under the 7FP, 31 ERA-NET actions and eight ERA-NET Plus actions have been selected, a further 11 ERA-NETs and one ERA-NET Plus are expected in response to the 2009 calls. Together with the 70 ERA-NET actions launched under the 6FP, these actions gather more than 500 national and regional programme owners (typically ministries) and programme managers (such as research agencies and research

⁸⁷³ CEC (2009a): Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

⁸⁷⁴ CEC (2009): Commission Communication on the progress made under the Seventh European Framework Programme for Research, (CEC(2009)209), 29/04/2009.

⁸⁷⁵ CEC (2010), Third FP7 Monitoring Report - MONITORING REPORT 2009, 13/07/2010.

⁸⁷⁶ Rietschel, E. et al, (2009): Evaluation of the 6FP for research and technological development 2002-2006: Report of the Expert Group, February 2009.

⁸⁷⁷ Horvat, M., et al. (2006), ERA-NET Review 2006: The Report of the Expert Review Group, December 2006.

councils)⁸⁷⁸. A website has been set up to map ERA-NETs and facilitate information sharing (<http://netwatch.jrc.ec.europa.eu/nw/>).

Develop bridges between environmental and other actors

A number of efforts have been undertaken in this regard as indicated by the Commission's 2009 progress report on the 7FP.

The **collaborative research instruments** of the Cooperation Programme enable industry and academia to collaborate in an 'open innovation' environment, contributing to the free circulation of knowledge and technologies⁸⁷⁹.

Efforts to build a European level **partnership between research and society** have been strengthened, e.g. a new funding scheme has been introduced which enables Civil Society Organisations to participate in the 7FP⁸⁸⁰.

European Technology Platforms (ETPs) engage companies, researchers, and non-governmental organizations, led by industry, in developing the direction of research on a number of important strategic areas. All 36 ETPs have produced Strategic Research Agendas, which encourage a better coordination of R&D efforts and articulate the views of industry, academia, civil society and other stakeholders on the needs and challenges in key technology areas at European level. These Strategic Research Agendas have inspired the main priorities of 7FP and contribute to the development of annual work programmes of 7FP⁸⁸¹. A report by an expert group on ETPs has called for a shift in the focus of ETPs from competitiveness towards societal challenges and developing products and services for a sustainable future⁸⁸².

The 7FP also supports initiatives aiming at integrating private and public research efforts. For a limited number of European Technology Platforms, long-term public private partnerships at European level in the form of **Joint Technology Initiatives** (JTIs) have been set up in key areas where industry-driven research and development can help boost European competitiveness. Five large-scale JTIs have been set up: Innovative Medicines (IMI); Embedded Computing Systems (ARTEMIS); Clean Sky; Nano electronics (ENIAC) and the Fuel Cells & Hydrogen (FCH

⁸⁷⁸ CEC (2009a): Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

⁸⁷⁹ CEC (2009): COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS On the progress made under the Seventh European Framework Programme for Research, (CEC(2009)209), 29/04/2009.

⁸⁸⁰ CEC (2009): Commission Communication on the progress made under the Seventh European Framework Programme for Research, (CEC(2009)209), 29/04/2009.

⁸⁸¹ CEC (2009a): Commission Staff Working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

⁸⁸² CEC (2009): Strengthening the role of European Technology Platforms in addressing Europe's Grand Societal Challenges – Report of ETP Expert Group October 2009.

1.6.1.4 Provision of regular information

Overview of objectives

This sub-area is considered to contribute most to the following overall objective:

- European Community's policy-making should be based on data and information on the state and trends of the environment.

It also may – though more indirectly – also contribute to achieve the following overall objective:

- The Programme shall form a basis for the environmental dimension of the EU SDS [...];

What comes most closely to an **output requirement** is the request for regular reports from the EEA and other relevant bodies that should consist of 'headline environmental indicators; indicators on the state and trends of the environment; integration indicators'.⁸⁸³

Overview of measures

The main measure issued by the European Commission is the Communication to the Commission 'Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy'.⁸⁸⁴ It presents the state of play of the Commission's reflections on possible indicators for monitoring the implementation of the EU Sustainable Development Strategy.

The Communication to the Commission 'Progress Report on the Sustainable Development Strategy 2007'⁸⁸⁵ is the first stocktaking and gives a first snapshot of the state of play as regards progress on the EU SDS. The analysis is based on different sources - national reports provided by the national SDS coordinators as set out in the EU SDS, the Eurostat monitoring report based on Sustainable Development Indicators (SDIs) using the year 2000 as a baseline and a Staff Working Paper of the Commission as well as an Independent Consultancy study.⁸⁸⁶

Council Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment as amended by Regulation 1882/2003/EC: In line with the provisions laid down in the Standardised Reporting Directive 91/692/EEC, a number of environmental Directives covering a wide range of areas (water, waste, air quality ...) require Member States to send information on implementation to the Commission every three years in the form of a sectoral report covering other related Directives. The number of Directives addressed by Directive 91/692/EEC is declining as they

⁸⁸³ Art. 10 (e).

⁸⁸⁴ SEC(2005)161 final.

⁸⁸⁵ COM(2007) 642 final.

⁸⁸⁶ European Commission 2007, p. 3.

are revised or repealed and the reporting obligations are incorporated into the texts of the new legislation.⁸⁸⁷

Finally, the EEA was established through Regulation (EEC) No 1210/90 that was adopted by the European Union in 1990 and has been amended several times since.⁸⁸⁸ The regulation also established the European environment information and observation network (Eionet).

Contribution of important measures to objective achievement

Objective 'Data and information on the state and trends of the environment'

With the Communication on Sustainable Development Indicators (SDIs) the European Commission has ensured that environmental data are available to policy-making and the public on a regular basis: Information on the state and trends of the environment in the EU has been provided through the 2005, 2007 and 2009 EU SDS monitoring reports that have been issued by Eurostat regularly since the measure has been introduced. Moreover, information on the state and trends of the environment in the EU is accessible online through the Eurostat Website. Additional information on the state and trends of the environment in the EU is provided through the EEA State of the Environment reports and its website.

So data for policy-making are available. In how far the data are actually used by policy-making (see also paragraph on 'Basis for EU-SDS' below) and in how far the right and relevant data and information are provided must remain open.

Objective 'Basis for EU-SDS'

The EU SDS monitoring reports published by Eurostat are directly linked to the environmental dimension of the EU SDS. The monitoring report 2009, for example, has served as input for the Presidency Report on the 2009 Review of the EU SDS (16818/09) and the December European Council Conclusions on the EU SDS.

Output requirements

The SDIs, on which Eurostat is reporting in its 'EU SDS Monitoring Reports' include headline indicators, indicators on the state and trends of the environment as well as integration indicators. Therefore, the priority measure does correspond to the 6EAPs output requirements as defined in Article 10(e).

1.6.1.5 INSPIRE

The 6EAP does not elaborate a specific requirement for creating a general framework for a European spatial data infrastructure (INSPIRE) for the purposes of Community environmental policies, but it does contain requirements for improving the use of information for policy making, which is the broad aim of INSPIRE. The 6EAP states that 'Full consideration shall be given to ensuring that the Community's environmental policy making is undertaken in an integrated way and to all available options and instruments, taking into

⁸⁸⁷ Institute for European Environmental Policy 2010.

⁸⁸⁸ Regulation (EC) No 401/2009.

account regional and local differences, as well as ecologically sensitive areas, with an emphasis on: data and information on the state and trends of the environment.’ (Art. 2 (3)).

The 6EAP also calls for ‘ensuring regular information, to be provided starting from 2003, that can help to provide the basis for: policy decisions on the environment and sustainable development’ (Art. 10 (e)).

The 6EAP’s information system requirements for policy making are very general; inspire meets those general aims as stated above. INSPIRE sets up a framework for creating a shared spatial data infrastructure that allows public sector organizations and others to share data and information for the purposes of improving environmental outcomes. The type of geographic/spatial information that INSPIRE will allow decision makers and the public to access much more easily is vital to understanding environmental conditions and impacts.

The EAP preamble (2) states: ‘The Sixth Environment Action Programme requires full consideration to be given to ensuring that the Community’s environmental policy-making is undertaken in an integrated way, taking into account regional and local differences. A number of problems exist regarding the availability, quality, organisation, accessibility and sharing of spatial information needed in order to achieve the objectives set out in that programme.’ INSPIRE reinforces Directive 2003/4/EC on public access to environmental information, rendering data more useful for policy making and public information and participation.

The 2002 memorandum of understanding between three Commissioners of the European Commission mentions the EU Sustainable Development Strategy but not the 6EAP. However, the 2003 Consultation Paper on the forthcoming INSPIRE Directive does mention the 6EAP: ‘[T]he Sixth Environment Action Programme emphasises the need to base environmental policy on sound knowledge and participation.’ The Proposed Directive for INSPIRE⁸⁸⁹ mentions the 6EAP in the first paragraph of the introduction in the same language as the Consultation Paper. The European Parliament Resolution on the Proposal for the Directive of June 7, 2005 clearly frames INSPIRE within the context of the 6EAP in the second paragraph of the preamble. Some of this language was put directly into the preamble of the Directive, quoted above. The Council Political Agreement of 11 July 2005 frames the INSPIRE Directive in the same language that subsequently was adopted in the preamble of the Directive itself, quoted above. The Conciliation Paper of 17 January 2007 also mentions the 6EAP in the same language that is in paragraph 2 of the Directive’s preamble.

Achievement of objectives

INSPIRE has catalyzed a great deal of activity in the area of spatial data infrastructure (SDI) development, generating significant and widespread investment in a wide range of EU Member States. It is not possible to track all the developments because they are largely occurring at the Member State and sub-national levels, as intended by INSPIRE. For instance, in Lithuania state and local authorities have agreed to follow common standards for maintaining spatial data. In Cyprus INSPIRE is expected to play an important day-to-day

⁸⁸⁹ COM 2004/516 final.

role in governmental organizations using spatial data. INSPIRE inspired SDIs in Catalonia and Lombardy show that INSPIRE can be effective at the sub-national level as well. In these cases costs can be recovered in less than two years and citizens and decision makers given a powerful tool for making environment related decisions. There have also been a good number of projects at the EU level related to INSPIRE. These include Joint Research Centre action to coordinate SDI components within the JRC; the collection of metadata on key datasets within the EC; and the start of preparing integrated environmental data centres with spatial data as a key component at EEA, ESTAT, and the JRC.

The EU Sustainable Development Strategy advocates a new approach to policy making through more coherence in Community policies. INSPIRE was designed in part to meet this objective by providing an information base that contains harmonized spatial information to policy makers and the public. The presumption in this linkage is that accessible, harmonized spatial information will give policy makers an extra tool with which to ensure that policies across sectors are more coherent with each other—are better co-ordinated—because they rely upon the same high-quality information.

INSPIRE also contributes to reaching the objectives established in the Commission's White Paper on European Governance. INSPIRE assists the Commission in creating greater coherence in its policies through more effective integration of the common territorial dimension. INSPIRE will improve participation in policy delivery by making information clearer and more easily understood by stakeholders at national and local levels. It will also improve European governance by providing the feedback essential to a successful policy-cycle, thus aiding policy impact assessment and subsequent review where relevant.

1.6.1.6 GMES

GMES (Global Monitoring for Environment and Security) is the European Initiative for the establishment of a European capacity for Earth Observation. GMES is an EU-led initiative. The coordination and management of the GMES programme is ensured by the European Commission. The setting up of initial versions of the GMES services have been assigned to several projects partly financed through the 6th and 7th Research and Development Framework Programme of the European Union, while the developments related to the observation infrastructure are performed under the aegis of the European Space Agency for the space component (i.e. Sentinel missions) and of the European Environment Agency and the Member States for the in situ component.

The 6EAP calls for reinforcing the development and the use of earth monitoring (e.g. satellite technology) applications and tools in support of policy-making and implementation (see Art 10(1)g). The priority measure should assist the Commission in environment policy-making based on participation and best available scientific knowledge.

Achievement of objectives

Earth observation-based services already exist in Europe, but they are dispersed at national or regional level and cannot rely on a sustainable observation capacity. With the exception of meteorological services, long-term availability and reliability of information is not guaranteed.

In order to overcome this barrier in policy making and in order to contribute to improve its response to ever growing challenges of global safety and climate change, Europe develops a sustained and reliable Earth observation system of its own. By releasing four communications the Commission⁸⁹⁰ outlined the way to an operational GMES system. The system aims to provide useful data in a range of issues which corresponds to user needs⁸⁹¹. The processing and dissemination of this information is carried out within the 'GMES service component'. The thematic areas within the GMES service component comprise:

- land, marine and atmosphere information – ensuring systematic monitoring and forecasting the state of the Earth's subsystems at regional and global levels;
- climate change information – helping to monitor the effects of climate change, assessing mitigation measures and contributing to the knowledge base for adaptation policies and investments;
- emergency and security information – providing support in the event of emergencies and humanitarian aid needs, in particular to civil protection authorities, also to produce accurate information on security related aspects (e.g. maritime surveillance, border control, global stability, etc.)

The achievement of these objectives has only partly taken place. While under the EUs research activities some progress has been made in terms of developing tools and datasets the space based component is still lacking. The launch of Sentinel-1A, the first Earth observation satellite to be built for Europe's Global Monitoring for Environment and Security programme is scheduled for launch in December 2012.

However the current progress is seen very critical as an evaluation report of the activities of the GMES Bureau states.⁸⁹² There GMES pre-operational services and products are seen as being unable to cover current operational needs of individual DGs; A similar reply is made from the Member states and the industry.

1.6.1.7 SEIS

SEIS is a framework approach to producing a 'more coherent and effective' information system, as the 6EAP calls for. The 6EAP does not elaborate a specific requirement for SEIS and an EU-wide eReporting System. It does, however, call for 'ensuring regular information' (Art 10 (e)) and 'reviewing and regularly monitoring information and reporting systems with a view to a more coherent and effective system to ensure streamlined reporting of high quality, comparable and relevant environmental data and information. The Commission is invited, as soon as possible, to provide a proposal as appropriate to this end' (Art. 10 (f)).

⁸⁹⁰ COM(2001) 609 Communication from the Commission to the Council and the European Parliament: Outline GMES EC Action Plan (Initial period: 2001-2003); COM(2004) 65 Final - Communication from the Commission to the European Parliament and the Council: Establishing a GMES capacity by 2008 - (Action plan 2004-2008) and COM(2005) 565 Final - Communication from the Commission to the Council and the European Parliament: GMES: From concept to reality, COM(2008) 46 Final - Communication from the Commission: Towards a Shared Environmental Information System.

⁸⁹¹ The definition of user is still not fully completed.

⁸⁹² Evaluation of the activities of the GMES Bureau - Final report February 2009, available at: http://ec.europa.eu/gmes/pdf/studies/gmes_bureau_evaluation_main_report.pdf

The 6EAP also states the general importance of environmental information for policy makers, stakeholder, and the public (33); that policy making occur with an emphasis on 'data and information on the state and trends of the environment' (Art. 2.3); and in the context of promoting collaboration with consumer groups and NGOs, 'supporting the provision of accessible information to citizens on the state and trends of the environment in relation to social, economic and health trends' (Art. 3.9).

The 6EAP is mentioned in Section 3 of the 2008 SEIS Communication, 'Why is SEIS Needed?' which states that 'The Sixth Environment Action Programme (6EAP) confirmed that sound information on the state of the environment and on key trends, pressures and drivers for environmental change is essential for the development of effective policy, its implementation, and the empowerment of citizens more generally.' The 6EAP does stress the importance of environmental information for policy making (Art. 10 (e)) and for empowering citizens (Art. 3.9) In addition, Article 3 (2) on better implementation calls for promotion of improved standards of monitoring by Member States, to which SEIS is intended to contribute.

There has not been a formal political debate concerning SEIS.

Achievement of objectives

Changes brought about by the SEIS are in the area of governance rather than in environmental conditions. SEIS seeks stimulate many actions at European, national, regional and local level in order to improve the quality and accessibility of environmental information. It also seeks to streamline and coordinate ongoing initiatives. However, changes in governance related to the priority measure are developing slowly, and no significant changes have yet been made.

Having said that, implementation of the priority measure until now include streamlining the reporting requirements for air quality under the thematic strategy on air pollution, reviewing the IPPC Directive and relations between air pollution and climate change, and adoption of a more effective approach to the production, exchange and use of data and information under the Water Information System for Europe. Other, similarly incremental actions are being taken by a range of stakeholder organizations throughout Europe. Impacts on the quality of decisions or public access to and use of environmental are not clearly evident.

There is no clear evidence that other policies or strategies have directly affected the level of ambition of the priority measure. However, the EU Sustainable Development Strategy calls for a new approach to policy making and the Commission's White Paper on European Governance calls for greater coherence and coordination between policies. The priority measure supports these aims by improving the capacity of citizens and decision makers to establish a common and improved knowledge base for policy making.

1.6.1.8 Implementation and enforcement of EU environmental legislation

Introduction

According to the preamble of the 6EAP, 'full and correct implementation of the existing legislation is a priority'. Accordingly, one of the 'strategic approaches' of the Programme

listed in Article 3(2) of the 6EAP is to encourage ‘more effective implementation and enforcement of Community legislation on the environment’. This is to be achieved by the following priority actions:

- ‘increased measures to improve respect for Community rules on the protection of the environment and addressing infringements of environmental legislation’;
- ‘promotion of improved standards of permitting, inspection, monitoring and enforcement by Member States’;
- ‘a more systematic review of the application of environmental legislation across the Member States’;
- ‘improved exchange of information on best practice on implementation including by the European Network for the Implementation and Enforcement of Environmental Law (IMPEL network) within the framework of its competencies’.

Such measures are, first and foremost, the responsibility of Member States, but, where they fail in their duty to ensure adequate transposition, implementation and enforcement of EU environmental legislation, the powers of the European Commission under the Treaty to monitor national implementation and to initiate infringement proceedings against offending Member States come into play. Article 192(4) of the Treaty on the Functioning of the European Union (TFEU) states that ‘without prejudice to certain measures adopted by the Union, the Member States shall finance and implement the environment policy’. As to the role of the Commission, Article 17 TFEU stipulates that the Commission shall both ensure and oversee application of EU law under the control of the European Court of Justice (ECJ).

Achievement of objectives

Statistics on infringements, judgements, complaints and petitions

It is extremely difficult to assess whether or not the European Commission and Member States have made progress in implementing and enforcing EU environmental legislation more effectively, in particular on the basis of the figures discussed below, as these are at best rough indicators of implementation and enforcement problems. Nevertheless, the analysis indicates that Member States’ record of implementing EU environmental legislation remains poor and that ensuring and enforcing the full implementation of EU environmental legislation by Member States remains a major challenge, despite measures taken by the EU to improve implementation and enforcement.

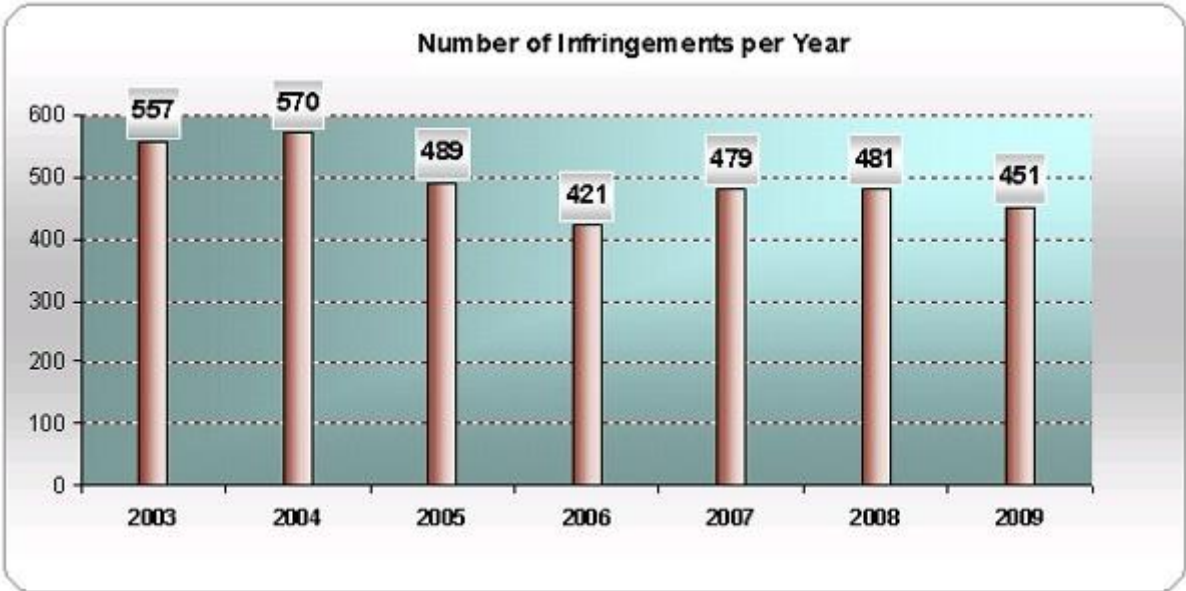
Infringements

Environmental infringement procedures account for approximately one third of all open cases for non-communication, non-conformity or bad application of EU law in the EU 27. At the end of 2009, DG Environment had 451 open infringement files⁸⁹³ under investigation (Figure 17). Over the past five years the number of open cases dealt with by DG Environment has remained fairly the same.

⁸⁹³ Infringement files are those in which the first step in legal action under Article 258 TFEU has been taken through the issuing of a letter of formal notice.

It is however remarkable that the number of open infringement cases did not rise significantly after the accession of 10 new Member States in 2004. This might be explained partially by the fact that case loads (for new Member States) often build up over time. Furthermore local environmental groups and citizens in new Member States have fewer financial resources and skills for submitting complaints to the Commission and thus for pushing the Commission to open infringement procedures. However, the new Member States already cover a significant number of open infringement cases. In 2008, the 12 new Member States (including Bulgaria and Romania) accounted for 149 cases out of a total number of 481 cases dealt with by DG Environment. In 2009, there were 160 cases out of 451. This implies that the number of open infringement cases related to older Member States has dropped significantly. It is unclear whether this is the result of improved implementation by the (old) Member States or whether this is the result of other factors (such as the Commission’s policies towards addressing infringements). The high number of infringements indicates that the implementation of environmental legislation remains far from satisfactory.

Figure 17: Number of infringement files per year dealt with by DG Environment



Source: European Commission, DG Environment, <http://ec.europa.eu/environment/legal/law/statistics.htm>

ECJ judgements

The number of judgements of the European Court of Justice (ECJ) in environmental matters has been continuously increased over the years (see Table 5)⁸⁹⁴. From 2000 to 2004 the number of judgements in environmental matters increased from 21 to 63. In 2005 the number of judgements decreased compared to the years before but increased since then to 63 in 2007. According to Krämer (2008) the recent increase of judgements is mainly due to the

⁸⁹⁴ Note that 'environmental' judgements are to be understood in a material sense. Some judgements which relate to environmental matters but which do range under 'institutional matters' or 'free circulation of goods' within the ECJ's own classification system, are thus also taken into account (Krämer, 2008).

Commission examining more systematically the cases of non-transposition and incorrect transposition and individuals applying more frequently to the ECJ.

Table 5 Number of ECJ judgements in environmental matters in 1990-2007

The greatest number of judgements since 2002 feature in the areas of nature protection,

1990	11	2000	21
1991	17	2001	23
1992	7	2002	47
1993	12	2003	56
1994	14	2004	63
1995	7	2005	43
1996	29	2006	52
1997	20	2007	63
1998	34		
1999	23		

Source: Krämer (2008)

waste and water. As for nature protection in some cases individuals had applied to the ECJ as they opposed the inclusion of their land in the Community lists of Natura 2000, though they were not successful. Waste treatment and waste disposal remain problematic in most Member States.

In addition, the number of cases of non-compliance by Member States (EU 15) with ECJ judgements increased in the first half of the 2000s and has been fluctuating since then between 66 and 81 cases. Every year the Commission publishes a list of judgements which had not yet been complied with, as Annex V to the Annual Reports on Monitoring the Application of Community Law. By the end of 2009, 66 judgements had not yet been implemented.

Table 6 shows the figures for the last seven years.

Table 6: Number of ECJ judgements that had not been implemented by the end of the year (all legal bases)

	2002	2003	2004	2005	2006	2007	2008	2009
France	13	17	18	14	7	6	8	4
Italy	6	6	14	12	8	19	18	11

Ireland	8	6	8	9	7	10	11	13
Spain	4	6	4	9	7	8	6	6
UK	4	3	6	7	8	6	3	5
Belgium	6	8	6	5	3	6	5	3
Greece	4	4	5	7	6	5	7	10
Luxembourg	5	6	1	-	6	7	4	3
Portugal	1	3	5	4	4	4	3	4
Germany	3	4	5	3	1	2	1	-
Austria	1	1	4	5	5	4	1	3
Netherlands	2	4	4	3	-	-	-	2
Finland	-	1	3	2	3	3	1	1
Sweden	1	1	2	1	1	1	-	1
Denmark	-	1	1	-	-	-	-	-
Total	58	71	86	81	66	81	68	66

Source: Krämer (2008) and own calculations as to 2007-2009 on the basis of Commission Annual Reports on Monitoring the Application of Community Law

Another problematic issue is the rather long duration of ECJ litigation. According to figures of Krämer⁸⁹⁵, ECJ procedures under Article 226 TEC (Commission v Member State)⁸⁹⁶ in the period 2006-2007 took on average 18 months, procedures under Article 230 TEC (individuals or Member States against EU institution) 21 months and procedures under Article 234 TEC (preliminary rulings) 19 months. As to procedures under Article 226, the average duration of the procedure varies according to the type of non-compliance. Whereas procedures in relation to non-transposition on average took only nine months in the period 2006-2007, procedures in relation to incorrect transposition and on incorrect application took 19 and 21 months respectively.

The length of the procedure before the ECJ cannot be looked at independently. For procedures under Article 226, the length of the pre-ECJ or prejudicial procedure⁸⁹⁷ should also be taken into account. If this pre-judicial procedure is taken into account, the total length

⁸⁹⁵ Krämer, Ludwig (2008): Environmental judgments by the Court of Justice and their duration. Research Papers in Law. European Legal Studies. College of Europe. Bruges.

⁸⁹⁶ With the coming into force of the Lisbon Treaty on 1 December 2009, Article 226 TEC is now being referred to as Article 258 TFEU and Article 228 TEC as Article 260 TFEU.

⁸⁹⁷ This procedure is opened by the dispatch of a Commission 'letter of formal notice' to the Member State concerned to which it may reply. If the Commission considers the Member State not to have replied in a satisfactory way, it may issue a 'reasoned opinion' clearly and definitively setting out reasons why it considers there to have been an infringement of EU law and calling on the Member State to comply with EU law within a specified period (usually two months). In light of the reply, the Commission may also decide not to proceed with the infringement procedure. If the Member State fails to comply with the reasoned opinion, the Commission may decide to refer the case to the ECJ.

of procedures under Article 226 becomes considerably longer. According to Krämer⁸⁹⁸ procedures under Article 226 in 2006-2007 took on average 47 months, i.e. almost four years. Procedures in relation to non-transposition took on average 26 months, whereas procedures in relation to incorrect transposition and application took respectively 51 and 52 months.

This lengthy nature of litigation does not encourage the more effective implementation and enforcement of EU environmental law. Firstly, Member States which do not correctly transpose or apply EU environmental law, can be ensured that it takes a long time before they are put on the spot by the ECJ. It is not just the infringement procedure that might take a significant amount of time; it also takes the Commission a while after the adoption of the national (incorrect) legislation to start the procedure under Article 226. Secondly, delays in complying with EU environmental law become even bigger when Member States do not comply with Article 226 judgements. Between 1992 and 2007 the ECJ has issued six judgements on environmental matters under Article 228 and its predecessor, Article 171 TEC. 'The average time-span between the dispatch of the letter of formal notice under the Article 226 and the judgement under Article 228 was 136 months, thus more than eleven years'.⁸⁹⁹ As a result of the long duration of the infringement procedures, the deterrent effect of these procedures on Member States is reduced and there is little incentive for Member States to take corrective action promptly. 'There have been cases where a Member State clearly relied on the length of the procedure and took advantage of this to deliberately delay transposition'.⁹⁰⁰

The lengthy nature of the infringement procedures under Article 226 and 228 TEC also has an impact on the Commission's enforcement behaviour. In some cases, the Commission simply does not start infringement procedures against a Member State as an ECJ judgement would come (far) too late, i.e. when the environmental damage has already been done and cannot be repaired. This occurs particularly in cases where EU environmental law is not applied - the realisation of infrastructure projects within a special protection area, the construction of a motorway without carrying out an environmental impact assessment, the refusal to grant access to environmental information, etc.⁹⁰¹

The prejudicial procedure is usually longer than the procedure before the ECJ itself. This is partly explained by the need for the Commission to clarify the facts of a case and by delays from Member States in answering requests for information. However, clarifying the facts in cases of non-transposition and incorrect transposition should not pose specific difficulties and should be ideally done before infringement procedures are started. In order to further

⁸⁹⁸ Krämer, Ludwig (2008).

⁸⁹⁹ Krämer, Ludwig (2008). Environmental judgments by the Court of Justice and their duration. Research Papers in Law. European Legal Studies. College of Europe. Bruges.

⁹⁰⁰ Allio, Lorenzo and Fandel, Marie-Hélène (2006). Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu.

⁹⁰¹ Krämer, Ludwig (2008); Allio, Lorenzo and Fandel, Marie-Hélène (2006).

explore the origins of the delays in these procedures, Krämer⁹⁰² examined in five cases in detail where the duration of the procedure exceeded 80 months, i.e. the period between sending the letter of formal notice and the ECJ judgement. He came to the conclusion that the main reason for the delays in these cases was the failure of the European Commission to decide on the next step in the infringement procedure or to actually take this step. In Krämer's view, these delays could not be explained by a lack of human resources or other administrative constraints, especially as three of the five cases concerned incorrect transposition of a Directive into national legislation, thus not requiring matters of fact to be clarified. However, time-gaps may be explained by the fact that, once a incorrect transposition case is opened against a Member State, an iterative process may ensue in which a Member State commits itself to legislative changes and submits texts in draft form to the Commission for comments and advice.

Complaints

In 2007, DG Environment registered 103 new complaint cases in the Commission's infringement database. In 2008 this number decreased to 62, but at the same time 75 cases were sent through to Member States via the EU pilot scheme (see below and section on the pilot scheme) for investigation.⁹⁰³ In 2009, DG Environment registered 27 new complaints in the infringement database. At the same time DG Environment launched 111 investigations through the EU pilot scheme in 2009. 723 files had been submitted to the EU pilot scheme since its start until the beginning of February 2010, of which 424 files have passed all the way through the process. Over 60% of these files constitute complaints.⁹⁰⁴

Petitions

EU citizens, businesses and NGOs have the right to petition the European Parliament raising concerns about the implementation of EU law. The Petitions Committee of the European Parliament is responsible for assessing which petitions are admissible for investigation and normally requests the European Commission to investigate these on its behalf. The overall number of petitions has grown steadily over the last years. By the end of 2009, DG Environment was responsible for handling 430 petition files, which is about a third of the overall petition workload of the European Commission.⁹⁰⁵ A continuously high number of petitions have been received in relation to waste, in particular on illegal landfills.⁹⁰⁶

Increased measures to improve respect for EU environmental law

According to Article 3(2) of the 6EAP, more effective implementation and enforcement of EU environmental law is to be achieved through *inter alia* 'increased measures to improve respect for Community rules on the protection of the environment'.

⁹⁰² Krämer, Ludwig (2008).

⁹⁰³ <http://ec.europa.eu/environment/legal/law/complaints.htm>.

⁹⁰⁴ EC, 2010c.

⁹⁰⁵ <http://ec.europa.eu/environment/legal/law/complaints.htm>.

⁹⁰⁶ EC, 2010a.

It is always preferable to cooperate more closely in preventing infringements to avoid conflict situations, thus the Commission has stepped up efforts since the mid-90s to guide Member States in implementing EU law. During the 6EAP's term the Commission has introduced new preventive tools or has used some existing preventive tools more systematically. These measures or tools include: the development of Commission guidance documents interpreting specific matters of EU law, the sharing of good practices at national and EU level, the recourse to early 'package meetings' to discuss transposition difficulties with national administrations, the establishment of expert groups (which among others develop guidance documents, formulate policy recommendations and assist the Commission in preparing proposals), the use of performance score-boards (e.g. the Natura 2000 barometer highlights progress in establishing the Natura 2000 network), the use of web-based question-and-answer tools, the organisation of information seminars on correct implementation of complex Directives, the establishment other formal and informal contacts with national authorities for instance through regular contacts between the Permanent Representations of the Member States and the Secretariat General of the Commission, and through networks of experts such as IMPEL and Green Enforce.⁹⁰⁷

Examples of preventive action taken by the European Commission in the course of 2009 include the publication of a guidance document 'Bathing Water Profiles: Best Practice and Guidance', resulting from the work of a working group of experts established under the bathing water Directive. In order to stress the need to strengthen implementation and enforcement of EU waste law, the Commission organized over 40 awareness-raising events in Member States, focusing in particular on the waste framework Directive, the landfill Directive and the waste shipment Regulation. As to the implementation of the water framework Directive, in 2009 the Commission closely monitored the public consultations held by Member States on the draft River Basin Management Plans and further developed the methodology for compliance-checking in consultation with Member State experts.⁹⁰⁸

The Commission has also strengthened efforts to introduce preventive measures when drafting legislation. It now systematically includes a specific legal provision in its new legislative proposals requiring Member States to provide concordance or correlation tables – listing each article of the Directive and the 'national implementing measures' that transpose it into the national law.⁹⁰⁹ However, this requirement is all too often deleted at the request of Member States during the decision-making process. It should be noted though that both the Commission and the European Parliament do not fight too hard for the correlation tables during co-decision. The European Parliament as a whole might be strongly in favour of the correlation tables, individual rapporteurs have no incentive to fight for them and are happy to drop them during inter-institutional negotiations in exchange for other concessions. The

⁹⁰⁷ Bonnie, Anne (2005): The evolving role of the European Commission in the enforcement of Community law: from negotiating compliance to prosecuting Member States. *Journal of Contemporary European Research*. Vol 1. Issue 2. pp 39-53.; Allio, Lorenzo and Fandel, Marie-Hélène (2006). Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu.

⁹⁰⁸ EC, 2010b.

⁹⁰⁹ EC, 2003.

Commission usually accepts these deals and does not fight too hard for the correlation tables either.

The Commission is also committed to systematically including review clauses in its proposals with the aim of promoting better assessment of the benefits and costs of legislation after it has entered into force (ex post evaluation) and facilitating simplification. In 2003, the Commission published the 'Joint practical guide for persons involved in the drafting of legislation', resulting from the revision of the 1998 inter-institutional agreement on common guidelines for drafting Community legislation. Through this effort to increase the quality of the legislation, the Commission aims to improve implementation.⁹¹⁰ This increased focus on measures to prevent infringements of EU environmental law is reflected in the Commission's 'Communication on implementing European Community environmental law'⁹¹¹.

Increased measures to improve addressing infringements of EU environmental law

According to Article 3(2) of the 6EAP, a more effective implementation and enforcement of EU environmental law is to be achieved *inter alia* through increased measures to address infringements.

Commission's strategy on implementation and enforcement

In November 2008, the Commission published a 'Communication on implementing European Community environmental law'.⁹¹² The Communication was initially envisaged to be adopted in 2006, but adoption was delayed as the Secretariat General wanted to first publish a general Communication on applying Community law.⁹¹³ After the publication of this general strategy in September 2007, it took the Commission (DG Environment) another year to adapt its Communication on the environment to the structure and language of the 2007 Communication. It was the first time since 1996 that the Commission issued a statement of its policy in the environment field, in which it plays a key role as 'guardian of the treaties'.

In a general Communication on 'Better monitoring of the application of Community law', published in 2002⁹¹⁴, the Commission first specified the 'priority criteria' it would apply in the exercise of its discretion on how to deal with infringements of Community law brought to its attention by citizen complaints. These general criteria seemed to exclude most cases of environmental non-compliance reported by citizens: only 'damage to the environment with implications for human health' and 'cases of systematic incorrect application detected by a series of separate complaints by individuals' with respect to the same piece of legislation, or cases of failure to transpose or incorrect transposition which affect a large segment of the public, would fall within the criteria.

⁹¹⁰ Allio & Fandel, 2006.

⁹¹¹ COM(2008)773.

⁹¹² COM(2007)502.

⁹¹³ COM(2007)502.

⁹¹⁴ COM(2002)725.

The general criteria for 'prioritisation and acceleration in infringements management' were refocused in a 2007 Communication⁹¹⁵, in which the Commission stated: 'Priority should be attached to those infringements which present the greatest risks, widespread impact for citizens and businesses and the most persistent infringements confirmed by the Court'. Apart from cases of non-communication of national measures and non-compliance with Court judgments, the Commission intends to prioritise 'breaches of Community law (...) raising issues of principle or having particularly far-reaching negative impact for citizens, such as those concerning the application of Treaty principles and main elements of framework regulations and directives'. The 2007 Communication announced that this general guidance would be further specified for each sector, and this is what the 2008 Communication does for the environment sector.

The 2008 Communication placed more emphasis than before on measures aimed at prevention of breaches (as opposed to measures to address breaches). According to the Communication, the Commission intends to cooperate closely with Member States to help them implement EU environmental legislation and 'solve problems highlighted by citizens and NGOs' through such measures as guidance documents, regular dialogue and support activities. The Commission announced that it would post, on a trial basis, environmental experts in its Representations in Madrid, Lisbon, Rome and Warsaw 'to help national officials as well as citizens' in implementing environmental legislation. The Commission has so far seconded one expert to Madrid, one to Lisbon and one to Rome. These Member States were chosen due to the high level of complaint-making and dissatisfaction expressed towards the Commission. This measure has been found useful for dealing with complaints from citizens.

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Where the preventive approach fails, the Commission focuses its enforcement activities in a way which it describes as more 'strategic', by giving priority to addressing those breaches of EU environmental law that it considers to be 'fundamental' or 'systemic'. In selecting those cases, it applies the following criteria:

- Non-conformity of key legislation viewed as presenting a significant risk for correct implementation of environmental rules and hence their overall effectiveness;
- Systemic breaches of environmental quality or other environmental protection requirements presenting serious adverse consequences or risks for human health and wellbeing or for aspects of nature that have high ecological value;
- Breaches of core, strategic obligations on which fulfilment of other obligations depends; and
- Breaches concerning big infrastructure projects or interventions involving EU funding or significant adverse impacts.

It should be noted that with respect to the strategic approach towards addressing (and preventing) infringements the Communication crystallizes what was already an emerging practice within DG Environment. Therefore, the Communication for the first time states those

⁹¹⁵ COM(2007)502.

⁹¹⁶ Stakeholder consultation, interview.

priorities explicitly and presents them externally.⁹¹⁷ To the outside observer, it may not always be completely clear how the Commission interprets these criteria in practice, as they are not explained in detail in the Communication. However, other publicly available documents such as Commission press releases on environmental infringements may provide illustrative material.⁹¹⁸

The 2008 Communication also stresses the importance of enforcement through national courts in the Member States and, in this respect, the Commission refers to its 2003 proposal for a Directive on access to justice in environmental matters, which remains stalled in the Council, notwithstanding the favourable opinion which the European Parliament expressed on the Commission's proposal in 2004. It reiterates its 'view that Community environmental law would be better and more consistently enforced if the proposed directive were adopted'.

EU pilot project

The EU pilot project or scheme, operating since April 2008, is a problem-solving mechanism in which the Commission and 15 Member States work closely together and more consistently to produce quicker and better responses to information requests, complaints and petitions with the ultimate aim of correcting infringements of EU law at an early stage wherever possible, without the necessity for recourse to infringement proceedings. In order to enable communication between the Commission and the Member States a confidential on-line database was established. Of the new central or eastern European Member States only the Czech Republic, Hungary, Lithuania and Slovenia participate (EU pilot evaluation report, 2010). Participation in the EU pilot scheme will soon be extended to the other Member States, with the exception of Luxembourg.

According to the Commission's first evaluation report, 723 files had been submitted to the EU pilot scheme since its start until the beginning of February 2010, of which 424 files have passed all the way through the EU Pilot process. Over 60% of files constitute complaints, over 20% constitute enquiries and about 20% are files created by the Commission of its own initiative. Just like environmental infringement procedures currently account for approximately one third of all open cases, 36% of the files within the EU pilot scheme concern the environment (EU pilot evaluation report, 2010). The Commission is relatively positive about the functioning of the EU pilot project so far, although it is not fully clear which criteria have been used to evaluate the success or failure of the system.⁹¹⁹ The project is beginning to contribute positively to the cooperation between the Commission and the participating Member States in responding to requests and complaints. The Commission intends to invite other Member States to join the project as well.⁹²⁰

Although the European Environmental Bureau (EEB) welcomes the establishment of the EU pilot scheme, it believes that such a reporting scheme can only fully serve its purpose if it is

⁹¹⁷ Stakeholder consultation, interview.

⁹¹⁸ Stakeholder consultation, interview.

⁹¹⁹ EEB, 2009.

⁹²⁰ EU pilot evaluation report, 2010.

made public.⁹²¹ Other NGOs have been critical towards the scheme, although they admit that the pilot scheme has also had some positive results such as facilitating a more fluent exchange of information with respect to implementation of EU law. ClientEarth has criticised the scheme for maintaining that the dialogue between the Commission and Member States is used by the latter to postpone correct implementation, that NGOs do not have access to the response from the Member State on the basis of which the Commission decides whether the case should be subjected to a complaints procedure or not, and that there is insufficient information to assess whether the scheme has slowed down or speeded up the process of dealing with requests and complaints.⁹²²

New policy to determine fines for non-compliance with ECJ judgements

With the publication of the Communication ‘Application of Article 228 of the EC Treaty’⁹²³, the Commission introduced a new tougher policy to determine fines for non-compliance with ECJ judgements, committing the ECJ to impose both lump-sums and periodic penalties for each day of non-compliance.⁹²⁴ ⁹²⁵ Before that the Commission’s policy was simply to ask the ECJ to impose a penalty payment, i.e. a type of ‘running’ fine intended to encourage Member States to comply with the ECJ judgement as soon as possible. For instance, Greece was ordered to pay €20,000 per day until it observed a preceding judgement on waste management.⁹²⁶ However, this approach had one major side effect: Member States could delay taking the corrective action needed to comply with a judgement under Article 226 TEC. As long as that action was taken by the time the following case came before the ECJ under Article 228 TEC, no financial penalty would be imposed, other than a demand to pay legal costs.⁹²⁷

However, in 2005 the ECJ required France in an Article 228 judgement ⁹²⁸ to pay both a penalty payment per day for every six-month period in which France failed to observe a previous 1991 judgement regarding fishery conservation⁹²⁹ and a lump-sum. For the first it became clear that the ECJ could impose a penalty payment and a lump sum payment. This led the Commission to introduce new and tougher enforcement policy guidelines set out in Communication ‘Application of Article 228 of the EC Treaty’.⁹³⁰ Since 2006, the Commission

⁹²¹ EEB, 2009.

⁹²² ClientEarth (2010). Key notes on monitoring the application of Community law – EU pilot. European Parliament public hearing. 28 April 2010.

⁹²³ SEC/2005/1658.

⁹²⁴ Allio, Lorenzo and Fandel, Marie-Hélène (2006): Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu.

⁹²⁵ EC, 2006.

⁹²⁶ C-387/97.

⁹²⁷ Jack, Brian (2009). Effective implementation of Directives on environmental law: re-opening the Court’s regulatory toolbox. Case C-121/07 European Commission v France (Grand Chamber). *Environmental Law Review*. pp 204-211.

⁹²⁸ C-304/02.

⁹²⁹ C-64/88.

⁹³⁰ SEC/2005/1658.

requested the ECJ, in every new Article 228 case, to impose both a penalty payment running from the date of delivery of the Article 228 judgement and a lump sum payment designed to penalize the Member State for its delay in observing the first judgement delivered under Article 226. As a result, Member States would not only have a financial incentive to comply quickly with the Article 228 judgement, but would also have an incentive to observe the preceding Article 226 judgement.⁹³¹ In case C-121/07, which was a test case for the Commission's new enforcement strategy, the ECJ showed strong support for the use of lump sum payments where Member States delay their compliance with preceding ECJ judgements by imposing both lump sum penalties and periodic penalties on France, despite the fact that the ECJ has rejected the idea that it may be asked to impose lump sum penalties on an automatic basis.⁹³²

Improved standards of permitting, inspection, monitoring and enforcement by Member States

According to Article 3(2) of the 6EAP, a more effective implementation and enforcement of EU environmental law is to be achieved *inter alia* through the 'promotion of improved standards of permitting, inspection, monitoring and enforcement by Member States'.

Implementation of non-binding criteria for environmental inspection

The non-binding Recommendation 2001/331/EC sets out criteria for adequate environmental inspection, with a view to guide Member States to improve the effectiveness of their enforcement of EU environmental law. In 2007, the Commission published a review of implementation of the Recommendation⁹³³ which concluded that almost all Member States had partially implemented the Recommendation, but only a few had achieved full implementation. Implementation problems were partially due to differing interpretations by Member States of the definitions and criteria of the Recommendation and of the reporting requirements and differences in the political priority given to inspections, so that some inspectorates are under-resourced. As a result the Commission concluded 'there are still large disparities in the way environmental inspections are being carried out within the Community. As to future action, the Commission suggested the Recommendation should be amended 'in order to improve its implementation and strengthen its effectiveness'.⁹³⁴ The 2007 review concluded that, as the Recommendation is a general framework for environmental inspection systems in Member States and its criteria are of a general nature 'it does not seem appropriate to transform them into legally binding requirements'. However, the Commission concluded that it should be amended 'in order to improve its implementation and strengthen its effectiveness' and consideration should be given 'to broaden its scope so that it covers as far as possible all environmentally significant activities' as well as clarification of definitions, further development of criteria for inspection planning and improved reporting requirements.

⁹³¹ Jack, B. (2009).

⁹³² Jack, B. (2009).

⁹³³ COM(2007)707.

⁹³⁴ EC, 2007e.

In November 2008, the European Parliament adopted a non-legislative resolution on environmental inspections in response to the Commission's Communication. The Parliament stated that it was concerned that the full implementation of environmental legislation in the Community cannot be ensured, since this leads not only to continuing damage to the environment but also to distortions of competition. Parliament opposed the Commission's intention of dealing with the problem through a non-binding Recommendation and the insertion of specific legally binding requirements in sectoral legislation and urged the Commission to come forward with a proposal for a Directive on environmental inspections before the end of 2009. IMPEL, which has focused much of its work on taking forward the Recommendation, is also critical of the Commission's proposed approach. IMPEL sees a need to strengthen environmental enforcement as a whole and maintains that a piecemeal approach to different items of legislation may be counterproductive (IMPEL website).

The Commission is currently finalising the review of the Recommendation and analysing several options on future action (options currently being considered include amending the Recommendation, turning it into a Directive, introducing binding requirements in sectoral legislation or a combination of these options). The Commission is expected to present a proposal in 2011.⁹³⁵

The Commission's review of implementation of the Recommendation also concluded that 'specific legally binding requirements for the inspection of certain installations or activities should be included in sectoral pieces of legislation', arguing that this is 'necessary to ensure that a higher political priority is given to inspections and that environmental legislation is better enforced throughout the Community'. Furthermore, 'defining the inspection requirements in each legislative act has the advantage that the requirements can be adapted to the specific nature and risks of the installations or activities covered and can be more precise and better targeted than general criteria' and that they 'can be complementary to the Recommendation or they can concern installations or activities that are not covered by the Recommendation'. This has been taken forward in certain legislative measures subsequently adopted:

- **Inspection requirements of the new Industrial Emissions Directive**

The Industrial Emissions Directive 2010/75/EU⁹³⁶ includes an article dedicated to environmental inspections. Article 23 states among others that Member States shall set up a system of environmental inspections of installations addressing the full range of relevant environmental effects, i.e. not only compliance with permit conditions. All installations will have to be covered by an environmental inspection plan that is reviewed regularly and updated where appropriate. The article also stipulates the required contents of the inspection plans, such as procedures for both routine and non-routine inspections. Competent authorities will be required to regularly draw up programmes for routine environmental inspections, including the frequency of visits for different categories of installations, and draft a report following each site visit. The

⁹³⁵ Stakeholder consultation, interview.

⁹³⁶ Inspection requirements have also been inserted in Directive 2009/31/EC on carbon capture and storage and in Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

new Directive also requires Member States to carry out non-routine environmental inspections to investigate serious environmental complaints, serious environmental accidents, incidents and occurrences of non-compliance as soon as possible. The planning and reporting requirements draw heavily on the Recommendation on minimum criteria for environmental inspections. Though many IMPEL members support the requirement of a minimum frequency of inspections, several members are of the opinion that the annual inspection requirement is undesirable, at least for some IPPC activities which are very small and have no significant environmental impacts. In their opinion it would be a waste of resources to inspect such industries once a year, as this would impose not only a major burden on the inspectorate, but also on the operator.⁹³⁷

- **Inspection requirements for waste shipments**

The Commission's review of the Recommendation identified inspection criteria in relation to the waste shipment Regulation ((EC) No 1013/2006) as a major gap to be addressed. Article 50 of the Regulation imposes certain obligations on Member States which aims to ensure effective inspection systems are in place, however, analysis serious gaps have been identified in the enforcement and inspections carried out by Member States relating to *inter alia*, inadequate inspections of waste shipments 'in situ', e.g. random on-the-spot checks without opening of containers; insufficient frequency of 'in situ' inspections; and lack of clear criteria for inspections. A major problem seems to be that the Regulation currently lacks specific criteria related to the frequency or quality of inspections.⁹³⁸ A Commission ordered a study on inspection requirements of waste shipments published its final report in August 2009⁹³⁹ which sets out criteria for effective inspection regimes under the Regulation that could be established at EU level. The Commission is currently considering different options to strengthen inspections related to the Waste Shipment Regulation (WSR) and connected legislation.

Adoption of environmental crime Directive

In 2008 the European Parliament and Council finally managed to agree on and adopt a Directive on the protection of the environment through criminal law.⁹⁴⁰ The Directive has the potential to contribute to some extent to the 6EAP objective of encouraging more effective implementation and enforcement of EU environmental law and to some of the environmental objectives of the 6EAP through defining criminal offences in the field of environment and harmonizing the scope of liability (requiring and defining liability for legal persons/companies and those acting on their behalf). Through this the law enforcement capacity in some of the Member States and in the EU as a whole will be improved. Extending the scope of liability to

⁹³⁷ Farmer, Andrew (2007). IMPEL Project 'Practicability and Enforceability of the IPPC Recast Proposal'. IMPEL. 2007/13, <http://impel.eu/wp-content/uploads/2010/03/2007-13-pe-checklist-ippc-FINAL-REPORT.pdf>

⁹³⁸ IEEP, Bio and Ecologic (2009) *Study on Inspection Requirements for Waste Shipment Inspections*. Study for the European Commission under the Framework Contract G.4/FRA/2007/0067. Available at: http://ec.europa.eu/environment/waste/shipments/pdf/report_august09.pdf

⁹³⁹ Ibid.

⁹⁴⁰ 2008/99/EC.

legal persons (and not just natural persons), is likely to have a deterrent effect on offenders, 'in particular because it would ensure that the liability of a legal person does not rule out the personal criminal liability of its officers so that they cannot hide behind an alleged bankruptcy of the legal person'. Whether the Directive will effectively improve enforcement of EU environmental law, depends however on the will of Member States to apply its provisions in practice.

The Directive's contribution, however, could have been bigger if it had provided for a certain level of approximation of the criminal penalties in place in Member States. The Directive only provides a general clause on penalties stating that unlawful conduct is punishable by 'effective, proportionate and dissuasive criminal penalties'. At the time of adoption of the Directive, it was however not possible to determine the type and level of those penalties at the EU level, as the ECJ had ruled (Case C-440/05) that the determination of the type and level of the criminal penalties does not fall within the Community's competence. At the time, these issues could only have been dealt with under the third pillar. However, since the entry into force of the Lisbon Treaty, the pillar structure no longer exists enabling the EU to deal with such issues through a Directive. As this general clause (on penalties) can be interpreted in many different ways by Member States, it is not likely to change the status quo (i.e. to raise levels of penalties in Member States).⁹⁴¹ There are currently large differences between criminal sanctions for environmental offences in Member States and the existing criminal sanctions are not sufficiently stringent to ensure a high level of environmental protection throughout the EU.

National judicial remedies and EU provisions providing for enhanced access to justice at the national level

As stated in the introduction to this chapter, correct implementation and enforcement of EU environmental law remains the primary responsibility of the Member States. In its November 2008 Communication on implementing European Community environmental law, the Commission rightly emphasizes the crucial role national courts play in the enforcement of EU legislation. Their role is in particular crucial in individual cases of inadequate application. In some environmental policy areas such as waste and nature protection the interpretative role of the ECJ has been substantially supplemented by national case-law resulting from procedures under Article 234 TEC (now replaced by Article 267 TFEU since the entry into force of the Lisbon Treaty).⁹⁴²

Because of this key role national judges play, the Commission has launched several initiatives aimed at supporting them. The Commission for instance runs a cooperation programme with national judges to look specifically at issues arising from the implementation of EU environmental law and to compare and discuss practices in different Member States. In 2008 seminars have been organised which looked at nature legislation. In 2009 and 2010 other sectors of EU environmental law have been looked at, such as waste and environmental impact assessment. Also conferences are being organized. The Commission

⁹⁴¹ Stakeholder consultation, interview.

⁹⁴² EC, 2008a.

organized one in November 2010 for Spanish and Portuguese judges and prosecutors on the role of the judiciary in the enforcement of EU environmental law. The Commission (DG Environment) also supports the activities of the EU Forum of Judges for the Environment established in 2004.

While better training of judges remains necessary, facilitating access to environmental justice in the Member States is even more important, since national courts can only fully play their role in the enforcement of EU environmental law if cases of inadequate application can be brought before them. In most Member States environmental groups face problems in bringing suits in national courts.⁹⁴³ This is one of the reasons why the Commission brought forward a proposal for a Directive on access to justice in environmental matters in 2003 as part of its so-called 'Aarhus package' of measures to prepare for the ratification of the Aarhus Convention by the Community. As the Commission pointed out in its explanatory memorandum to this proposal, increased public access to justice in environmental matters might help overcome the current shortcomings in the enforcement of environmental law in the Member States. The proposal, though strongly supported by the European Parliament in its first reading opinion, has never seriously been considered by the Council, as a majority of Member States view the Commission's legislative initiative as an unwelcome intrusion in their national legal systems contrary to the principle of subsidiarity. Anticipating opposition to this proposed horizontal measure on access to justice, the Commission, in earlier legislative proposals designed to implement the Aarhus Convention's requirements on access to information and public participation in decision-making, had already included provisions on access to justice linked to the enforcement of those specific procedural environmental rights. Directive 2003/35/EC introduced such provisions, directly inspired by article 9(2) of the Convention in the EIA⁹⁴⁴ and IPPC⁹⁴⁵ Directives, while Directive 2003/4/EC on access to environmental information also includes an access to justice provision,⁹⁴⁶ mirroring article 9(1) of the Convention. Finally, Directive 2004/35/CE on environmental liability⁹⁴⁷ also contains a provision conferring a right of access to judicial review to certain natural or legal persons, including environmental protection associations, enabling them to challenge before national courts the administrative decisions of Member States' competent authorities with regard to the prevention and remedying of environmental damage falling within the scope of that Directive.

This legislative strategy has recently started bearing fruit, as referrals to the ECJ indicate that environmental NGOs in some Member States are well aware of those access to justice

⁹⁴³ Milieu (2007). Inventory of EU Member States' measures on access to justice in environmental matters. Report prepared under contract to the European Commission, http://ec.europa.eu/environment/aarhus/study_access.htm.

⁹⁴⁴ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2003/35/EC, art. 10a.

⁹⁴⁵ Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, art. 16.

⁹⁴⁶ Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information, art. 6.

⁹⁴⁷ Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, art. 13.

provisions in EU environmental law and are increasingly having recourse to them to challenge more restrictive national rules on *locus standi*.⁹⁴⁸

Some analysts, nevertheless, warn for too optimistic hopes for remedying violations of EU law through private enforcement at national level. According to Slepcevic⁹⁴⁹, in order to be successful private enforcement of EU environmental law through national courts requires a particular set of conditions to be met on top of the legal preconditions. One of these conditions is the organizational capacity of the public interest groups to litigate – this refers to the resources available such as information and finance. Also the reaction of competent authorities to litigation before national courts determines the effectiveness of private judicial enforcement. Research has shown that competent authorities might refuse to obey their national courts. Despite these limits, private enforcement has the potential to improve enforcement in general as it will complement the EU's centralized enforcement system.

Systematic review of the application of environmental legislation

According to Article 3(2) of the 6EAP, a more effective implementation and enforcement of EU environmental law is among others to be achieved through 'a more strategic review of the application of environmental legislation across the Member States'.

The Commission undertakes more systematic examination of the cases of non-transposition, incorrect transposition or incorrect application of EU environmental legislation. According to Krämer (2008) this is one of the main reasons for the increase of ECJ judgements in the environment field the last ten years. As to the review of correct application (compliance in practice), the Commission focuses mostly on formal aspects of application such as whether national or regional authorities have adopted plans, whether they have drawn up reports, etc.⁹⁵⁰

The Commission in particular carries out more conformity-checking studies than before (usually done by outside contractors). In 2009 alone 63 conformity-checking studies were carried out.⁹⁵¹ In order to facilitate the systematic assessment of conformity between EU legislation and national transposition measures, the Commission now systematically includes a specific legal provision in new legislative proposals requiring Member States to provide correlation tables. However, this requirement is often deleted at the request of Member States during the decision-making process. The Commission is also committed to systematically including review clauses in its proposals with the aim of promoting better assessment of the benefits and costs of legislation after it has entered into force (ex post

⁹⁴⁸ See, e.g., Case C-263/08, Judgment of 15 October 2009, *Djurgården-Lilla Värtans Miljöskyddsförening v Stockholms kommun*, in which the ECJ interpreted art. 10a of Directive 85/337/EEC in such a way as to remove obstacles to access to justice for environmental NGOs resulting from Swedish law. See also the recent opinion of AG Sharpston in Case C-115/09, concerning a referral from a German administrative court in which the same provision of the EIA Directive is at issue.

⁹⁴⁹ Slepcevic, Reinhard (2009). The judicial enforcement of EU law through national courts: possibilities and limits. *Journal of European Public Policy*. Vol 16. Issue 3. pp 378-394.

⁹⁵⁰ Stakeholder consultation, interview.

⁹⁵¹ EC, 2010d.

evaluation). The Commission has been more systematically producing implementation reports in the environmental sector.

Improved exchange of information and best practice on implementation

According to Article 3(2) of the 6EAP, a more effective implementation and enforcement of EU environmental law is to be achieved *inter alia* through 'improved exchange of information on best practice on implementation including by the European Network for the Implementation and Enforcement of Environmental Law (IMPEL network) within the framework of its competencies'.

The framework for IMPEL projects and activities is its Multi Annual Work Programme (MAWP) (currently 2007–2010). Much of the work of IMPEL is programmed through three 'clusters': Cluster 1: Improving permitting, inspection and enforcement; Cluster TFS: on Transfrontier Shipment of Waste; and Cluster 3: Better Regulation (practicability and enforceability). IMPEL changed its status from an informal network to a legally formulated entity which has helped clarify its relations with its members and the EU institutions. In particular, the changed status has made it eligible for LIFE+ funding, thus setting its future activities on improving implementation on a firmer financial basis.

A considerable amount of the work of IMPEL has focused on Recommendation 2001/331/EC on criteria for adequate environmental inspection. It has produced a Guidance Document to assist Member States in reporting under the Recommendation in a consistent manner. IMPEL has finalized work on Best Practices concerning Training and Qualification for Environmental Inspectors and also published a Management Reference Book for Environmental Inspectorates, as well as Benchmarking on Quality Parameters for Environmental Inspectorates. With respect to planning of environmental inspections, IMPEL carried out a three-stage project, the so-called 'Doing the right things' project. In a first stage it explored how inspection authorities set priorities with regard to their tasks and activities. In a second stage a step-by-step guidance book was developed to help practitioners answer basic questions an inspecting authority has to deal with when setting up an inspection plan. The third and final stage aimed to facilitate, support and promote the implementation of the guidance book. IMPEL also undertakes peer-reviewed studies of the regulatory authorities in individual Member States.⁹⁵² In 2009 for instance the Portuguese Environmental and Spatial Planning General Inspectorate (IGAOT) was informally reviewed by the IMPEL network, focusing on the inspection and enforcement of the IPPC and SEVESO Directives (IMPEL website). IMPEL has also carried out a number of projects on the implementation of various aspects of the IPPC Directive. It has provided input to BREF development on sectoral and horizontal issues. It also provided input for the review of the IPPC Directive. IMPEL provided support to its members in the implementation of the EU ETS and identified problems in implementation of the relevant Directive (IMPEL website). IMPEL also carries out series of projects identifying illegal shipments of waste and carrying out joint enforcement actions to improve the implementation of the Waste Shipment Regulation.

⁹⁵² IEEP (2010) Manual of European Environmental Policy. Institute for European Environmental Policy. Earthscan. Available at: <http://www.europeanenvironmentalpolicy.eu>.

The IMPEL network also has a role in providing advice, on request or on its own initiative. It gave advice on the practicability and enforceability of EU environmental legislation and developed a checklist to assess the practicability and enforceability of the Commission proposal for an industrial emissions Directive (recast of the IPPC Directive) and the proposal for a revised Directive on waste electrical and electronic equipment (WEEE) (IMPEL website). Many IMPEL members feel that practical enforcement is often inadequately designed in EU law and, therefore, improving this aspect of law making would contribute to 6EAP objectives of improved implementation⁹⁵³.

1.6.1.9 Environmental Integration in Transport Policy

Measures to integrate environmental considerations into transport support the overall objectives of the 6EAP outlined in Article 2. Most notably, measures are in line with the 6EAP's aim of 'contributing to a high level of quality of life and social well being for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment and by encouraging a sustainable urban development.'

The 6EAP states in Art 2(4) that: 'The Programme shall promote the full integration of environmental protection requirements into all Community policies and actions by establishing environmental objectives and, where appropriate, targets and timetables to be taken into account in relevant policy areas'.⁹⁵⁴

The 6EAP aims to reduce greenhouse gas emissions in the transport sector as outlined in Art 5(2)iii, and discussed in section 1.1.2.2.

Environmental policy integration is recognised as one of the strategic approaches to meeting the environmental objectives and aims of the 6EAP; a number of actions to further environmental policy integration are identified in Article 3(3):

- Further efforts for integration of environmental protection requirements into the preparation, definition and implementation of Community policies and activities in the different policy areas are needed. Further efforts are necessary in different sectors including consideration of their specific environmental objectives, targets, timetables and indicators. This requires:
 - ensuring that the integration strategies produced by the Council in different policy areas are translated into effective action and contribute to the implementation of the environmental aims and objectives of the Programme;
 - consideration, prior to their adoption, of whether action in the economic and social fields contribute to and are coherent with the objectives, targets and time frame of the Programme;
 - establishing appropriate regular internal mechanisms in the Community institutions, taking full account of the need to promote transparency and access to information,

⁹⁵³ Pallemmaerts, Marc et al. (2006). IMPEL Project 'Developing a checklist for assessing legislation on practicability and enforceability. IMPEL. 2006/15, <http://impel.eu/wp-content/uploads/2010/02/2006-15-pe-checklist-FINAL-REPORT.pdf>

⁹⁵⁴ Article 2(4).

to ensure that environmental considerations are fully reflected in Commission policy initiatives, including relevant decisions and legislative proposals;

- regular monitoring, via relevant indicators, elaborated where possible on the basis of a common methodology for each sector, and reporting on the process of sectoral integration;
- regular monitoring, via relevant indicators, elaborated where possible on the basis of a common methodology for each sector, and reporting on the process of sectoral integration;
- further integration of environmental criteria into Community funding programmes without prejudice to existing ones;
- full and effective use and implementation of Environmental Impact Assessment and Strategic Environmental Assessment;
- that the objectives of the Programme should be taken into account in future financial perspective reviews of Community financial instruments.

Overview of measures

Predating the 6th EAP, the European Commission launched a Transport Environment Reporting Mechanism (TERM) in 1998 which led to the first TERM report in 2000. Later versions of the TERM reference directly to the 6th EAP.

Since 2002, the CIVITAS Initiative for cleaner and better transport in cities has provided more than € 180 million to promote sustainable urban transport in all Member States.

Furthermore, the Intelligent Energy Europe (IEE) programme, formerly known as STEER and part of the Competitiveness and Innovation Framework Programme (CIP), is funding energy efficiency in transport in European Member States. IEE was instituted by Decision 1230/2003/EC.

In 2006, the Commission issued its mid-term review of the White Paper on the European Transport Strategy from 2001 (COM (2006) 314). This review consisted of a considerable change in policy: It abolished the goal of decoupling and focussed on making transport greener instead of reducing overall transport volumes. Moreover, the emphasis on a modal shift towards greener transport modes was replaced by a focus on co-modality with the goal of improving the efficiency of all transport modes.

In 2008, the European Commission communicated its strategy for integrating environmental considerations into the transport sector with the Greening Transport Package, Other relevant measures for the European transport sector include the Action Plan on Urban Mobility (COM(2009) 490/05 and the Marco Polo programme (Regulation (EC) No 1382/2003) as well as the Directive to include aviation in the emissions trading scheme (2008/101/EC), the Biofuels Directive (2003/30/EC), replaced by the Renewable Energy Directive (2009/28/EC), Regulation 443/2009 on CO₂ emissions from passenger vehicles, the Fuel Quality Directive (2009/30/EC), and the Directive to Promote Clean and Energy Efficient Vehicles (2009/33/EC), which includes an overview of these in section 1.1.2.2.

The European Commission introduced the **Greening Transport Package**, COM(2008)433, in July of 2008 to create greater sustainability in the transport sector. One of its key focuses

is on the revision of the Eurovignette Directive.⁹⁵⁵ As of December 2010, no agreement could be reached on the proposed amendments to the Directive.

In 2009 the European Commission issued the **Action Plan on Urban Mobility** to highlight the responsibility of local, regional and national authorities to develop urban mobility policies supporting sustainable transport.⁹⁵⁶ It focuses on six themes for action to be carried out by 2012: promoting integrated policies, focusing on citizens, greening urban transport, strengthening funding, sharing experience, and optimising urban mobility.

The Motorways of the Seas Projects and the Marco Polo programme - both part of the Trans-European Network (TEN-T) - seek to reduce road traffic and congestion on Member State motor ways by promoting more sustainable modes of transporting freight, such as rail, short-sea and inland shipping. Legal basis for the Marco Polo programme was established in 2003⁹⁵⁷ and was replaced in 2006⁹⁵⁸ with significant revisions and again in 2009⁹⁵⁹ to simplify its procedures.

Furthermore, the EU adopted in 2008 the **Aviation Directive** to include aviation activities in the EU emission trading scheme.⁹⁶⁰

Other important measures in the transport sector are the **Biofuels Directive**, which includes an indicative target of 5.75% of transport fuels to be biofuels by 2010. This target was later replaced by the 2009 **Renewable Energy Directive**, with a 10% renewables target for the transport sector by 2010.

The 2009 **Regulation on CO₂ emissions from passenger cars**⁹⁶¹ gradually introduces, until 2015, a fleet average of 130g CO₂/km. The 2009 **Fuel Quality Directive**⁹⁶²

⁹⁵⁵ European Parliament (2008): Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures (COM(2008)436).

⁹⁵⁶ EC (2009): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on Urban Mobility, (COM(2009) 490/5).

⁹⁵⁷ Regulation (EC) No 1382/2003 of the European Parliament and the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme).

⁹⁵⁸ Regulation (EC) No 1692/2006 of the European Parliament and of the council of 24 October 2006 establishing the second Marco Polo programme for the granting of community financial assistance to improve the environmental performance for the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003.

⁹⁵⁹ Regulation (EC) No 923/2009 of the European Parliament and of the Council of 16 September 2009 amending Regulation (EC) No 1692/2006 establishing the second 'Marco Polo' programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II).

⁹⁶⁰ Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8, 13.1.2009, p. 3–21.

⁹⁶¹ Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009, setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles, OJ L 140, 5.6.2009, p. 1–15.

⁹⁶² Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC, OJ L 140, 5.6.2009, p. 88–113.

complements the Renewable Energy Directive and its 10% target for the transport sector. The Renewable Energy Directive and the Fuel Quality Directive implement sustainability criteria for the production of biofuels and criteria for calculating the cumulative carbon savings of alternative fuels.

In 2009, the **Directive on the promotion of clean and energy-efficient road transport vehicles** was adopted⁹⁶³ to reduce pollutant emissions in the transport sector. Member States have to ensure that all public authorities and contracting entities and operators of public transport services, take the operational lifetime energy and environmental impacts into account when purchasing road transport vehicles.

Contribution of important measures

As seen above, multiple measures with environmental objectives were adopted in the transport sector. Moreover, environmental measures in transport are gaining greater prominence as shown by the fact that many were introduced between 2008 and 2010. In general, environmental transport objectives are to make transport more efficient as well as encourage the use of those transport modes which are more efficient or less environmentally damaging (i.e. a modal shift).

The European Commission uses a number of policy measures to integrate environmental and sustainability objectives into the European transport sector, best described as a push-pull strategy. Measures aim at both fostering demand for sustainable transport (pull) as well as restricting the supply of the most inefficient technologies through standards and regulations and encouraging innovative new technologies (push).

On the other hand, the policy shift marked by the Transport White Paper mid-term review was not supporting environmental integration because it no longer sought a reduction in overall transport volumes and can, thus, be considered a significant back-lash.

As outlined in the Greening Transport Package, the European Commission aims to achieve environmental objectives in the transport sector by internalising the external costs of transport as well as reducing environmental impacts altogether, for example, by reducing rail noise. By internalising transport costs, the Commission seeks to integrate the consideration of environmental effects into decision making by transport users as well as producers. In this context, the Commission funded a study to determine best practices and develop a common framework to estimate external transport costs. Further, it suggests a methodology and produced a guidance book with reference values for determining external costs. The strategy to internalise transport costs will be reviewed in 2013. The Commission is therefore taking steps to **monitor its effects and progress**. Moreover, the internalisation of transport costs is to be co-ordinated with other strategies and measures, such as the Integrated Maritime Policy for maritime transport and the Energy Taxation Directive, which is used to complement the EU's GHG emissions trading scheme.⁹⁶⁴

⁹⁶³ Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles, OJ L 120, 15.5.2009, p. 5–12.

⁹⁶⁴ EC (2008): Communication from the Commission to the European Parliament and the Council, Greening Transport COM(2008)443. Brussels, 8 July 2008.

The 'Eurovignette' Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures provides a legal framework to internalise environmental costs by collecting tolls for heavy goods vehicles on Member States' motorways. According to the Commission, the proposed revision to the 'Eurovignette' Directive aims to prevent distorting competition in the Internal Market as a result of discrepancies between new national charging measures⁹⁶⁵. It seeks to ensure that charging does not discriminate based on nationality and that obstacles to transport are not created. **Common principles for charging and calculating costs** are also proposed to ensure coherence throughout Member States. The selection of the vignette as a measure to implement the polluter-pays-principle arguably results in fewer discrepancies between Member States than other measures to reduce pollution because the toll is charged regardless of where the vehicle is registered.⁹⁶⁶

The Greening Transport Package also focuses on a number of complementary measures to internalise costs and tackle the environmental effects of transport. In this context it sets forth specific goals and timelines to reach certain objectives.

The outlined strategy commits the Commission to take measures to **reduce emissions in maritime transport and internalise costs** if no action is taken by the International Maritime Organisation by 2009. To date, no proposal for a measure in this context has been made.

The strategy aimed to **revise the Energy Taxation Directive** to create a 'cross-cutting internalisation measure' in 2008. Such a measure would seek to underpin the EU's GHG emissions trading scheme and EU environment and climate goals. While the discussion is still ongoing, no significant steps have so far been taken.

The Commission also set out to **propose new legislation** in 2008 **to reduce rail noise** and make rail transport more acceptable to the public, promoting greater use of rail instead of road transport. A communication as well as an impact assessment on rail noise was presented to Parliament in 2008.

To reduce emissions in the road sector the Commission committed to propose **new legislation to limit CO₂ from vans, develop a system for tyre labelling, and revise the Car Labelling Directive** by the end of 2008. While proposals for legislation regarding CO₂ limits for vans and tyre labelling have been made, no proposal for the revision to the Car Labelling Directive has been presented.

The Commission also committed to proposing **a measure** in 2009 **to reduce the sulphur content of liquid fuels**, a recognised cost-effective method to tackle air pollution. Such a measure would also seek to include maritime transport fuels within its scope. No proposal has been presented to date.

An action plan and proposal on Intelligent Transport Systems to support new technologies for road transport is to be presented by the Commission.

⁹⁶⁵ Europa Press Releases Rapid (2008) Greening Transport Package.

⁹⁶⁶ Europa Press Releases Rapid (2008) Greening Transport Package.

A revision to the Directive on Airport Noise which will increase its stringency, as well as a proposal to address nitrous oxide emissions from aviation.

Additionally, the Commission stated that **funding would be made available under the Trans-European Network programme** for the introduction of electronic toll systems.

The Action Plan on Urban Mobility demonstrates the importance of transport modes by city dwellers for climate change as well as the local environment and air quality. It aims to **enhance a modal shift to more sustainable urban transport means**. The Plan also implements goals of the 6EAP to integrate sustainable transport objectives into community program, including funding. Through the Action Plan the European Commission supports the European Mobility Week to raise awareness about public transportation, cycling and walking and to encourage citizens to use these modes of transport and cities to promote their use.

The Marco Polo Programme provides financial support to enable the shift to more efficient modes of freight transport (i.e. away from road transport). It has an annual grant budget of around €60 million and the current programme runs until 2013. According to the Programme, it funds projects which have a cross-border route and that make economic and ecological sense.

Additional measures also aim at integrating environmental considerations into transport policies. Directive 2008/101/EC amends the previous EU ETS Directive 2003/87/EC to include aviation in the greenhouse gas emissions trading scheme within the Community and refers to the 6EAP in paragraph ten of the preamble. The scheme commences on 01/01/2012 for all flights arriving at or departing from an EU airport, regardless of where the operators and airlines are based. The emissions cap and allocation of allowances to aircraft operators is derived so that in 2012, overall emissions from the aviation sector will equal 97% of the sector's historical emissions (average annual emissions from 2004-2006). From 2013 onwards, the annual cap will be reduced to 95%.

Directive 2009/33/EC to promote clean and energy efficient vehicles entered into force on 04/06/2009 and takes effect on 4/12/2010. It requires public authorities to include the environmental impact of vehicles into procurement decisions, therefore targeting not only climate change but also energy efficiency. Authorities are to consider the externalities linked to energy consumption, CO₂ emissions and other pollutant emissions during **the entire operational lifetime of vehicles when purchasing them**. In this regard, the Directive aims to ensure that vehicle purchases are based on societal and environmental values, as well as help to foster a market for clean and energy efficient vehicles.

Regulation (EC) No 443/2009 sets emission performance standards (or CO₂ emission limits) for manufacturers of new passenger cars, limited to 130 g of CO₂/km and set to reduce in 2020 to 95 g of CO₂. **Member States must collect data on new vehicles registered in their territory and report this to the Commission**. The collected data is publicly available and maintained by the Commission in a central database. Emissions targets of the Regulation will be re-examined by the Commission before 1 January 2013.

The Renewable Energy Directive, Directive 2009/28/EC, sets a number of goals to increase the share of renewable energy in the EU. Moreover, it mandates a **10% share of renewable energy in the transport sector by 2020** and establishes sustainability criteria for biofuels.

The Fuel Quality Directive (Directive 2009/30/EC) aims at a number of improvements in the environmental impact of diesel and petrol transport fuels. Moreover, it requires fuel suppliers to gradually reduce the life cycle GHG intensity of energy supplied for road transport. Article 7 (a) stipulates a reduction of **10% GHG emissions by the end of 2020**. This reduction can be achieved via multiple elements, including a 2% reduction attributed to the use of electric vehicles in road transport. Accounting procedures under the Fuel Quality Directive have to be in line with those under the Renewable Energy Directive. A first revision of the Fuel Quality Directive is expected for the end of 2012.

Reviewing the European transport sector as a whole, as of 2010 freight transport is growing faster than the economy and road and air freight transport are increasing the most. These modes, which are less efficient than rail, inland, and short-sea shipping, are also expected to continue to grow in the long term.⁹⁶⁷

At the same time, as of 2010, passenger transport by car continues to grow, although slower than the economy. The number of kilometres travelled by passengers grew by 1.2% in the EU in 2007 compared to 2006. And intra EU, air passenger travel is the fastest growing transport mode at 48% growth between 1997 and 2007.⁹⁶⁸

Conclusion: The mid-term review of the Transport White Paper and the resulting shift in policy objectives can be interpreted as a significant back-lash for environmental policy integration into transport policy making. However, other measures show a more favourable picture.

It is difficult to fully assess the capacity of the Greening Transport Package and other relevant measures to contribute to the objectives of the 6EAP because they were adopted only recently, between 2008 and 2009. Nonetheless, the Greening Transport Package and the subsequent environmental measures developed for the transport sector constitute a step towards achieving the objectives outlined by the 6EAP.

Steps to internalise transport costs as set out by the Greening Transport Package, are arguably a significant move forward to integrate environmental objectives into transport policy. The Commission Communication sets out specific areas of focus where new or revised measures will be used to further integrate environmental objectives into the transport sector. Several measures have subsequently been adopted, such as the inclusion of aviation in the EU ETS, the Regulation on CO₂ limits for passenger vehicles and the Fuel Quality Directive. The Directive requiring public authorities to consider the environmental impacts of vehicles in their purchasing decisions encourages the uptake of new clean and energy efficient transport technologies. However, as shown in the assessment above, proposals for concrete measures to be adopted by the EU have subsequently not been provided for each of the areas identified in the Communication.

⁹⁶⁷ EEA (2010): Towards a resource-efficient transport system, TERM 2009: indicators tracking transport and environment in the European Union, EEA Report, No 2/2010.

⁹⁶⁸ EEA (2010): Towards a resource-efficient transport system, TERM 2009: indicators tracking transport and environment in the European Union, EEA Report, No 2/2010.

Looking specifically at Art 3(3) of the 6EAP, a strategic approach for integrating environmental objectives into transport policy can be identified. In addition to impact assessment, data collection, monitoring plans, and common methodologies have been developed to support measures where needed.

In summary, the review shows that significant steps have been taken to include environmental objectives in transport policies. Policies differ by both their end objective as well as their means to obtain them. Multiple measures (e.g. Regulation on CO₂ emissions from passenger cars and the inclusion of aviation into the GHG emissions scheme) aim to internalise costs and thus encourage increased efficiency. Other measures aim to encourage freight and passenger transport users to shift to more efficient and sustainable modes.

Measures which lead to increased efficiency run the danger of the so-called 'rebound effect'. This means that the increased efficiency could eventually drive down costs, ultimately negating attempts to internalise costs and in turn encouraging an increased use of transport modes. Additionally, growth rates suggest that inefficient transport modes for both freight and passengers are on the rise. This means that the effects of measures to shift transport to more efficient means are either not yet recognised or insufficient. Although it is too early to determine the full effects of environmental measures on the transport sector, considering the potential 'rebound effect' and growth rates in transport, it remains in question as to whether they will be enough to meet the objectives set out in the 6EAP.

Finally, there is a recognised shift in focus from transport measures covering the environment as a whole (e.g. air pollutants, fuel types, and spatial aspects) in line with the programme aims of the 6EAP, to those which clearly focus on climate change, in line with Art. 5(2)iii. However, environmental and climate change goals considerably overlap. The initial steps to include environmental considerations in transport policies began in 1998 with the Transport and Environment Reporting Mechanism (TERM). It sought to monitor the progress and effectiveness of integrating transport and environment strategies based on a set of indicators.⁹⁶⁹ However, the Greening Transport Package of 2008 places more of a focus on climate change (i.e. reducing GHG emissions), shown in the selection of concrete measures (see section 1.1.2.2).

1.6.1.10 Environmental Integration in Cohesion Policy

Relevant aims, objectives and priority actions

The 6EAP states that: 'The Programme shall promote the full integration of environmental protection requirements into all Community policies and actions by establishing environmental objectives and, where appropriate, targets and timetables to be taken into account in relevant policy areas'.⁹⁷⁰

Environmental policy integration is recognised as one of the strategic approaches to meeting the environmental objectives and aims of the 6EAP and a number of actions to further integration are identified in Article 3(3) including:

⁹⁶⁹ EEA (2010): TERM policy context, process and concept, Facts about the transport and environment reporting mechanism.

⁹⁷⁰ Article 2(4).

- ‘further integration of environmental criteria into Community funding programmes without prejudice to existing ones;’

Overview of measures

The principle of environmental integration in EU funding and the role of environmental investments in particular for regional development have gained increasing prominence on the Cohesion Policy agenda. This was reflected in the policy framework governing the principles and rules in the current 2007-2013 financial perspective. The **General Regulation 1083/2006/EC**⁹⁷¹ adopted in 2006 laid down provisions for the European Regional Development Fund (ERDF), European Social Fund and the Cohesion Fund. These funds provide €347 billion in the 2007-2013 financial perspective for projects which aim to address regional disparities and boost growth and jobs. In 2007, in line with the General Regulations and the Community Strategic Guidelines on cohesion, Member States developed their National Strategic Referential Frameworks (NSFR), setting out the strategic directions for EU spending, followed by more detailed Operational Programmes (OP), which determined the allocations of EU funding to concrete priority axes and measures. The General Regulation 1083/2006/EC introduced for the first time a stand-alone article on sustainable development.

In the 2007-2013 financial perspective, the **Community Strategic Guidelines for Cohesion**⁹⁷² set out a novel approach where EU funding for certain environmental measures can be regarded as a driver for economic development. Funds to ‘green’ production process and SMEs development (e.g. eco-innovation, eco-technologies, EMAS, etc.) were made available although the funding for such measures is fairly limited. Additionally, some funding was allocated to other types of environmental investment which seek to go beyond compliance with the EU environmental acquis and to respond to climate challenges in the regions (e.g. risk prevention, adaptation, clean and efficient energy and transport) and preserve ecosystems (e.g. Natura 2000).

In 2008, as part of the European Economic Recovery Plan, the Commission proposed changes in the General Regulation and other Regulations, arranging provisions for the separate funds, so as to stimulate the ‘real economy’ through smart and greener investments⁹⁷³. At the time, stronger political will for a greener agenda was translated into more ambitious measures for harnessing EU funds for energy efficiency and renewables projects in housing. **Regulation (EC) No 397/2009**⁹⁷⁴ amended the ERDF Regulation (EC) No 1080/2006 so that all Member States could use up to 4% of the ERDF allocations for energy efficiency and renewable energy measures in housing. Under the previous

⁹⁷¹ Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, *OJ L 210, 31.7.2006*.

⁹⁷² CEC, (2005), Cohesion Policy in Support for Growth and Jobs: Community Strategic Guidelines, 2007-2013, (COM(2005)299),05/07/2005.

⁹⁷³ CEC, (2008), European Economic Recovery Plan. (COM(2008)800), 26/11/2008.

⁹⁷⁴ Regulation (EC) No 397/2009 of the European Parliament and of the Council of 6 May 2009 amending Regulation (EC) No 1080/2006 on the European Regional Development Fund as regards the eligibility of energy efficiency and renewable energy investments in housing, *OJ L 126, 21.5.2009*,

Regulation, only new Member States could use up to 2% of the total ERDF allocations for such measures in social housing.

A number of other EU environmental measures also contribute to the 6EAP integration objectives in relation to Cohesion Policy. In particular, the **SEA Directive 2001/42/EC** sets out provisions for environmental assessment of plans and programmes prior to the decision-making and hence can be considered one of the key tools for environmental policy integration in EU fund programmes. The **EIA Directive 85/337/EEC** as amended by Directives 97/11/EC and **2003/35/EEC** requires investment projects which are likely to have significant environmental effects to undertake an environmental impact assessment prior to the development consent and therefore can be considered a key instrument for environmental policy integration at the project level and plays a major role regarding environmental policy integration in EU funded projects.

Contribution of important measures

Article 2 (1b) of Regulation 1084/2006/EC governing the rules on the Cohesion Fund stipulates that the scope of assistance provided from the Fund shall include 'the environment within the priorities assigned to the Community environmental protection policy under the policy and action programme on the environment'. The contribution of Cohesion Policy to the environmental and 'other' objectives of the 6EAP is linked to the provision of funding for the **implementation of different types of environmental measures**. Many of these are directly related to financing investment needs arising from the implementation of EU environmental acquis, particularly in relation to the water framework Directive, waste framework Directive or Natura 2000. For the 2007-2013 financial perspective, EU structural and cohesion funds allocate approximately €105 billion for the implementation of a range of environmental measures such as water supply, waste water treatment, waste management, mitigation and adaptation to climate change, risk prevention, renewable energy, energy efficiency, assistance to SMEs for the promotion of environmentally-friendly products and production processes, railways, multi modal transport, intelligent transport systems, the promotion of clean urban transport and cycling tracks⁹⁷⁵. All these measures are stipulated in separate Council Regulations laying down provisions for each of the Funds.⁹⁷⁶ Council Regulation 1084/2006/EC specifies that environmental measures under the Cohesion Fund should finance environmental measures within the 'priorities assigned ... under the policy and action programme on the environment'.⁹⁷⁷

The actual impact of 2007-2013 **cohesion spending on the state of the environment** is difficult to assess at this point as many of the projects have only recently been commissioned. In general however, there has been a lack of comprehensive evaluation of the impact of EU funds on the environment over the years. Some recent ex-post evaluations of the impact of cohesion funding in the previous financial period between 2000 and 2006

⁹⁷⁵ CEC, (2008a) Communication on the results of the negotiations concerning cohesion policy strategies and programmes for the programming period 2007-2013, (COM(2008)301).

⁹⁷⁶ Council Regulation 1080/2006/EC on the ERDF and Council Regulation 1084/2006/EC on the Cohesion Fund.

⁹⁷⁷ Article 2(b).

suggest that overall environmental investments had a significant impact on improving living conditions as well as compliance with the EU environmental acquis⁹⁷⁸. For instance, EU funds played a key role in supporting water investments needed to implement the urban wastewater treatment Directive in Italy and Spain⁹⁷⁹. The correlation between EU funding and improved water quality, on the other hand, is more difficult to establish⁹⁸⁰.

Non-environmental spending from EU funds, however, could potentially have a negative impact on the environment, especially in the case of the construction of large infrastructure such as roads and airports (some €40 billion EU funds is allocated to these types of projects in the 2007-2013 financial perspective)⁹⁸¹. Such investments could potentially have an adverse impact on greenhouse gas emissions, land use and habitats fragmentation. More importantly, they threaten to lock regions into carbon-intensive infrastructures and place them on an unsustainable development pathway on the long term^{982,983}. Therefore, providing direct funding for environmental projects is insufficient to suggest that Cohesion Policy effectively integrates environmental concerns. Environmental integration requires improved policy coherence through coordination mechanisms and policy instruments which ensure that Cohesion Policy investment are not counterproductive to the Community's environmental objectives.

The General Regulation 1083/2006/EC introduces a number of novel **governance mechanisms** which can further enhance environmental integration and partnerships in Cohesion Policy spending. These have significantly influenced the design of national and regional OP as well as the institutional structures in a way that cohesion programmes/projects could prevent or mitigate negative environmental impacts. Previous research has shown that EU funding could have positive spillover effects on governance systems, administrative capacity and policy learning in recipient countries.⁹⁸⁴ These provisions include:

Sustainable development as a horizontal issue: Article 17 stipulates that 'the objectives of the Funds shall be pursued in the framework of sustainable development and the Community promotion of the goal of protecting and improving the environment as set out in Article 6 of the Treaty'. This means that OP should align their objectives to the EU SDS objectives and take these into account in the programming and implementation of EU funded programmes

⁹⁷⁸ DG Regional Policy (2010) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 5b: Environment and climate change.

⁹⁷⁹ European Environmental Agency (2009) Territorial Cohesion – Analysis of environmental aspects of the EU Cohesion Policy in selected countries.

⁹⁸⁰ DG Regional Policy (2010) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 5b: Environment and climate change.

⁹⁸¹ DG Regional Policy. Transport statistics, http://ec.europa.eu/regional_policy/themes/transport/index_en.htm.

⁹⁸² FOEE and CEE Bankwatch Network (2007) EU Cash in Climate Clash: How the EU funding plans are shaping up to fuel climate change. Friends of the Earth Europe and CEE Bankwatch Network.

⁹⁸³ Green Alliance (2007) Investing in Our Future: a European Budget for Climate Security. Green Alliance. London.

⁹⁸⁴ DG Regional Policy (2009) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 11: Management and implementation.

and projects. An external evaluation of the current 2007-2013 programming process, however, found out that only one-third of the OPs adopted a three pillar definition of sustainable development and the polluter pays principle. Only few programmes referred to trade-offs between growth and the environment (particularly in relation to transport and energy). Furthermore, the evaluation suggests that economic development 'was given a de facto priority' particularly in poorer Member States⁹⁸⁵.

Ex-ante evaluation: The General Regulation sets out the requirement for Member States to conduct evaluations of the OPs which should take into account 'the objective of sustainable development and of the relevant Community legislation concerning environmental impact and strategic environmental assessment' (Article 47). Research has shown that the ex-ante evaluations of the 2007-2013 OPs have been an important tool to ensure that OPs are aligned with the Lisbon Strategy and the EU SDS⁹⁸⁶.

SEA: In 2007, the Commission requested that Member States conduct an SEA as a parallel process to the ex-ante evaluations in line with the SEA Directive 2001/42/EC for the NSRF and OP. SEAs generally focused on potential synergies (win-wins) between economic development and environmental protection and less on trade-offs. However, there were few Member States where the choice of strategic decisions on the allocation of funding was influenced by considerations of associated environmental costs⁹⁸⁷.

EIA: Major projects (the total cost of which is above €50 million) are compulsory subject to an EIA in line with the EIA Directive 2003/35/EEC. The Commission has retained powers over the decision-making concerning major projects and requires that Member States submit to the Commission as part of the official project documentation 'an analysis of the environmental impact' (EIA) (Article 40(f) of the General Regulation).

Partnership: The partnership principle sets out the requirement for Member States to organise close cooperation with environmental partners and non-governmental organisations during the preparation, implementation, monitoring and evaluation of OPs (Article 11). The application of the partnership principle in previous Cohesion Policy cycles has shown mixed results as in some countries the benefits of partnership are not understood and its delivery has not been entirely transparent.⁹⁸⁸

Monitoring committees: Article 63 of the General Regulation sets out that Monitoring Committees should be established per each OP. These inter-institutional bodies aimed at bringing policy coordination and complementarity of cohesion funding. Environmental authorities are usually full members of the committee with voting right, while non-governmental organisations are also invited but have the status of observers. While, it is still too early to assess the effectiveness of these structures, in theory the committee can

⁹⁸⁵ Nordregio (2009) The potential for Regional Policy Instruments, 2007-2013, to contribute to the Lisbon and Göteborg objectives for growth, jobs and sustainable development, Final report.

⁹⁸⁶ Ibid.

⁹⁸⁷ Ibid.

⁹⁸⁸ DG Regional Policy (2005) Partnership in the 2000-2006 programming period: analysis of the implementation of the partnership principle, http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/partnership_report2005.pdf.

facilitate environmental policy integration by exerting power over project selection criteria, monitoring report, approving revisions of the OPs priorities and actions, etc.

Strategic reporting: Member States are required to submit two strategic national reports which aim to assess the extent to which implementation of the Programme contributes to the objectives of Cohesion Policy as established in the Treaty, the tasks of the Funds as laid down in the General Regulation and the Integrated Guidelines for growth and jobs. No similar requirement is stipulated for contributing to the objectives of the EU SDS. However, these reports sometimes include data on greenhouse gas emission reduction realized by EU funded projects. They are also valuable instruments as they emphasize common implementation problems and examples of good practices.

In some countries, further institutional mechanisms for environmental policy integration were set out in previous policy cycles, which continue to operate. Some countries like the UK for instance introduced '**sustainability managers**' tasked with making EU funds programmes and projects more resilient and proofed from an environmental perspective. Italy and Spain created **networks of national and regional environmental authorities** responsible for the management of various EU funded projects. These networks cooperate on establishing common approaches to environmental investments and integration, e.g. the network in Italy drafted common guidelines on the ex-ante environmental evaluation in Objective 1 regions for the 2000–2006 cycle.⁹⁸⁹

In 2003, a European wide network of environmental and managing authorities (**ENEA-MA**) of EU funds programmes and projects was also set up. It is coordinated by DG Environment and meets twice a year. Its purpose is to bridge the exchange of knowhow and ideas among managing authorities with regard to the integration of environmental consideration in Cohesion Policy. The network usually establishes ad-hoc internal Working Groups on different topic areas. For the 2008-2010 period, there were three active working groups focusing on reporting of good practices and experiences across Member States concerning climate change, SEA and biodiversity⁹⁹⁰. Currently, a new working group has been established on the future Cohesion Policy, which aims to provide input to the negotiations on the future EU Funds Regulations from the perspective of environmental integration. This European network constitutes an important institutional and coordination mechanism for environmental policy integration in Cohesion Policy, however, its contribution to policy innovation has been fairly limited to date. Recently, DG Regional Policy has been more actively engaging with the network, which might create a new institutional leverage for environmental integration in the post-2013 Cohesion Policy⁹⁹¹.

Compared to previous financial periods, the **level of ambition** of environmental measures and integration mechanisms of EU funds as laid down in the General Regulation is higher, but can still be considered insufficient with respect to the objectives of the 6EAP. The

⁹⁸⁹ IEEP, (2010), Manual for European Environmental Policy, Earthscan.

⁹⁹⁰ EC (2009) ENEA and cohesion policy, http://ec.europa.eu/environment/integration/cohesion_policy_en.htm.

⁹⁹¹ ENEA-MA Plenary meeting, December 2010, DG Regional Policy <http://ec.europa.eu/environment/integration/pdf/enea/Agenda%2013%20Oct%202010%20FIN.pdf>.

strategic alignment of the EU funds Regulations to the Lisbon Strategy for growth and jobs led to the earmarking of approximately 65% of all funding to economic measures⁹⁹². Some of these measures can potentially undermine environmental objectives particularly through increased GHG emissions, land use and habitats fragmentation and lock countries into carbon- and resource intensive development pathways in the long term. Although a significant amount of the current Cohesion Policy funding is allocated to different environmental measures; measures encouraging climate change mitigation remain considerably underfinanced (€9 billion), while climate change adaptation funding is largely missing.

In 2006, when the Regulations were being negotiated, climate change was not a major political priority in the context of cohesion policy, and thus the scope of EU funds was limited to risk prevention measures which can be broader than climate change impacts. However, subsequent reports commissioned by DG Regional Policy ('Regions 2020'⁹⁹³ and the Barca Report⁹⁹⁴, published in 2008 and 2009 respectively, have helped to inform the Commission's understanding of climate change impacts on European regions and will potentially shape its thinking in this regard for the future post-2013 policy.

1.6.1.11 Promoting sustainable consumption and production patterns through a blend of instruments

Overall aims, objectives and priority actions

One of the strategic approaches to meeting the aims and environmental objectives set out in the 6EAP is the 'Promotion of sustainable consumption and production...to internalize the negative as well as the positive impacts on the environment through the use of a blend of instruments, including market based and economic instruments'.⁹⁹⁵ This requires *inter alia* 'promoting and encouraging the use of fiscal measures such as environmentally related taxes and incentives, at the appropriate national or Community level' and 'promoting the integration of environmental protection requirements in standardization activities'.⁹⁹⁶

More specifically, Article 5 of the 6EAP Decision lists, among the priority actions for tackling climate change, the use of fiscal measures including energy taxes. Article 5(2vi) calls for 'promoting the use of fiscal measures, including a timely appropriate Community framework for energy taxation, to encourage a switch to more efficient energy use, cleaner energy and transport and to encourage technological innovation'.

⁹⁹² Nordregio (2009) The potential for Regional Policy Instruments, 2007-2013, to contribute to the Lisbon and Göteborg objectives for growth, jobs and sustainable development, Final report.

⁹⁹³ CEC (2008b) Regions 2020: An Assessment of Future Challenges for EU Regions (SEC(2008)2868).

⁹⁹⁴ Barca, F. (2009) An Agenda for a Reformed Cohesion Policy.

⁹⁹⁵ Article 3(4).

⁹⁹⁶ Ibid.

Overview of measures adopted

Directive 2003/096/EC restructuring the **Community framework for the taxation of energy products and electricity** framework for the taxation of energy products and electricity (energy taxation Directive) establishes an EU framework for the taxation of energy products including electricity while contributing to the objectives of employment, environment, energy and transport policies across the EU. The Directive set minimum levels of duty for motor fuels, reviewing the level formerly set out in the 1992 Mineral Oils Directives 92/81/EEC and 92/82/EEC. The Directive also introduced minimum levels of duty for coal, natural gas and electricity for both industrial and domestic use for the first time.

In March 2007 a **Green Paper on Market Based Instruments (MBI)**⁹⁹⁷ was presented which had a major focus on energy taxation. Notably, it proposed to split tax rates set out in the energy taxation Directive into energy and an environmental component, and explored the possibility of further shifting taxes from labour to environmentally-damaging products and services ('Environmental Tax Reform'). Reactions to the Green Paper were meant to provide input to a **revision of the energy taxation Directive**. A draft proposal for a revised Directive was tabled in 2009⁹⁹⁸ with the aim of bringing the energy taxation Directive more closely in line with the EU's climate and energy objectives and to introduce an explicit environmental element into the tax. The proposal also recommended extending the scope of the Directive to products falling under the ETS, with the exception of taxation elements related to CO₂ emission in order to avoid duplication. A revised proposal was meant to be issued in early April 2009 as part of a 'green tax package' of measures on environmental taxation – including draft legislation on reduced VAT rates for 'green' products and a Commission Communication on the role of taxes in energy and environmental policy. The package however has not yet been released and has been put on hold following internal consultations within the Commission.

The **eco-design Directive** 2009/125/EC⁹⁹⁹ establishes a framework (rules and criteria) for the setting of minimum requirements for the performance of energy-related products. It expands the scope of the original eco-design framework Directive (2005/32/EC) from energy-using products (EuP) to all energy related products which have an impact on energy consumption during use (e.g. windows, construction products, insulation materials, detergents and water-using products). The measure does not as such introduce directly binding requirements, but rather defines a process, conditions and criteria for setting requirements through implementing measures. The Commission prepares implementing measures for products which have significant sales and trade in the EU (indicatively more than 200,000 units a year) and a significant environmental impact with potential for

⁹⁹⁷ Green Paper on market-based instruments for environment and related policy purposes, (COM(2007)140), 28/03/2007.

⁹⁹⁸ Commission of the European Communities (2009) Proposal for a Council Directive Amending Directive 2003/96 restructuring Community framework for the taxation of energy products and electricity (presented by the Commission), (COM (2009) XXXX).

⁹⁹⁹ Council Directive 2009/125/EC establishing a framework for the setting of Ecodesign requirements for energy-related products (recast). OJ L28531.10.2009

improvement. Ecodesign requirements are based on an assessment of the impact of a product on the environment throughout its lifecycle.

Other key measures which seek to reduce the impact from energy and energy-related products and promote sustainable consumption and production include the following:

Energy Performance of Building Directive¹⁰⁰⁰ promotes an improvement in the energy performance of buildings in the EU by setting a common framework and a number of requirements to ensure that action is taken by Member States.

Energy Labeling Directive¹⁰⁰¹ introduces an EU-wide energy labeling scheme for household appliances which rank products according to their energy efficiency consumption. Energy labelling requirements are already in force for a number of household products including electric ovens, fridges and freezers, washing machines, electric tumble driers, combined washer driers, dishwashers, lamps, and air conditioners. In September 2010 the Commission proposed new energy labels for TVs and updates to the existing label scheme for refrigerators, dishwashers and washing machines¹⁰⁰².

Energy End-use Efficiency and Services Directive¹⁰⁰³ aims to enhance the cost-effective improvement of energy end-use efficiency in Member States by setting indicative targets, removing market barriers and introducing measures to promote energy efficiency and energy services. The Directive requires Member States to adopt an indicative national energy savings target of 9%, to be achieved in 2016. Member States are also required to take energy efficiency considerations into account for public procurement. Member States are required to submit National Energy Efficiency Action Plans (NEEAPs) to the Commission (the first was due by 30 June 2007) which set out how they intend to reach the indicative 9% target and how they intend to comply with other provisions of the Directive including the exemplary role of the public sector and the provision of information and advice to final consumers.

Contribution of important measures

The **energy taxation Directive** sets out for the first time a range of minimum tax rates for energy related products, thus representing a step forward from the earlier Directive on Mineral Oils¹⁰⁰⁴ which only focused on motor fuels. The Directive corresponds to the requirement in the 6EAP of setting up a 'community framework for energy taxation'. Whether it is 'timely and appropriate' depends on the required level of ambition of the measure which

¹⁰⁰⁰ Council Directive 2002/91/EC on the energy performance of buildings. OJ L1, 4.1.2003.

¹⁰⁰¹ Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (recast), OJ L 153/1, 18/6/2010.

¹⁰⁰² European Commission (2010), Press release - Energy savings: Commission sets up new energy labels for televisions, refrigerators, dishwashers and washing machines, IP/10/1182, 28/09/2010, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1182&format=HTML&aged=0&language=en&guiLanguage=en>.

¹⁰⁰³ Council Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC. OJ L 114, 27.4.2006.

¹⁰⁰⁴ Directive 92/82/EEC of 19 October 1992 on the approximation of the rates of excise duty on mineral oils.

is not clarified in the 6EAP. Compared to an earlier proposal in 1997, the adopted Directive substantially watered down the initial level of ambition, setting relatively low minimum tax rates and granting substantial exemptions to energy intensive industries. Furthermore, some Member States were allowed to delay meeting the first minimum rates by up to six years, and to grant partial exemptions to a number of products, including products used for public transport, renewable sources of energy and fuel used for navigation in inland waters. Overall, the Directive sets low minimum levels for energy taxation¹⁰⁰⁵, which in practice provide little incentive to increase energy taxation enough to stimulate substantial energy efficiencies. A substantial divide remains between countries with taxes far above the minimum EU rates (especially northern EU Member States) and countries with relatively low rates and a large number of exemptions. The low tax rates and the numerous exemptions granted to some industrial sectors and Member States has limited the impact of the Directive on the achievement of EU and international climate change targets and the 6EAP environmental objectives. Despite these shortcomings, the Directive represents the first attempt to improve harmonisation and acknowledges the importance of a common energy taxation framework in order to contribute to the achievement of climate change objectives. The upcoming revision of the Directive has the potential to improve its level of ambition and hence contribute more substantially to 6EAP objectives.

The new **eco-design Directive** only entered into force on 20 November 2009 (deadline for transposition is 20 November 2010), thus it is too early to assess its implementation or contribution to the objectives of the 6EAP. In relation to the 2005 Directive, although the Directive took a lifecycle perspective, the environmental impact of energy-using products covered by the Directive only accounted for 31-36% of the environmental impact of products¹⁰⁰⁶. The new Directive expands the scope of the original Directive to all energy related products which have an impact on energy consumption during use. It establishes a single, coherent Community framework for setting eco-design requirements and encourages the integration of environmental protection requirements in standardization activities,. The adoption of eco-design standards as applied to a range of different energy-related products will help promote the objectives of the 6EAP relating to the promotion of more sustainable consumption and production patterns. The decision to improve eco-design helps to raise awareness among industry and consumers and will also help spur innovation in the manufacturing of products, thus prompting industry to invest more in research and development. The Directive is also likely to have some indirect impacts on the achievement of the 6EAP's objectives relating to climate change and sustainable resource use through its ability to encourage less emission intensive manufacturing processes. Decisions aimed at improving the eco-design of energy related products will reduce the lifecycle greenhouse gas emissions associated with various manufacturing processes thus helping the EU to meet its overall emissions reduction target. At the same time, reducing lifecycle emissions will

¹⁰⁰⁵ Hasselknippe /Christiansen (2003): Energy Taxation in Europe: Current Status- Driver and Barriers – Future Prospects. FNI Report 14/2003

¹⁰⁰⁶ CEC, (2008), Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, (COM(2008)397), 16/07/2008.

encourage industry to use energy inputs more conservatively and thus contribute to objectives relating to the sustainable use and management of natural resources and waste.

Eco-innovation or the development and dissemination of new environmental technologies

Relevant aims, objectives and priority actions

The 6EAP does not contain a separate section on eco-innovation or the development and dissemination of new environmental technologies nor does it call (explicitly) for the adoption of a European environmental technologies action plan. Nevertheless, the 6EAP includes the overall aim of decoupling economic growth from the use of natural and material resources and established ambitious environmental policy objectives in a number of priority areas, whose achievement necessarily requires accelerated development and uptake of environmental technologies. The 6EAP also mentions a number of instruments and approaches such as integrated product policy (IPP), green public procurement (GPP), removal of environmentally harmful subsidies (EHS), use of environmentally related taxes and charges, etc that relate to eco-innovation and also feature in the Environmental Technologies Action Plan (ETAP).¹⁰⁰⁷

A number of the strategic approaches to meeting the environmental objectives and aims of the 6EAP set out in Article 3 relate to eco-innovation:

In order to promote sustainable consumption and production patterns, the 6EAP aims to encourage 'reforms of subsidies that have considerable negative effects on the environment and are incompatible with sustainable development, inter alia by establishing, by the mid-term review, a list of criteria allowing such environmentally negative subsidies to be recorded, with a view to gradually eliminating them' (Article 3(4)).

In the same area, the 6EAP also aims to promote and encourage 'the use of fiscal measures such as environmentally related taxes and incentives, at the appropriate national or Community level' (Article 3(4)).

It also aims to promote 'an integrated product policy approach throughout the Programme that will encourage the taking into account of environmental requirements throughout the life-cycle of products, and more widespread application of environmentally friendly processes and products' (Article 3(5)).

It also aims to promote 'a green public procurement policy, allowing environmental characteristics to be taken into account and the possible integration of environmental life cycle, including the production phase, concerns in the procurement procedures while respecting Community competition rules and the internal market, with guidelines on best practice and starting a review of green procurement in Community Institutions' (Article 3(6)).

Article 5 of the 6EAP also mentions innovation in relation to its objectives and priority areas for action on tackling climate change:

¹⁰⁰⁷ Pallemarts, M., ten Brick, P., Herodes, M., Bassi, S. and Geeraerts, K. (2007). Study on the potential contribution of the federal authorities to the development of an integrated policy in the field of eco-innovation in Belgium. Report for the Belgian federal Public Service for public health, food chain safety and environment. IEEP. London.

- promoting the use of fiscal measures, including a timely and appropriate Community framework for energy taxation, to encourage a switch to more efficient energy use, cleaner energy and transport and to encourage technological innovation;
- ensuring climate change as a major theme of Community policy for research and technological development and for national research programmes

Overview of measures

In January 2004, the Commission published a Communication '**Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union**'¹⁰⁰⁸. The Action Plan aims to: remove barriers to harness the full potential of environmental technologies and deliver win-win solutions for the environment and the economy; ensure the EU takes a leading role in developing and utilising environmental technologies; and mobilise all interested stakeholders in achieving these objectives. ETAP sets out a series of measures focusing on three key areas of intervention:

- Bring research to markets: enhance research, demonstration and dissemination, establishing technology platforms and testing networks.
- Improve market conditions: agree performance targets, mobilize necessary financial resources, revise environmental state aid guides, review environmentally harmful subsidies, green public procurement, increase awareness among stakeholders.
- Act globally: promote responsible investments and trade.

It should be noted that ETAP is an action plan that refers to a number of environmental and other measures. In fact, the implementation of most of the actions it foresees still necessitates the adoption of more operational instruments. Financial instruments such as 7FP and CIP are major EU-level instruments for the implementation of ETAP.

The **7th Research Framework Programme (7FP)** aims to support Community objectives in the area of competitiveness and innovation, notably the objectives of the Lisbon Strategy. It aims in particular to strengthen research and innovation capacities in bottom-up innovation and knowledge production processes. The 7FP also funds initiatives in a number of sectors and areas with links to environmental technologies, including energy, climate change sustainable management of natural resources, and biotechnology. The 7FP allocates approximately €10 billion to environmental technologies, whereas the preceding 6th research framework programs (6FP) devoted approximately €1.4 billion, indicating that these technologies have gained significantly more importance as a result of increased coordination of existing programs.¹⁰⁰⁹

¹⁰⁰⁸ CEC. 2004. Communication from the Commission to the Council and the European Parliament Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union, COM(2004)38, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0038:FIN:EN:PDF> .

¹⁰⁰⁹ Ecorys (2009). The implementation of the Environmental Technologies Action Plan. Draft final report. Under the Framework Contract ENV.G.1/FRA/2006/0073. Ecorys Research and Consulting. 23 August 2009.

The **Competitiveness and Innovation Framework Programme** (CIP) was proposed in April 2005 and adopted in October 2006¹⁰¹⁰ and aims to bring together specific EU support programmes and relevant parts of other programmes related to boosting European productivity, innovation capacity and sustainable growth, whilst simultaneously addressing complementary environmental concerns. The CIP, which covers the period January 2007 - December 2013, constitutes the legal basis for Community actions enhancing competitiveness and innovation, complementing 7FP. The CIP makes explicit reference to ETAP, and two of its sub-programmes, namely *Entrepreneurship and Innovation* and *Intelligent Energy*, and has the potential to foster the development of environmental technologies (Pallemaerts et al, 2007). Eco-innovation is described as a transversal theme of the whole programme, and within the *Entrepreneurship and Innovation* sub-programme, nearly €200 million is specially allocated to support eco-innovation.

Other EU policy initiatives in the field of innovation (which may be of incidental relevance to eco-innovation and therefore only contributing in a limited way to the relevant 6EAP objectives) include:

Innovation strategy: In September 2006, the Commission proposed a strategy to promote the development of innovative products and services, by supporting knowledge sharing and creating a more 'innovation-friendly' business environment. The innovation strategy proposes ten priority actions, two of which are particularly relevant to the promotion of environmental technologies and services. Action 9: develop a strategy for innovation friendly 'lead markets' and Action 2: the establishment of a European Institute of Technology.

Modern SME Policy for Growth and Employment: the SME Policy for growth and employment aims to provide a framework for the various enterprise policy instruments in the EU, in line with the objectives of the Lisbon Agenda.

European Strategic Energy Technology Plan (SET-Plan): The SET-Plan is the technology pillar of the EU's energy and climate policy proposed by the Commission in 2007 and subsequently endorsed by Member States and the European Parliament. It lays out the EU's strategy to accelerate the development of clean, efficient and low emission energy technologies and to bring them more quickly to the market

Contribution of important measures

ETAP contains 25 actions, including 11 priority actions. This section focuses on those priority actions which relate directly or indirectly to the 6EAP objectives mentioned above. : increase and focus research, demonstration and dissemination (priority action 1); develop and agree on performance targets for key products, processes and services (priority action 4); review environmentally harmful subsidies (priority action 7); encourage procurement of environmental technologies (priority action 8).

Increasing and focusing research, demonstration and dissemination

¹⁰¹⁰ Decision No 1639/2006/EC of the European Parliament and the Council of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme (2007-2013.).

ETAP aims to increase research, demonstration and dissemination (RD&D) activities and increase coordination of existing programs related to R&D activities. A number of relevant instruments have been put in place in relation to RD&D activities and these instruments seem to be suited for reaching out to a large number of different actors (Ecorys 2009). Nevertheless, for some stakeholders, in particular for SMEs, a number of barriers to access to RD&D still exist. Relevant instruments have also been put in place which seek to increase coordination of existing programs related to R&D activities, in particular the ERA-NET scheme.¹⁰¹¹

Promoting an integrated product policy approach throughout the Programme

ETAP puts forward a priority action (No 4) to develop and agree on performance targets for key products, processes and services. Under this action, the Commission undertook to work with Member States and relevant stakeholders to consider how best to develop a process to identify performance targets for environmental technologies. The means of achieving this was integrated product policy (IPP), eco-design of energy-using products, voluntary agreements, policy initiatives and more generally regulation.

With regards to **IPP**, the Commission published a Communication in June 2003 setting out a non-binding framework for the consideration of a product dimension within environmental policy.¹⁰¹² A program to take forward at least some of the elements set out in the Communication was put in place. Specifically this focused on the completion of pilot projects and the development of ideas regarding the most environmentally harmful products. Moreover, regular meetings were held to discuss the evolution of actions under the IPP heading.¹⁰¹³ Two pilot projects examining the application of IPP were undertaken (focusing on mobile phones and tropical hardwood garden furniture) which were completed in 2006 hailed as a success by the Commission with industry groups committing to take voluntary action, however, no subsequent formal processes have been put in place for other sectors.¹⁰¹⁴ Despite the 2003 Communication, there remains no coherent approach to products in EU law, with legislation focused on specific product groups including electrical equipment, cars, batteries, packaging, energy using products etc., which tend to operate in isolation requiring different actions and activities.¹⁰¹⁵

With regards to the **eco-design of energy-using products (EuP)**, in 2005 the Commission adopted Directive 2005/32/EC (the so-called EuP Directive) which requires the incorporation of lifecycle-based environmental considerations in the product development process. The Directive is a framework Directive that defines how to prepare product group-specific

¹⁰¹¹ Ecorys 2009.

¹⁰¹² COM(2003)302.

¹⁰¹³ IEEP, 2010a.

¹⁰¹⁴ Ibid.

¹⁰¹⁵ Ibid.

implementation measures in further detail, the types of regulations they may included, and how product compliance is to be demonstrated. In 2009 the EuP Directive was re-cast through Directive 2009/125/EC. This new Directive on eco-design requirements for energy-related products not only deals with EuPs such as washing machines, freezers or hair-driers, but will also deal with products such as windows, insulation materials or certain water using products like shower heads or taps.¹⁰¹⁶

Reviewing environmentally harmful subsidies and using fiscal measures

In relation to the 6EAP objective to encourage reforms of environmentally harmful subsidies, ETAP put forward a priority action (No 7) to **review environmentally harmful subsidies**. Under this action the Commission undertook to use a framework developed by the OECD to identify the most significant subsidies that have a negative impact on the environment. The action was to be undertaken together with Member States and regional governments. ETAP foresees that subsequent to this review, each level of government should take the appropriate action, as quickly as possible, to remove or reduce the negative effects of such environmentally harmful subsidies, for example by introducing new taxes or tax incentives combined with harmonised performance targets. The Commission (DG Environment) commissioned a study to help add clarity to the debate on the reform of environmentally harmful subsidies. This report gives an overview of the issues relating to the existence and potential reform of EHS.¹⁰¹⁷ Further to this, another study was carried out with the aim of developing a methodology for identification, assessment and quantification of environmentally harmful subsidies. The study tested the tools developed previously by the OECD on six case studies of subsidies in the energy, transport and water sectors. Based on this analysis and on results of a workshop, the study developed the 'EHS Reform tool' for screening, integrated assessment and reform of environmentally harmful subsidies.¹⁰¹⁸ To date, the reform of environmentally harmful subsidies has not progressed beyond these studies, with the exception of the CAP reform.

In relation to the 6EAP objective to promote and encourage the use of fiscal measures, **tax incentives** are mentioned only in passing in the ETAP Communication under the heading 'Creating incentives and removing economic barriers'. None of the 28 actions recommended by ETAP refers to the introduction of such incentives. Concrete policy actions in the area of environmental taxes are mainly visible at the level of Member States. To date, only a few Member States have adopted some forms of environmental tax reform (ETR). Finland (1990), Sweden (1991) and Denmark (1993) were the first to embrace the concept and strategy of ETR, followed by the Netherlands (1996, 2001), Germany (1999) and the United Kingdom (1996, 2001 and 2002) (EEA, 2005). Other Member States have adopted environmental (green) taxes, but not full ETR strategies.¹⁰¹⁹ The level of uptake of

¹⁰¹⁶ Ibid.

¹⁰¹⁷ IEEP, 2007b.

¹⁰¹⁸ IEEP et al 2009.

¹⁰¹⁹ Bassi, S., ten Brink, P., Pallemerts, M. (IEEP) and von Homeyer, I. (Ecologic). (2009). Feasibility of implementing a radical ETR and its acceptance. Report under task C of the 'Study on Tax Reform in Europe over the Next Decades: Implication for the Environment, for Eco-Innovation and for Household Distribution'.

environmental taxes in the EU is also uneven. Some countries such as Denmark, the Netherlands and Malta have been keener to implement green taxes, which reached a level of respectively 12.2, 10.4 and 10.1 per cent of total tax revenues in 2006. At the other extreme, France, Spain and Belgium recorded the lowest percentage of revenues from environmental taxes – respectively 5.2, 5.1 and 4.9 per cent in 2006. Furthermore, while in some countries the share of green taxes has increased in the past 10 years, in others the trend has been decreasing.¹⁰²⁰ At EU level, after a general increase in the 90s, the EU (weighted) average of environmental taxes has decreased from 1995 to 2006 from 7 to 6.4 per cent.¹⁰²¹

Since the launch of the 6EAP in 2002, the EU's intention to strengthen the role of environmental taxes and charges and to reduce environmentally harmful subsidies has been reconfirmed several times. Concrete policy actions in these areas are mainly visible at the Member State level, especially by looking at the number of countries that apply specific environmental taxes and charges. Nevertheless, in terms of its share in total tax revenue the role of eco-taxation remains modest and does not show an increasing trend.¹⁰²²

Encouraging procurement of environmental technologies

In relation to the 6EAP objective relating to the promotion of green public procurement policy, ETAP put forward a priority action (No 8) to encourage procurement of environmental technologies and set national targets for the uptake of environmentally friendly technologies. ETAP proposed investigation into the setting of performance based instruments in public procurement procedures, as a way of pulling environmental technologies into the market. It also noted that the Commission had already contributed to this area by proposing what was to become the Directive 2006/32/EC on energy end-use efficiency and energy services as well as a number of other developments including a handbook for public procurers, a product-group database and voluntary action plans for public procurement. See GPP and EuP, this section, for further details.

Role of ETAP

At national level, a study carried out by WIFO for the OECD Environment Directorate concluded that 'ETAP has had little or no impact on the development of new policy measures for eco-innovation'.¹⁰²³ EU Member States have introduced policy measures for national reasons and not for EU/ETAP reasons. 'ETAP itself does not lay down specific requirements for member states other than providing a roadmap. ETAP has, however, been a vehicle to systematise and reorganise existing measures in the participating countries. For countries that have been exposed to the European convergence process only recently, ETAP has also been an instrument to start a policy debate on issues related to eco-innovation'.¹⁰²⁴ 'To

¹⁰²⁰ European Commission (EC) (2008). Taxation trends in the European Union. Data for the EU Member States and Norway. Eurostat Statistical Books.

¹⁰²¹ Bassi et al, 2009.

¹⁰²² Pallemmaerts et al, 2007.

¹⁰²³ WIFO (2009). Assessment of ETAP roadmaps with regard to their eco-innovation potential, Final Report, Part 1: Analysis of country roadmaps. Prepared by the Austrian Institute for Economic Research (WIFO) for the OECD Environment Directorate. Vienna. 23 December 2009.

¹⁰²⁴ Ibid.

summarise the status of ETAP roadmaps is that of a summary of existing measures, an umbrella document, rather than a vehicle for change'.¹⁰²⁵ At national level 'ETAP has acted more as an instrument to promote debates on eco-innovation at the political and policy-making levels. [...] In this case it would be wrong to assess ETAP in terms of new measures it has initiated at the national level or in terms of eco-innovation output indicators. The correct assessment would be to look at the impact ETAP has had on policy learning because it has been used as such by member states'.¹⁰²⁶

1.6.1.12 Better environmental information

Overall aims, objectives and priority actions

One of the strategic approaches to meeting the aims and environmental objectives set out in the 6EAP is 'To help ensure that individual consumers, enterprises and public bodies in their roles as purchasers, are better informed about the processes and products in terms of their environmental impact with a view to achieving sustainable consumption patterns' (Article 3(3)). This requires *inter alia*:

- 'encouraging the uptake of eco-labels and other forms of environmental information and labelling that allow consumers to compare environmental performance between products of the same type;
- promoting a green public procurement policy, allowing environmental characteristics to be taken into account and the possible integration of environmental life cycle, including the production phase, concerns in the procurement procedures while respecting Community competition rules and the internal market, with guidelines on best practice and starting a review of green procurement in Community Institutions;' (Article 3(3)).

Overview of measures

A number of legislative measures providing for the labelling of energy using goods have been adopted that encourage the uptake of eco-labels and other forms of environmental information and labelling. Some key measures adopted since 2002 are outlined below:

Directive 2010/30/EC on energy labelling¹⁰²⁷ recast and extended the scope of previous Directive 92/75/EEC to all energy-related products. The Directive establishes requirements for labelling and information on the environmental performance of certain products with the aim of helping consumers make better choices. It also contains provisions on public procurement. By extending the scope of the Directive beyond household goods, more products in the public procurement pool are required to be labelled.

¹⁰²⁵ Ibid.

¹⁰²⁶ Ibid.

¹⁰²⁷ Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (recast), OJ L 153/1, 18/6/2010.

Regulation (EC) 66/2010 on the EU eco-label¹⁰²⁸ (which repeals Regulation (EC) No 1980/2000) lays down rules for the establishment and application of the voluntary EU eco-label scheme to goods and services in the Community market. The aim is to contribute to reducing the negative impact of consumption and production on the environment, health, climate and natural resources by promoting those products with a higher level of environmental performance through award of the EU eco-label. More generally, it aims to streamline the previous Regulation to raise awareness, understanding and respect for the EU eco-label, bring about more eco-labelled products, and reduce administrative costs and burdens on business.

Regulation (EC) 106/2008 on an energy-efficiency labelling programme for office equipment (Energy Star) is a voluntary energy labelling programme for office equipment (computers, computer monitors, printers, copiers, scanners, fax machines) in the Community. The Energy Star logo helps consumers identify office equipment products that save them money and help protect the environment by saving energy.

A number of measures have been adopted which aim to facilitate/encourage the uptake of green public procurement (GPP) policy in the EU including:

Communication on public procurement for a better environment (COM(2008)400)¹⁰²⁹ proposed a series of actions which aimed to address certain obstacles to the uptake of GPP and promote more and better GPP. These actions involved the creation of a process for setting common GPP criteria, encouraging the publication of information on lifecycle costing of products, increasing certainty on the legal possibilities to include environmental criteria in tender documents, and increasing support for the promotion and implementation of GPP through a political target linked to indicators and future monitoring. The Communication proposed that by 2010, 50% of all public tendering procedures should be 'green', i.e. comply with endorsed common core EU GPP criteria.

EU Directives on **public procurement** (Directive 2004/18/CE and Directive 2004/17/CE) clarify how environmental considerations can be taken into account in public procurement procedures and practices.

Directive 2009/33/EC on clean and energy efficient road transport vehicles requires that energy and environmental impacts linked to the operation of vehicles over their whole lifetime are taken into account in all purchases of road transport vehicles as covered by the public procurement Directives and the public service Regulation.

Directive 2006/32/EC on energy end-use efficiency and energy services provides that the public sector should fulfill an exemplary role in the context of this Directive and should *inter alia* adopt at least two measures from a list in Annex VI aimed at procurement of energy efficiency equipment and buildings.

¹⁰²⁸ Regulation (EC) No 66/2010 on the EU Eco-label, OJ L 27/1, 30/01/2010.

¹⁰²⁹ CEC, (2008), Communication from the Commission on public procurement for a better environment, (COM(2008)400), 16/07/2008.

Regulation (EC) No 106/2008 on a **Community energy efficiency labeling programme for office equipment (Energy Star)** obliges central government to apply energy efficiency requirements included in Energy Star Standards in procurement procedures for contracts above the thresholds of the Public Procurement Directives.

Implementing measures under the revised Directive on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products are to identify one of the labelling classes as a level below which public procurement and national incentives would not be allowed.

The identification of suitable GPP criteria is coordinated and complementary to new and existing **eco-label, energy star and eco-design of energy using products** measures and other EU initiatives aimed at setting voluntary environmental product or production process related criteria, including reference to standards for the assessment of the **energy performance of buildings and services**.

Contribution of important measures

The new **eco-label Regulation** only entered into force on 19 February 2010, thus it is too early to assess its implementation or contribution to the objectives of the 6EAP. Assessments of the previous Community eco-label scheme however indicated a number of shortcomings in the approach including the lack of a clear, consistent vision and slow decision-making¹⁰³⁰; limited awareness; uneven geographic uptake, insufficient product group categories; cumbersome administrative procedures; and the cost of attaining the eco-label¹⁰³¹. The above would suggest that the most important factors in the new Regulation's success will be the level of awareness of the eco-label, the efficiency of the administration of the scheme – particularly consideration of applications and allocation of the label – and the cost to producers of getting the label for their product/service. It is difficult to say at present how effective the new Regulation will be, but in its revision all three points (awareness, administration and cost) were addressed, so one would hope performance in these areas would be improved.

The new **energy labelling Directive** has yet to be transposed (the deadline for transposition is 20 June 2011), thus it is too early to tell what the impact of the new Directive will be on the objectives of the 6EAP. A survey¹⁰³² of compliance with the previous Directive (92/75/EEC) found that the total share of correctly labelled appliances that is those in full accordance with the Directive, across all 29 countries (27 EU Member states, Norway and Iceland) included in the analysis was found to be 61%. There were, however, huge differences between countries and between different appliances. A clear difference was found in the degree of compliance between those appliances for which implementing Directives came into force more than 10 years previously and electric ovens and air conditioners, for which the implementing

¹⁰³⁰ IEEP, (2010), Manual for European Environmental Policy, Earthscan .

¹⁰³¹ European Commission (2007) Report on the Public Consultation, Revision of the EU Ecolabel Regulation (EC) No 1980/2000 http://ec.europa.eu/environment/ecolabel/about_ecolabel/revisions/revision_report2007.pdf.

¹⁰³² Schlomann, et al., (2009) Survey of Compliance Directive 92/75/EEC (Energy Labelling) Final Report for the European Commission Directorate-General Energy and Transport, 2009.

Directives were only adopted in 2002. The survey also showed that only a few regular and systematic controls were carried out by Member State enforcement authorities with regard to the correct classification of appliances, although most countries stated that they carried out shop inspections to monitor the retail trade. It is too early to tell whether the new Directive will help to improve compliance in Member States, however by expanding the scope of the Directive to cover all the energy-related products, the new Directive has the potential to encourage labelling and environmental information relating to much wider range of products. The Directive can also be expected to have an impact on green public procurement practices. With more products bearing the same label across all Member States, less fragmentation of procurement policy is envisaged: where one Member State has a policy on green public procurement, for example with criteria on energy efficiency, they would be able to base this criteria on the label style used by the energy labelling Directive, and they would not be restricted to purchasing within their country to know that they could meet such criteria, if products in other Member States are directly comparable. It is hoped this will facilitate the uptake of energy efficient products.

In terms of trends in the uptake of **GPP** among Member States, in 2006, seven Member States (Sweden, Finland, Denmark, Austria, Germany, the Netherlands and the UK - known collectively as the 'Green-7') were practising a significant amount of GPP, while GPP was applied much less, or not at all in other Member States¹⁰³³. In 2006/2007, the Green-7 had an average overall level of 45% GPP of the total procurement value and 55% GPP of the total amount of contracts¹⁰³⁴. The 2003 Integrated Product Policy (IPP) Communication called on Member States to develop a national action plan (NAP) on GPP by the end of 2006. As of September 2010, a NAP or equivalent document had been adopted in 21 Member States, and NAPs were in the process of development in the remaining six Member States (Bulgaria, Estonia, Greece, Ireland, Hungary, Romania)¹⁰³⁵. A recent review of green and/or sustainable public procurement schemes in nine Member States¹⁰³⁶ revealed that there are no outstanding differences between the different national approaches or with the EU GPP scheme and thus concluded that it was not necessary to develop a new framework for the EU GPP scheme, but rather a number of recommendations for update were proposed. The Commission has worked with Member States and stakeholders to develop common criteria for 18 product and service groups. These criteria are available for use in all Member States and encourage a consistent and harmonised approach which simplifies compliance for manufacturers and in turn reduces the administrative burden for those

¹⁰³³ CEC, (2008a), Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, Impact Assessment, SEC(2008)2124, 16/07/2008.

¹⁰³⁴ PWC (2009), Collection of statistical information on Green Public Procurement in the EU Report on data collection results, Report by PricewaterhouseCoopers, Significant and Ecofys, January 2009, http://ec.europa.eu/environment/gpp/pdf/statistical_information.pdf.

¹⁰³⁵ DG Environment (2010), GPP National Action Plans – The Status in Member States, http://ec.europa.eu/environment/gpp/action_plan_en.htm, Site accessed 15/12/2010.

¹⁰³⁶ AEA Technology Plc, (2010), Assessment and Comparison of National GPP/SPP Criteria and Underlying Schemes, Service contract ENV.G.2/SER/2009/0059r .

implementing GPP¹⁰³⁷. A web-based Training Toolkit on GPP has been produced and in 2009-2010 a program to raise awareness of GPP policy in 19 EU Member States was carried out. In addition an extensive training programme was carried out for 40 participants from 19 Member States¹⁰³⁸. In 2004, the Commission published a handbook on 'Buying Green! – A Handbook on Environmental Public Procurement' which explains how environmental considerations can be integrated in public procurement procedures and clarifies the legal position of integrating environmental considerations in a tender¹⁰³⁹. A Helpdesk for GPP was launched in January 2010 which aims to promote and disseminate information about GPP. In 2011, the Commission will undertake a monitoring exercise of the level of GPP covering all Member States.

The GPP Communication is relatively new and its impact is difficult to distinguish from preceding / ongoing processes, which largely began in 2003 with the IPP Communication. However, in general it is evident that the Commission has undertaken a number of steps to promote GPP, thus contributing towards the relevant objectives of the 6EAP. The setting of common environmental criteria will facilitate the integration of environmental considerations in procurement procedures and thus contribute to the 6EAP calls for environmental characteristics to be taken into account and for the possible integration of environmental lifecycle concerns in public procurement procedures. The elaboration of a specific GPP target (albeit one that is non-mandatory) should provide additional political impetus to the uptake of GPP. The Handbook on Environmental Public Procurement sets out how to best integrate environmental considerations in public procurement procedures and thus contributing to the 6EAP's call for best practice guidelines in this area, while the organisation of national conferences and training programmes have helped raise awareness of GPP at the national level. Although the Commission uses GPP in some of its own tendering procedures¹⁰⁴⁰, a comprehensive review of GPP in all Community institutions as called for in the 6EAP has not yet been undertaken.

1.6.1.13 Environmental Liability

Thematic Area

The 6EAP only makes one explicit reference to environmental liability legislation. However, throughout the text of the 6EAP, there are several other objectives which are directly or indirectly related to this topic.

¹⁰³⁷ DG Environment (2010), GPP common criteria, http://ec.europa.eu/environment/gpp/gpp_criteria_en.htm, Site accessed 15/12/2010.

¹⁰³⁸ DG Environment (2010), GPP web pages, http://ec.europa.eu/environment/gpp/index_en.htm, Site accessed 15/12/2010.

¹⁰³⁹ DG Environment (2004), Buying Green! – A Handbook on environmental public procurement, http://ec.europa.eu/environment/gpp/pdf/buying_green_handbook_en.pdf.

¹⁰⁴⁰ AEA Technology Plc, (2010), Assessment and Comparison of National GPP/SPP Criteria and Underlying Schemes, Service contract ENV.G.2/SER/2009/0059r

Main objectives of the 6EAP relating to environmental liability

The objective to enact environmental liability legislation at Community level ties in with the overall aims set out in the 6EAP.

The 6EAP's **overall aims** set out in Article 2 echo the Community's environmental policy¹⁰⁴¹, positing that it

- 'shall be based particularly on the polluter-pays principle, the precautionary principle and preventive principle, and the principle of rectification of pollution at source.'

Article 3, which lists **strategic approaches** to meeting environmental objectives, then goes on to specify that the aims and objectives set out in the 6EAP shall be pursued by,

'inter alia,

2. *development of new Community legislation [...];*
3. *encouraging more effective implementation and enforcement of Community legislation on the environment and without prejudice to the Commission's right to initiate infringement proceedings'.*

As regards the issue of environmental liability in particular, Article 3 states that

8. To create a Community liability regime requires inter alia:

- *legislation on environmental liability'.*

Thus, the creation of a Community liability regime is given the character of a priority action (output requirement).

In the context of objectives and priority areas for action on nature and biodiversity, Article 6 lists among its objectives

- 'protection and appropriate restoration of nature and biodiversity from damaging pollution'.

As a specific priority action, **Article 6** para. 2 (b) of the 6EAP names

- 'on accidents and disasters [...] developing further measures to help prevent the major accident hazards with special regards to those arising from pipelines, mining, marine transport of hazardous substances and developing measures on mining waste'.

Furthermore, regarding objectives and priority areas for action on environment and health and quality for life, **Article 7** para. 2 (e) names as a priority action

¹⁰⁴¹ At the inception of the 6EAP, these principles were enshrined in Article 174 para. 2 (former Article 130r) of the EC Treaty (Consolidated Version of the Treaty Establishing the European Community, (97/C 340/03) as part of the Treaty of Amsterdam, Official Journal C 340 of 10 November 1997). As of 1 December 2009, the date of entry into force of the Lisbon Treaty, they are contained in Article 191 para. 2 of the Treaty on the Functioning of the EU (Consolidated version of the Treaty on the Functioning of the European Union Official Journal C 83 of 30.3.2010).

- ‘ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use’.

Achievement of objectives

In the following section, the achievement of relevant environmental and other related objectives in the 6EAP by the adoption of the Environmental Liability Directive¹⁰⁴² (hereinafter ELD) will be examined.

Achievement of overall aims

The 6EAP’s **overall aims** set out in **Article 2** stressed that the Community’s environmental policy should be based on the ‘*polluter-pays principle, the precautionary principle and preventive principle, and the principle of rectification of pollution at source*’, as is fundamentally laid down in Art. 174 para.2 of the EC Treaty (now Article 191 para. 2 of the Treaty on the Functioning of the EU). The ELD pays heed to these fundamental principles insofar as it applies them to all cases of liability which fall within its scope.

The polluter pays principle is explicitly mentioned as one of the fundamental principles of the ELD (para (2) of the preamble):

‘The prevention and remedying of environmental damage should be implemented through the furtherance of the ‘polluter pays’ principle, as indicated in the Treaty and in line with the principle of sustainable development. The fundamental principle of this Directive should therefore be that an operator whose activity has caused the environmental damage or the imminent threat of such damage is to be held financially liable, in order to induce operators to adopt measures and develop practices to minimise the risks of environmental damage so that their exposure to financial liabilities is reduced.’

Regarding the precautionary and preventive principles, while the ELD does not explicitly mention them, it specifically requires the operator to ‘*take the necessary preventive measures [...] where environmental damage has not yet occurred but there is an imminent threat to such damage occurring*’ (Article 5 para. 1 ELD), thereby effectively adhering to these principles.

Finally, with respect to the principle of rectification of pollution at source, the ELD prescribes remedial measures where environmental damage has occurred. Thus, for instance, according to Article 6, para. 2 of the ELD,

‘[t]he competent authority may [...] require the operator to take the necessary remedial measures’.

Achievement of the priority action (output requirement)

With the enactment of the Directive on Environmental Liability on 21 April 2002, the **priority action (output requirement)** contained in **Article 3**, para. 8, ‘(t)o create a Community

¹⁰⁴² Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environment liability with regard to the prevention and remedying of environmental damage, ‘Environmental Liability Directive’.

liability regime requires inter alia: legislation on environmental liability' was followed to the extent of the scope of the ELD.

Since other requirements – the '*alia*' – were not explicitly mentioned in Article 3, there is no yardstick to determine whether the strategic approach would have required another form of legislation besides the adopted Directive.

Achievement of priority actions in related areas

With respect to the **objectives and priority actions** in the field of nature and biodiversity listed in Article 6, the ELD, although not explicitly mentioned as a priority action to be taken in order to protect and restore nature and biodiversity from damaging pollution, does require the Member States to take action in order to further these goals.

Thus, **Article 6** para. 2 (b) of the 6EAP names as a priority action

'on accidents and disasters [...] developing further measures to help prevent the major accident hazards with special regards to those arising from pipelines, mining, marine transport of hazardous substances and developing measures on mining waste'.

The ELD addresses these issues in that it applies to

'environmental damage [and] damage to protected species and natural habitats caused by any occupational activities [...] and to imminent threat of such damage occurring by reason of any of those activities' (Article 3, para. 1 (a) and (b) ELD).

It specifically requires the operator to *'take the necessary preventive measures [...] where environmental damage has not yet occurred but there is an imminent threat to such damage occurring'* (Article 5 para. 1 ELD).

As for the priority action to be taken regarding objectives and priority areas for action on environment and health and quality of life,

'ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use' (Article 7 para. 2 (e) of the 6EAP),

damage to the spheres mentioned therein also falls within the scope of the ELD as determined in Article 3 ELD and outlined above.

Summary assessment of the thematic area

With the enactment of the ELD, the overall aims, priority action and priority actions in related fields were fulfilled.

1.6.1.14 EU Enlargement

The 6th EAP provides a framework for Community action on the environment from July 2002 to July 2012 and includes some specific aims relating to the enlargement process. The Programme's overall aims in relation to enlargement are set out in Article 2(5) which asserts that the 'Programme shall promote the adoption of policies and approaches that contribute to the achievement of sustainable development' in the candidate countries. This is to be achieved through the:

- 'integration of environmental protection requirements in Community Programmes including those related to development of infrastructure;
- promotion of transfer of clean technologies to the Candidate Countries;
- extended dialogue and exchange of experience with the national and local administrations in the Candidate Countries on sustainable development and preservation of their environmental assets;
- cooperation with civil society, environmental non-governmental organisations (NGOs) and business in the Candidate Countries to help raise public awareness and participation; and
- encouraging international financing institutions and the private sector to support the implementation of and compliance with the environmental acquis in the Candidate Countries and to pay due attention to integrating environmental concerns into the activities of the economic sector' (Article 2(5)).'

Enlargement is one of the key aspects of EU environmental policy in which membership is contingent upon a commitment to environmental protection.¹⁰⁴³ The 6th EAP maintains that 'the enlargement process should sustain and protect the environmental assets of the Candidate Countries such as wealth of biodiversity, and should maintain and strengthen sustainable production and consumption and land use patterns and environmentally sound transport structures' (Article 2(5)). Furthermore, the Preamble to the 6th EAP specifically acknowledges the importance of sustainable development in the candidate countries, maintaining that, 'the objectives, priorities and actions of the Programme should contribute to sustainable development in the candidate countries and endeavour to ensure the protection of the natural assets of these countries.'

Since the 6th EAP was adopted, 12 new member states (10 from Central and Eastern European (CEE) countries, together with Cyprus and Malta) have joined the EU. The EU has thus basically doubled in size with the 2004 and 2007 accessions. Currently, there are four candidate countries (Croatia, Turkey, the Former Yugoslav Republic of Macedonia, and Iceland) and a number of potential candidates (Albania, Bosnia and Herzegovina, Montenegro, Serbia, Kosovo under the UNSC Resolution 1244/99). In this context, it is additionally important to evaluate the extent of the role of the 6th EAP in terms of influencing the development of environmental policies, legislative measures and tools in the potential candidates, candidate countries, and new member states and to evaluate implementation of the 6th EAP in the new member states after their accession to the EU in 2004 and 2007.

The 6th EAP set out specific actions relating to the enlargement process which addressed *inter alia* environmental policy integration (EPI) and the engagement of civil society. Additionally, an especially important indicator through which to assess the 6th EAP in the context of enlargement is the relevant EU funding mechanisms. New member states that acceded in 2004 and 2007 received large sums of EU funding before and after accession in the framework of pre-accession assistance and the Cohesion Policy. Candidate countries and potential candidates receive support under the 2007 Instrument for Pre-Accession

¹⁰⁴³ Gerhards, Jurgen and Holger Lengfeld. 2008. Support for European Union Environmental Policy by Citizens of EU-Member and Accession States. *Comparative Sociology* 7: 222

Assistance (IPA). This section will thus largely focus on these three areas to gain richer insights into the achievements and challenges of enlargement in light of the 6th EAP.

Achievement of objectives

The span of the 6th EAP has involved a time of unprecedented EU enlargement in which a noteworthy portion of the former socialist bloc has joined the European Union. Political transformation has characterized the status of some of the candidate countries and potential candidates. The integration of environmental protection, dialogue and exchange across scales of government, civic engagement, and financial mechanisms have varied across an enlarged Europe and are manifested differently in candidate countries and potential candidates. It is difficult to generalize the EU enlargement experience in light of environmental protection and the 6th EAP. New member states, for example, have had different impacts on EU environmental policy.¹⁰⁴⁴ Enlargement (2004 and 2007) has had mixed results in different policy areas and has involved diverse policy actors.¹⁰⁴⁵ Potential candidates and candidate countries also vary in their contributions and support or challenges to the 6th EAP.

That said, however, initial fears that enlargement to EU-25 would result in an overall weakening EU environmental policy have proved unfounded.¹⁰⁴⁶ New member states continue to take the adoption of EU directives seriously.¹⁰⁴⁷ While new member states such as Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Slovakia, and Slovenia, for example, varied in the times it took them to engage EU directives;¹⁰⁴⁸ adoption, however, was considered overall efficient. According to The Commission Staff Working Paper '2009 Environment Policy Review', energy intensity across the new member states that joined the EU in 2004 decreased their energy intensity (gross inland energy consumption divided by the gross domestic product) (European Commission, 2009).

Enlargement poses unique opportunities. Iceland, for example, can share renewables technology. Due to the 2004 enlargement, the 'Birds Directive' (2009/147/EC) and the 'Habitats Directive' (92/43/EEC) not only apply to a much larger area, but increase the environmental assets of the EU. The EU enlargement of 2007 involving Bulgaria and Romania brought about changes in the both the 'Birds Directive' (2009/147/EC) and the 'Habitats Directive' (92/43/EEC). The EU is furthermore allocating approximately 124 million euros through the LIFE+ Nature & Biodiversity programme largely to support the implementation of these two directives.

While environmental laws have generally improved in new member states of Central and

¹⁰⁴⁴ Skjaereth, Jon Birger and Jorgen Wettestad. 2007. Is EU enlargement bad for environmental policy? Confronting gloomy expectations with evidence. *International Environmental Agreements* 7:263-280.

¹⁰⁴⁵ Thomson, Robert. 2009. Actor alignments in the European Union before and after enlargement. *European Journal of Political Research* 48:756-781.

¹⁰⁴⁶ Ibid.

¹⁰⁴⁷ Sedelmeier, U. (2008) 'After conditionality: post accession compliance with EU law in East Central Euro Toshkov (2008, 2009), pe', *Journal of European Public Policy* 15(6): 806–25.

¹⁰⁴⁸ Toshkov, Dimitar. 2008. Embracing European Law: Compliance with EU Directives in Central and Eastern Europe, *European Union Politics*, 9(3):379-402

Eastern Europe with transposition, it can still be noted too that some pre-existing laws were considered stronger still than their EU counterparts. Further, it is important to note that from a non-governmental organization perspective, there was a great deal of hope and anticipation with the introduction of EU laws in the new member states of 2004 and 2007, but this may have been deflated with post-accession as their manifestation was negotiated across the different cultural contexts and various member states.¹⁰⁴⁹ There is further the dilemma that perhaps civil society organisations anticipated that there would be more EU intervention in the event that environmental policies were not secure at the member state level.

The environmental enlargement strategy of the EU relies increasingly on conditionality to secure adoption of environmental legislation in candidate countries, and the Cohesion Policy to strengthen implementation capacity in eligible new member states that joined in 2004 and 2007. A significant aspect of these approaches is the integration of environmental protection and environmental policy integration (EPI) in new member states, potential candidates, and candidate countries.

A significant challenge for the implementation of environmental policy integration (EPI) in general is again the unique circumstances within which it must operate. Pre-existing circumstances with unique and persistent political and social cultures will also hold true for potential candidates and candidate countries. Candidate countries must secure the adoption of the EU *acquis* while further establishing the necessary institutional context for their implementation.

Additionally, the dispersal of enlargement funds is now considered to be guided by a stricter and more cautious policy of conditionality with the potential candidates and candidate countries.¹⁰⁵⁰ After the accessions of Bulgaria and Romania, the EU raised the standards for the promise of membership.¹⁰⁵¹ It is expected that candidates and potential candidates in South East Europe going through transformations will find it harder than their predecessor candidates to achieve EU standards.¹⁰⁵² And, the EU seems to affirm this in its increasingly strict approach to accession. Several forces have been asserted to explain this, 1) transformative state of potential candidates and candidate countries; 2) lessons learned from earlier 2004 enlargement; 3) perspective of Commissioner Olli Rehn; and 4) 'enlargement fatigue'.¹⁰⁵³

Agri-environmental schemes and marine and coastline efforts gain increasing importance in an enlargement context in which the potential candidates and candidate countries are

¹⁰⁴⁹ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹⁰⁵⁰ Pridham, Geoffrey. 2007. Change and Continuity in the European Union's Political Conditionality: Aims, Approach, and Priorities. *Democratization*, 14(3):446-471.

¹⁰⁵¹ Papadimitriou, Dimitris and Eli Gateva. 2009. Between Enlargement-Led Europeanisation and Balkan Exceptionalism: An Appraisal of Bulgaria's and Romania's Entry into the European Union. *Perspectives on European Politics and Society* Vol. 10, No. 2, 152–166, June 2009.

¹⁰⁵² Unalan, Dilek, and Richard Cowell. 2009. Adoption of the EU SEA Directive in Turkey, *Environmental Impact Assessment Review*, 29:243-251.

¹⁰⁵³ Pridham, 2007.

nurtured toward agricultural modernisation and Europe's marine and coastline area could increase significantly. As of September 1, 2010, the Commission asserted criteria and methodological standards on good environmental status of marine waters which engages EU member states (and their neighbors) in developing marine strategies.¹⁰⁵⁴

Environmental Policy Integration

'integration of environmental protection requirements in Community Programmes including those related to development of infrastructure' (Article 2(5)).

Environment policy integration is recognised as one of the strategic approaches to meeting the environmental objectives of the 6th EAP and is also promoted in other sections of the 6th EAP, for example Article 2(4) states that:

'The Programme shall promote the full integration of environmental protection requirements into all Community policies and actions by establishing environmental objectives and, where appropriate, targets and timetables to be taken into account in relevant policy areas.'

The EU accession process was a strong driver for the introduction and implementation of EPI in CEE countries that joined the EU in 2004 and 2007; yet the CEE countries were challenged to assert this new framework within the domestic policy-making context involving evolving administrative and bureaucratic structures.¹⁰⁵⁵ Still, certain EU measures were especially important for promoting the concept of EPI in CEE countries; this applies, in particular, to EU directives on Environmental Impact Assessment and Strategic Environmental Assessment. However, partly as a result of implementation problems, effects on EPI are less evident in practice.

As enlargement involving potential candidates and candidate countries emphasizes institutional capacities, environmental policy integration is of important consideration. In a communication from the Commission to the European Parliament and the Council on Enlargement Strategy and Main Challenges 2010-2011, the Commission announced that it is finalizing a Danube Strategy which will involve not only member states, but also Western Balkan countries and various other EU neighbours. The Strategy is associated with investments in various sectors including the environment along with energy and transport.¹⁰⁵⁶ Additionally, the European Network of Environmental Authorities for the Cohesion Policy (ENEA) facilitates environmental policy integration with regard to regional policy programmes in member states and candidate countries. At this stage, however, efforts are especially focused on securing political stability and building institutional capacity to manage EU funds (i.e. Instrument for Pre-Accession) in a decentralized context. Noteworthy as part of this effort, is a systematic account of the administrative structures denoting responsibility for environmental protection.

¹⁰⁵⁴ European Commission. 2010. Commission decision on criteria and methodological standards on good environmental status of marine waters. 1 September. (2010/477/EU).

¹⁰⁵⁵ Medarova-Bergstrom et al., 2010.

¹⁰⁵⁶ COM (2010) 660.

Funding Mechanisms

'encouraging international financing institutions and the private sector to support the implementation of and compliance with the environmental acquis in the Candidate Countries and to pay due attention to integrating environmental concerns into the activities of the economic sector' (Article 2(5)).

The EU accession process involving potential candidates and candidate countries is supported by the Instrument for Pre-Accession Assistance (IPA) as outlined in the Commission Regulation (EC) No 718/2007 of 12 June 2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA) and the amendment asserted in the Commission Regulation (EU) No 80/2010 of 28 January 2010 amending Regulation (EC) No 718/2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA). The IPA is an EU financial mechanism to support beneficiaries (potential candidates and candidate countries) in the pre-accession process from 2007-2013 involving five components: support for transition and institution-building; cross-border cooperation; regional development; human resources development and rural development and is based on strategic multi-annual planning. The dispersal of enlargement related funds such as the IPA is integrally linked to the fulfilment of stated requirements at various stages and funds are dispersed based on progress made by the beneficiary country.

Due to the IPA, especially Component III, candidate countries have been able to increasingly fulfil the requirements of the 6th EAP through the gradual adoption of the EU acquis, including in particular those measures related to water and waste management (COM(2009)699). Article 3 of the regulation asserts that, '[t]he objectives of pre-accession assistance shall be pursued in the framework of sustainable development and the Community promotion of the goal of protecting and improving the environment.' Furthermore, the Transition Assistance and Institution Building Component and the Regional Development component both take into account the importance of environmental policies and priorities.

This funding mechanism is, furthermore, attributed with several important environmental endeavours. Cooperative environmental efforts, for example, are enhanced through Cross-Border Programmes such as the Black Sea Synergy (COM(2007)160). The Regional Environmental Network for Accession (RENA) including the Environmental Compliance and Enforcement Network for Accession (ECENA) can improve the transposition and implementation capacity of the candidate countries.

The IPA also supports the development of civil society (Article 2 (e); Article 6(1)) which can be important for policymaking, administrative reform, and legitimacy. The Environment Forum, for example, is an EU funded project, 'to build and strengthen civil society active in the environment field in candidate countries (Croatia, the former Yugoslav Republic of Macedonia and Turkey) and potential candidates (Albania, Bosnia and Herzegovina, Montenegro, Serbia and Kosovo under UNSCR 1244/99) through information exchange on

EU environmental policy and developments in the enlargement process' (see http://www.envforum.eu/doku.php/ngos_enlargement/start; last visited November 25, 2010).¹⁰⁵⁷

While current IPA funds pose a tighter budget and strict dispersal, the Cohesion Policy has increased to improve the administrative capacities of new member states in Central and Eastern Europe and support the development of key environmental infrastructure improving water and waste management. The Cohesion fund specifically targets the environment and transport infrastructure. The budgets for the Structural Funds and the Cohesion Fund for 2007-2013 are about 278 billion euros and 70 billion euros respectively, and constitute 35% of the EU budget comprising the second largest budget item.¹⁰⁵⁸ Out of the total Cohesion Policy budget 2007-2013, 105 billion euros are anticipated for environment related programmes and projects.¹⁰⁵⁹ More than half of the Cohesion Fund of 2004-2006 went to eligible new member states.

Council Regulation (EC) No 1083/2006 of 11 July 2006 establishes the general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repeals Regulation (EC) No 1260/1999 and references the Community Action Programme. There are several environmental provisions in the regulation that are summarized in a document entitled, 'Cohesion policy regulations and the Community Strategic Guidelines (CSG) and the environment.'¹⁰⁶⁰

Civil Society

'cooperation with civil society, environmental non-governmental organisations (NGOs) and business in the Candidate Countries to help raise public awareness and participation' (Article 2(5)).

EU enlargement processes have facilitated noteworthy capacity building in civil society throughout the new member states and in the potential candidates and candidate countries through financial support, trainings, and emerging legal frameworks. There has been concern, however, that such support results in elitism encouraging the development of professionalized policy actors at the EU level rather than say, community activists working on social or political problems relevant in the everyday lives of the surrounding and extended communities.¹⁰⁶¹ This concern aside, the general role of the public as a democratising, legitimising force in enlargement cannot be underestimated and is a principle in the EU's Enlargement Strategy. Previous accession of the new member states was highly criticized for lack of civil society involvement, and the implications of that are becoming increasingly evident as new member states are challenged to implement and enforce environmental laws.

¹⁰⁵⁷ see http://ec.europa.eu/environment/integration/pdf/cohesion_policy_2007.pdf.

¹⁰⁵⁸ http://europa.eu/scadplus/glossary/structural_cohesion_fund_en.htm.

¹⁰⁵⁹ European Commission. 2010. Commission Staff Working Paper '2009 Environment Policy Review.' SEC (2010) 975 final, Brussels, 2.8.2010.

¹⁰⁶¹ Borzel, Tanja. 2010. Why you don't always get what you want: EU enlargement and civil society in Central and Eastern Europe. *Acta Politica*, 45:1-10.

Several important EU efforts influencing civil society in the enlargement context have included COM(2005) 290 final and Directive 2003/35/EC. Environmental governance in candidate countries, particularly the Balkans, is ultimately impacted by this due in part to several initiatives: Environment Forum, NGO Forum, Regional Environment Network for Accession (RENA), Civil Society Facility, Horizon 2020. As mentioned earlier, the IPA is integral to support for capacity building measures for engagement.

EU efforts to build civil society dialogue further emphasizes opportunities for dialogue between civic entities (loosely defined) and the EU itself. The measure COM (2005) 290 final reflects a widening emphasis by EU institutions on the importance of civil dialogue, especially in terms of democracy building and women's issues. The thrust of COM (2005) 290 final has impacted accession as noted by the references to civil dialogue in several key country specific documents: Guiding Principles for EC Support of the Development of Civil Society in Turkey, 2011-2015 (see footnote 3). In addition to mentioning the specific measure, it also refers to, among others, the European Principles for Environment and Climate Change Action Plan Instrument for Pre-Accession Assistance (IPA): Multi-annual Indicative Planning Document (MIPD), Multi-Beneficiary, 2009-2011. The Civil Society Facility (CSF) is a financial facility of the IPA designated in an EC Communication on the Western Balkans, 5 March, 2008 (Memo 08/141) and COM(2008) 127 final.

The Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Civil Society Dialogue between the EU and Candidate Countries specifically addresses the importance of civil society dialogue between the EU and Candidate Countries stating in the introduction, 'Any future enlargement of the EU needs to be supported by a strong, deep and sustained dialogue between the societies of the candidate countries and in the EU member States, as well as with the EU institutions' (COM (2005) 290 final). COM(2005) 290 final refers to the environment specifically in two sections: 1) Sec. 1.2 The dialogue relating to future enlargement as follows: 'The civil society dialogue¹⁰⁶² will thus concern Croatia as well¹⁰⁶³, although the dialogue with regard to Croatia may be of a somewhat different nature from that on Turkey. The dialogue with Croatia aims more towards enhancing public debate in Croatia on EU membership, especially leading to a deeper understanding and acceptance of EU values and standards. In addition to more general political issues, this dialogue is particularly important in certain areas of the EU acquis such as, for example, the environment, food safety and consumer protection, as well as the obligations in the field of external assistance. ' 2) Section 3.2.1.1 Turkey: NGOS, social partners and professional organisations: Long-term partnerships as follows: 'Such increased international exposure should also be aimed at helping Turkish NGOs grow stronger and participate more actively in EU debates. Organisations active in such crucial areas as youth, gender-equality, environment, consumer rights, cultural rights, civil and human rights, and combating social exclusion and discrimination of all kinds, should be particularly encouraged to establish a

dialogue with their EU counterparts. Priority will be given to projects aimed at establishing long-term, sustainable relations between EU and Turkish NGO groupings, where applicable.'

1.6.2 Drivers and barriers

1.6.2.1 Public participation

While transposition has been positively assessed, implementation is still challenged. With the impetus on member states to implement through subsidiarity, the Directive has been interpreted in different ways as well as manoeuvres such as 'salami slicing' in which a large project is broken down into smaller 'single' projects have been noted averting the requirement for an EIA.

While many member states report positive results in terms of public participation related to this Directive, assessments indicate that while transposition is adequate, implementation is lacking. Challenges to implementation include lack of consistency in the application of the Directive, 'salami slicing,' and narrow interpretations of important concepts in the Directive such as 'the public concerned' and 'early and effective public consultation.'

A European Commission, DG ENV Report, 'Study concerning the report on the application and effectiveness of the EIA Directive,' produced by COWI in June 2009 asserts that results from Directive 2003/35/EC have been mixed across member states' reports: no major changes since Directive was adopted (Malta); legislation was redundant (Sweden, Lithuania); too early to tell (Germany and UK); increased public involvement in EIA process and public decisionmaking in general (Romania, Portugal, Cyprus, Latvia); increased transparency of EIA process (Czech Rep.); stronger national transboundary procedure (France); increased public awareness of rights, particularly with regard to the definitions of 'the public' and 'the public concerned' (Latvia, Bulgaria, Slovakia); legal standing for ENGOs increased profile of environmental work (Austria); additional administrative and judicial review important as alternative, more efficient procedures (Greece); clearer regarding Annex 1 changes or extensions of projects (Finland).

Public opinion

With increasing emphasis on civil dialogue and the important role of public legitimacy in the EU, widened public participation is increasingly expected.

1.6.2.2 Improvement of the process of policy making through evaluation

Changes in the target area caused by independent variables: Not applicable since there are no direct environmental impacts of the measure in question.

Conformity / lack of conformity with 6EAP priority actions: Not applicable since there is no priority action in this area.

Decision-making

Decision-making has not played a major role in issuing the IA guidelines as they are an internal Commission document which has not undergone the formal decision-making procedure. Still, the IA guidelines have a surprisingly binding effect given their unbinding

character. This is due to the high priority the Commission has ascribed to its IA system and the establishment of the IA Board as a quality control mechanism.

Two decision-making related issues affecting the effectiveness of the IA system include the co-operation between various DGs within the Commission as well as the co-operation between the Commission and other EU institutions during the IA process.

Co-operation between DGs usually takes place but not always works to everyone's satisfaction. As no reliable data for proving this finding exist this finding is based more on anecdotal evidence. The independent evaluation of the EU's IA system showed that the majority of IA reports (74%) did not explicitly provide information on whether inter service steering groups – as a means of internal consultation – had been established.¹⁰⁶⁴

Inter-service consultation between the various EU institutions has been a continuous process ever since the introduction of the IA system. Already in the early phase of its introduction the three EU institutions Commission, Council and European Parliament acknowledged Impact Assessment to be a shared responsibility in their December 2003 Inter-Institutional Agreement on Better Lawmaking. In 2005, as an addition to the 2003 Inter-Institutional Agreement, the three EU institutions agreed on the 'Common approach to impact assessment'. The common approach defines a set of 'traffic rules' how IA is to be used throughout the legislative process. Accordingly, the Commission's initial impact assessment on its proposal will build the basis for any subsequent impact assessment work that the other EU institutions may carry out when they make substantive amendments to the Commission's proposal. Under the Inter-Institutional Agreement on Better Lawmaking a High Level Technical Group was established. Again anecdotal evidence suggests that there is still room for improving inter-service consultation between the three EU institutions. As personal conversations with DG Environment officials have revealed the uptake of IA results in the other EP strongly depends on the file as does the quality of the interservice consultations.

Implementation

Ever since its introduction, IA has been taken serious by the Commission services. IAs were done whenever requested. A bigger problem was the quality of the IAs done. Sometimes they were of poor quality. This was tackled by establishing the IA Board (see above). Other drivers for the continuous improvement of the quality of IA are the transparency of the process (all IAs are published on the Commission website) as well as a number of research studies (e.g. MATISSE, Sustainability A-Test, IQ-Tools, EVIA, LIAISE).

Financial resources

Lack of financial and human resources has been an issue in implementing IAs in many cases (TEP, 66-67).

Public opinion

Public opinion has neither hampered nor facilitated introducing and implementing the IA guidelines. However, for formulating the revised IA guidelines issued in 2009 the

¹⁰⁶⁴ The Evaluation Partnership 2007, 49.

Commission has conducted a participation process. According to its summary report, 'the new Guidelines incorporate many of the comments and suggestions received throughout the process in informal and public consultation rounds.'¹⁰⁶⁵

Competing / complementary EU priorities

Other EU priorities, such as the Lisbon Strategy or the EU-SDS have contributed to achieve the aims and objectives. Both have been central drivers for establishing the Commission IA system and have led to designing the system as it stands.

As an important element of the EU's Lisbon Strategy, the Commission in the context of its activities on better regulation announced in its Communication 'Simplifying and improving the regulatory environment'¹⁰⁶⁶ the adoption of two key measures one being the definition of a consolidated impact assessment method for its key initiatives concerning policy and legislation. Its aim is to improve the quality of legislation, make the Commission's working methods more transparent and set the example of good practice.

In its Sustainable Development Strategy, the Commission demands policy-makers to identify likely spill-overs of proposed policies onto other policy areas and to take them into account by way of IA. This should include estimates of a proposal's economic, environmental and social benefits and costs or lack of action, both inside and outside the EU.¹⁰⁶⁷

1.6.2.3 Environment in Community Research Programme

Key factors driving the development of the 7FP were the policy objective set at the European Council meeting in March 2000 to **make Europe the most competitive and dynamic knowledge society in the world by 2010** and the targets established at the European Council meeting in March 2002 in Barcelona, which specified that the EU should invest **3% of its GDP in R&D by 2010**¹⁰⁶⁸. The renewed Lisbon Strategy was also the key driver for the enhanced focus on R&D and innovation supported by the EU **Structural Funds**, which culminated in the allocation of three times more resources in the current programming period compared to the 2000-2006 period. The Lisbon agenda also revisited the Community policy to stimulating innovation action, originally drawn in 2003¹⁰⁶⁹, and called for a strengthened integrated approach to the promotion of R&D and innovation where EU Structural Funds play a key role.¹⁰⁷⁰

The design of the 7FP was influenced by the **mid-term review process** of the 6FP and an **impact assessment** undertaken to assess the potential impact of the 7FP on growth, employment, competitiveness and R&D intensity which proposed to renew the structure of

¹⁰⁶⁵ European Commission (2008): Reaction to inputs received in the public consultation on the Impact Assessment Guidelines, June-July 2008.

¹⁰⁶⁶ COM(2002) 278.

¹⁰⁶⁷ COM(2001)264.

¹⁰⁶⁸ CEC 2005b.

¹⁰⁶⁹ Commission of the European Communities. Communication on innovation policy: updating the Union's approach in the context of the Lisbon agenda', (COM(2003)112), Brussels, 11.3.03.

¹⁰⁷⁰ Commission of the European Communities. Fourth report on economic and social cohesion. May 2007.

the Programme while integrating a key modification - simplification. The need for research to help Europe face its environmental challenges was a central element in the debate and ex-ante evaluation of the 7FP. Other important factors driving the contributions / achievements of the 7FP are: the **larger budget** (1.5 times the annual budget of the previous 6FP programme); a specific research theme focused on Environment; a Capacities Programme to encourage cooperation between researchers, enhance the involvement and dissemination of results to industry; encourage greater debate between researchers and the public; and support for international cooperation. **Public concern** over the 'remoteness' of science and technology from daily interests prompted support for 'bringing science and society closer together' as a key aim of the Capacities Programme.¹⁰⁷¹

The share and effectiveness of environmentally relevant projects under the broader R&D and innovation categories of **Structural Fund** expenditure often depend on the **capacity, commitment and vision of national authorities** to promote these but also on the actual **beneficiaries** and their capacity to put forward projects with such focus. Therefore, the European Commission has attempted to further promote such investments through the proliferation of good practices (Regions for economic change) or through rewards schemes such as the Regio Stars awards. One of the central topics in the 'Regions for economic change' initiative is 'improving knowledge and innovation for growth' where a number of guidance and good practice case studies are promoted in relation to the capacity of regions for research and innovation and bringing innovative ideas to the market more quickly, including some explicitly linked to the environment.¹⁰⁷²

Complexities of the **application and contractual procedures** raise significant barriers to entry at the proposal stage, especially for first time applicants. These factors have been a significant disincentive to participation in FP activities, and have for instance been cited among the major factors contributing to the continuing decrease in industrial interest in the FP. 'In far too many ways, implementation acts against achieving the objectives that are being set for the FP'.¹⁰⁷³

Absorption rates for projects targeting R&D and innovation by **Structural Funds** are also relatively low. The Commission reports that, by September 2009, €22 billion or 26% of the €86 billion initially allocated are currently being committed to concrete projects.¹⁰⁷⁴ The report, however, does not provide information about the barriers for the low absorption rates nor does it refer concretely to implementation trends with regard to environmentally relevant R&D and innovation projects.

¹⁰⁷¹ Annex I of Decision No 1982/2006/EC.

¹⁰⁷² DF Regional Policy. Regions for economic change, http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/themes_en.cfm?nmenu=3

¹⁰⁷³ Rietschel, E. et al, (2009), EVALUATION OF THE SIXTH FRAMEWORK PROGRAMMES FOR RESEARCH AND TECHNOLOGICAL DEVELOPMENT 2002-2006: Report of the Expert Group, February 2009.

¹⁰⁷⁴ European Commission. Communication on the Regional Policy contributing to smart growth in Europe 2020. (COM(2010)553), Brussels, 6.10.2010.

1.6.2.4 Provision of regular information

Changes in the target area caused by independent variables: Not applicable since there are no direct environmental impacts of the measure in question.

Conformity / lack of conformity with 6EAP output requirements: Eurostat and the EEA issue regular reports on the state of the environment and sustainable development. These reports cover the headline environmental indicators as well as the indicators on the state and trends of the environment and integration indicators as required by the 6EAP.

Decision-making: Not applicable, since SDIs are based on a Commission Communication. As regards implementation of the system, the fact that the Eurostat Monitoring Reports only discuss EU aggregated data and do not show Member State level data it can be assumed that this is due to Member State resistance. This may be a reason for hampering the effect of the SDI system.

Implementation: The Eurostat Monitoring Reports have been issued on a regular basis since the Commission Communication has been published. The choice and quality of indicators depends on the data availability in the Member States. This hinders to chose indicators of more informative value and limits the explanatory power of the indicators because time series are not fully represented or single country data are missing. For example, one of the key indicators in the recent report, the abundance of common birds, only contains data for 19 of 27 Member States. In the same time this indicator is presented as a good proxy for overall biodiversity development in the European Union. Other indicators, such as water abstraction or deadwood on forest land do not even allow for an indicative conclusion as they only cover a limited share of Member States (eight and twelve, respectively).

Competing / complementary EU priorities: The SD Indicators have been issued in (and partly probably also been pushed by) the broader context of the indicator development required by the Lisbon Strategy (structural indicators). In addition, the EU-SDS has been a driver to initiate SDI development as it sets out a commitment to regular monitoring of the strategy. Beyond this, a general trend towards evidence-based policy-making (through *i.a.* better regulation and impact assessment) has contributed to the objective of ensuring that the Community's environmental policy-making is undertaken with a view to data and information on the state and trends of the environment. Though neither the better regulation agenda nor the impact assessment are directly targeted to environmental policy, legislative proposals in this policy area also have to undergo the respective procedures which *i.a.* aim at basing policies on scientific evidence.

International commitments: The Rio process may indirectly have facilitated the effectiveness of the priority measure. This statement, however, is an assumption and would need further research.

1.6.2.5 INSPIRE

Intense informal discussions between the Council of Europe, the European Parliament, and the Commission significantly affected the priority measure. The Commission facilitated the final compromise that was reached by the Council and the Parliament. Intensive stakeholder

consultations contributed to the development of the final Directive and subsequent stakeholder consultations have affected the development of Commission Decisions and Regulations related to INSPIRE.

Coordination of INSPIRE appears to be a problem. Also, the absence of clear guidelines for the organizations at stake appears to be an obstacle to more rapid implementation. In addition, implementation in new Member States has been more problematic than in old Member States. While new partnerships and projects have been launched, organizational structures in the Member States have not yet changed sufficiently to maximize the potential benefits of INSPIRE. Data specifications for INSPIRE may be unclear and thereby cause uncertainty for organizations. As INSPIRE seeks to create bottom up processes implementation gaps are likely to be found primarily at the Member State level.

Currently there is no EU budget dedicated to the priority measure. Existing funding programmes at European and Member State levels are being used to fund INSPIRE topics. A website dedicated to notifying the INSPIRE community of funding opportunities has been set up.

1.6.2.6 GMES

Even if the GMES initiative has had more than eight years of development a major component – the space based infrastructure- is still lacking. So GMES services are not fully operational yet. A fully operational system is planned from 2014 onwards.

Another barrier is the lack of coordination among potential GMES users. Different levels of users and different user needs are conflicting and require different services. This makes user coordination very difficult. However, this failure results not only from the complexity of the system. It can also be explained by the relatively low attention given to such a structuring process in terms of projects tendered and financial resources provided by the ESA and the European Commission. Also the 'closed community' of GMES experts makes it difficult for others to interfere and to develop a clearer picture of the user landscape.¹⁰⁷⁵

The success of GMES depends strongly on articulating reasonable user requirements that service providers can build upon. Consequently, it is crucial to pay attention to the agreements between both service providers and users. Within this context, a major issue which interferes with communication is related to the difficulties which some users face in expressing their needs in a form that can be operationalised by service providers. Vice versa, service providers often describe their products in a way, which is too technical to be understood by many users. Further on the user side, there is a need to develop expertise, which requires time and budgets which are often not available.¹⁰⁷⁶

Another issue that can interfere with interactions between service providers and users may be the administrative burdens. These can be a source of conflict of interests among the service providers and users: 'registration procedures for data users are advantageous,

¹⁰⁷⁵ Philipp Schepelmann/ Arkaitz Usubiaga/ Mikel Orive/ Thomas Dworak/ Michaela Matauschek (2010): Governance of GMES– a user perspective - Final September 2010 available on request.

¹⁰⁷⁶ Ibid.

because knowing who uses which data is a prerequisite to adapt and improve data products. But currently, several users view such administrative procedures as intimidating¹⁰⁷⁷

Further the governance of GMES is still a matter of discussion. The implementation of final structures is not expected before 2011. Until now, the main governing bodies of GMES are the GMES Advisory Council (GAC) and the GMES Bureau. The discussion about a functioning governance structure is one of the most complex ones because of the different bodies involved and the different policy levels which have to be served. A lack of a coherent and functioning governance body might hamper the achievement of a GMES objectives in time and quality.

1.6.2.7 SEIS

SEIS does not yet have an implementation plan, the absence of which itself constitutes the largest implementation gap. The Commission stated in the Press Release of February 5, 2008 that a 'detailed implementation plan' for the priority measure would be issued some time in 2008.

There is currently no budget dedicated to SEIS. Projects must seek funding from existing funding programmes. As no funding needs analysis has been made available, and no aggregate data on the availability of funding for priority measure related activities at EU and member state levels exists, it cannot be determined whether funding has undermined the achievement of relevant 6EAP objectives.

1.6.2.8 Implementation and Enforcement

This section aims to identify the main drivers and barriers to the achievement of the 6EAP objective of encouraging a more effective implementation and enforcement of EU environmental legislation (in relation to the horizontal measures mentioned in the previous section). It should be noted, however, that this is a rather general analysis of drivers and barriers to implementation and enforcement and does not analyze in detail the barriers and drivers within each of the thematic areas – for that refer to the section of the report on thematic areas.

More effective implementation of EU environmental law

A number of factors (drivers and barriers) can be identified which explain why implementation of EU environmental law by Member States can be relatively smoothly or becomes troublesome including political support or resistance, domestic societal mobilization in favour or against full and correct implementation, (in)sufficient administrative capacities in Member States, (in)sufficient enforcement capacities and mechanisms in Member States and at the EU level (see this section), bureaucratic and institutional contexts and traditions in Member States (i.e. national structures and procedures and national administrative and political cultures which fit or do not fit what is required for implementing adequately EU legislation), Commission's activities to prevent and address infringements, and the quality of

¹⁰⁷⁷ Ibid.

legislation.^{1078 1079} The increased efforts of the Commission to guide Member States in implementing EU environmental law (in combination with the strategic approach) has pushed forward implementation in many Member States in several areas of EU environmental policy. The organization by the Commission of bio-geographical seminars has helped Member States correctly apply EU nature conservation legislation and in particular to establish (correctly) the Natura 2000 network.

The general priority attached to 'implementation' by the Commission and the European Parliament helped push forward the adoption of the 2008 Communication on implementing European Community environmental law.¹⁰⁸⁰ The 2007 Communication on applying Community law¹⁰⁸¹ from the Secretariat-General, which in particular expresses the priority attached to implementation by the Commission as a whole, had for its part a major influence on the 2008 Communication, in particular as to the wording. However, the fact that the 2008 Communication had to be adapted to fit the 2007 general Communication, delayed its publication for two years.

More effective enforcement of EU environmental law

At Member State level

Recommendation 2001/331/EC on minimum criteria for environmental inspections appears to have had a positive impact on inspection systems in most Member States, even though most Member States have only partially implemented the Recommendation. Many Member States have started to reform their inspection systems because of the Recommendation.¹⁰⁸² The inspection requirements included in the recently adopted industrial emissions Directive (recast of IPPC Directive) are expected to be a future driver for further improving inspections of installations in the Member States.

Another driver for achieving more effective enforcement of EU environmental law at Member State level is the work done by IMPEL, in particular through its guidance of Member States in improving inspections and enforcement and through informal peer-reviews of Member States' inspection authorities.

A major barrier towards more effective enforcement of EU environmental law at national level, relates to the lack of political priority to environmental inspections in some Member States and as a result the limited resources available for inspecting authorities to develop an effective system of environmental inspections. This explains in part problems in relation to implementation of Recommendation 2001/331/EC. Other barriers to effective enforcement

¹⁰⁷⁸ Allio & Fandel, 2006.

¹⁰⁷⁹ Börzel, Tanja (2000): Why there is no 'southern problem'. On environmental leaders and laggards in the European Union. *Journal of European Public Policy*. Vol 7. Issue 1, p. 141-162.

¹⁰⁸⁰ COM(2008)773.

¹⁰⁸¹ COM(2007)502.

¹⁰⁸² EC (2007f). Commission staff working paper. Report on the implementation of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections. SEC(2007)1493. Brussels. 14.11.2007.

and implementation of Recommendation 2001/331/EC relate to differing interpretations by Member States of the definitions and criteria of the Recommendation.¹⁰⁸³

The lack of harmonization of the type and level of criminal penalties is generally considered to be another barrier to the effective enforcement of EU environmental law, as various studies have shown that penalties currently in place in Member States are not always sufficient to tackle the increasing problem of environmental crime and as a result to effectively implement EU's environmental policies.¹⁰⁸⁴ The Commission aimed to harmonize criminal penalties through its proposals for a Directive on the protection of the environment through criminal law, but was not successful. It took several years for the proposed Directive to go through the co-decision procedure – the first Commission proposal on this issue was published in 2001, whereas the Directive was only adopted in 2008 – due to opposing views between the Commission and the Council on whether to adopt a Directive under the EC Treaty or a framework decision under the third pillar of the EU Treaty and to related ECJ judgements. The adopted Directive does not provide for a certain level of approximation of the criminal penalties in place in Member States, as the ECJ had judged in 2007 this was not possible within the Community's sphere of competence and as a result bolstered the position of opponents within the Council to such harmonisation. However, the new Directive will to some extent drive more effective enforcement of EU environmental law at national level as it defines and harmonizes criminal offences in the environment field, harmonizes the scope of liability, and defines liability for legal persons/companies and those acting on their behalf.

At EU level

Several barriers to effective enforcement of EU environmental law remain at the EU level. One of which is the lengthy nature of the pre-litigation stage of the infringement process. As a result of this, much of the damage has already been done by the time the Commission intervenes and Member States are hardly stimulated to take corrective action promptly. There have been cases where a Member State clearly relied on the length of the procedure to deliberately delay implementation.¹⁰⁸⁵

Another barrier is the limited resources of the Commission, which does not have the resources to carry out systematic and comprehensive checks on the application and enforcement of all EU law.¹⁰⁸⁶ Although Member States are required to provide full information about the formal transposition of Directives into national or regional law, there is limited information about the organizational stage of implementation (in which the legal and administrative framework for the proper application and enforcement of the transposing laws is set up) and even less about the operational stage of implementation (compliance in

¹⁰⁸³ EC (2007e): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States. COM(2007)707. Brussels. 14.11.2007.

¹⁰⁸⁴ EC (2007b). Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law. COM(2007)51. Brussels. 9.2.2007.

¹⁰⁸⁵ Allio & Fandel, 2006.

¹⁰⁸⁶ Ibid.

practice).¹⁰⁸⁷ DG Environment tries to overcome this problem by applying a strategic approach towards addressing infringements and by outsourcing ex-post evaluations of EU environmental legislation. Unlike other policy areas of European law, such as competition, veterinary, customs, regional and fisheries policy, the Commission does not have investigative powers in the environmental field that extend to the territory of the Member States. 'The Commission may ask the Member State to allow for inspections, but this lies completely within the discretion of the Member State and such requests are not likely to be honoured in cases where infringements may be discovered.'¹⁰⁸⁸

The lack of access to justice for environmental NGOs is also considered by many observers as a barrier to effective enforcement of EU environmental law. Environmental NGOs are hardly involved in ECJ cases. If they are involved, these cases concern the request from national courts for a preliminary ruling. In practice, access to EU courts is not possible for environmental NGOs which have seen all their actions in the past declared inadmissible as they were considered not to be directly and individually concerned. The narrow construction by the ECJ of direct and individual concern has therefore shut the door in practice for private enforcement in direct actions at EU level. This was expected to change with the Community's ratification of the Aarhus Convention, however according to observers such as Krämer¹⁰⁸⁹ and Wenneras¹⁰⁹⁰, Regulation (EC) No 1367/2006 which intends to implement the Convention falls short of this in several respects and is therefore not in compliance with the requirements on access to justice of the Convention.¹⁰⁹¹

1.6.2.9 Integration of Environmental Requirements in Transport Policy

Integrating environmental measures into transport policy represents a major challenge. Fair priced and efficient transport is essential to the mobility of European citizens and goods. Moreover, transport and logistics is a large contributor to Member State employment and economic growth. At the same time, there is a growing need to reduce traffic, congestion, environmental damage, negative health effects and climate change. These opposing pressures, though not jointly exhaustive, result in a number of both drivers and barriers to integrating environmental objectives into transport policy. A conflict-laden political arena in which to develop measures and set objectives is therefore created. Nevertheless, sustainable transport has been identified as a common European objective.¹⁰⁹²

¹⁰⁸⁷ 'This is one of the reasons why there are many infringement cases that concern issues of formal implementation, and relatively few cases about insufficient application or enforcement of EC environmental law' Wenneras, Pal (2007). *The enforcement of EC environmental law*. Oxford University Press. pp 341.

¹⁰⁸⁸ Ibid.

¹⁰⁸⁹ Krämer, Ludwig (2008). *Environmental judgments by the Court of Justice and their duration*. Research Papers in Law. European Legal Studies. College of Europe. Bruges.

¹⁰⁹⁰ Wenneras, Pal (2007). *The enforcement of EC environmental law*. Oxford University Press. P. 341.

¹⁰⁹¹ Ibid.

¹⁰⁹² Europa Press Releases Rapid (2008) *Greening Transport Package*.

The inland transport sector is **growing rapidly** (annual growth of 4.9% in 2006). Additionally, international traffic is expected to double between 2000 and 2020.¹⁰⁹³ Against this background, the Greening Transport Package, along with other relevant measures, is underpinned by the desire and need to address environmental concerns related to transport. The Commission's proposal to internalise transport costs is a pragmatic approach based on average external costs of various forms of transport. This balanced approach as well as the 'polluter pays' principle on which the Eurovignette Directive is based, help justify the relevant measures and can therefore be viewed as important drivers for the integration of environmental concerns into transport policy. Involvement of both the Parliament and the Council in the decision-making process can be viewed as another driver because both institutions **asked the Commission to revise the Eurovignette Directive**.¹⁰⁹⁴ The European Parliament recognised the importance of the Greening Transport Package as a first step for achieving environmental objectives in the transport sector, specifically regarding efforts to internalise transport costs which is notably difficult.¹⁰⁹⁵ **International commitments** such as the Kyoto Protocol, which is referenced in the majority of relevant legal acts, also play a substantial role in supporting the increased use of environmental transport measures. In this regard, the lack of an international agreement to reduce GHG emissions from aviation was an important driver of the amendment to include it in the Directive on GHG emissions trading.

As seen in sections 1.1.2.2 and 1.6.1.10, measures increasingly focus on climate change and the reduction of GHG emissions rather than integrating broader environmental goals. Therefore, concerns about climate change are a key driver behind climate related transport policies. On the other hand, conventional environment protection issues receive comparatively less attention.

There were also barriers to the adoption of the Greening Transport Package, in particular concerning **social and economic impacts**. Especially the Eurovignette Directive was viewed sceptically by the hauling industry for creating additional costs in light of existing fuel taxes and high oil prices. In this context, the Eurovignette is seen as **adding to the pressures of rising fuel costs**. Moreover, public concern stems from the fear that increasing transport costs will lead to higher prices for consumers. The Commission, however, argues that such costs will be absorbed by increased efficiency in transport and logistics in the near term.

Additionally, a considerable driver for environmental as well as climate change transport measures is the Climate Action and Renewable Energy (CARE) Package, see section 1.1.3.

Generally, support to integrate environmental measures into transport policies stems from environmental concerns and rapid growth within the sector as well as international commitments. However, economic pressures intensified by the crisis stand as a major barrier

¹⁰⁹³ Europa Press Releases Rapid (2008) Greening Transport Package.

¹⁰⁹⁴ Europa Press Releases Rapid (2008a) Greening Transport: new Commission package to drive the market towards sustainability.

¹⁰⁹⁵ European Parliament 2009: European Parliament resolution of 11 March 2009 on the greening of transport and the internalisation of external costs (2008/2240(INI)).

to implement new policies for fear of undesired consequences. Economic concerns also play a role as an important driver to transport policies. Specifically, the Internal Market is arguably a driver behind the 'Eurovignette' Directive, as it aims to avoid discrepancies between Member States through a harmonized charging structure.

The Commission and Parliament demonstrate a general agreement to strengthen measures which integrate environmental concerns into transport policy. This is demonstrated by their interaction under the co-decision procedure for the Eurovignette Directive. However, it is also identified that Parliament seeks a comprehensive strategy with specific legal instruments which integrates every mode of transport into a common approach based on a 'polluter pays' principle. Moreover, Parliament requests increased justification for measures through scientific evidence such as impact assessments suggesting a high concern for the potential economic and social impacts of transport policies.

Industry concerns and economic growth targets represent the main barriers to implementing transport policies with a stronger and more integrated environmental perspective. This translates into industry associations seeking influence on restraining environmental legislation at European level as could be observed in the case of CO₂ regulation for new passenger cars.

From a European perspective, maintaining the functioning of the internal market is clearly a main concern of the Commission and can be a driver for environmental regulation in the transport sector as illustrated by the case of the Eurovignette Directive.

The impact of certain Member State interests is another important barrier. Especially Member States with a prominent transport sector or vehicle manufacturing industry oppose stronger environmental regulation out of fear of economic losses.

These barriers overlap with structural barriers which can be found within the decision making process.

- Within the European Commission, different DGs have different priorities and agreement has to be sought on issues as well as measures to achieve objectives. Both the political meta-context, i.e. the current daily pressures such as wars and crises and overarching strategies (see 1.1.5.2) have an impact on this process.
- The European Parliament can be both a driver and a barrier, depending on whether national interests overrule environmental concerns.
- The Council tends to follow national interests as well as maintain Member State sovereignty and is, thus, often a barrier to environmental integration.

Different decision procedures have different roles for the three decision bodies. It can be observed that the co-decision procedure, where the Parliament enjoys equal rights to Council and Commission, can potentially help to improve the integration of environmental concerns into transport policies, but can also delay processes considerably. This could be observed in the case of the Eurovignette Directive where severe disagreements between Member States and the EP led to a situation where the full potential for internalising external costs could not be realised and was postponed for a later day.

On the other hand, Assent, now Consent, and Consultation bear the risk of overlooking important environmental concerns while allowing faster and less compromise-based decision

making. In this sense, these legislative procedures are both drivers and barriers to integrating environmental concerns into transport policies.

Judging from the present evidence, despite the presence of some drivers, integrating environmental concerns into transport policy faces more barriers as economic interests both at EU and Member State level are considered vital and stakeholders tend to be well organised.

1.6.2.10 Environmental Integration in Cohesion Policy

The **European Parliament** and a coalition of **environmental NGOs** put significant pressure on ensuring environmental integration provisions in the original texts of the General Regulation. The General Regulation was subject to the assent procedure, however the EP Rapporteur, Konstantinos Hatzidakis, managed to convince the Austrian Presidency to agree two important concessions with regards to the environment and governance issues¹⁰⁹⁶. A new stand alone Article 17 in the General Regulation was introduced stipulating the protection of the environment in view of enhancing sustainable development while pursuing the objectives of the Funds. MEPs also advocated strong language on the partnership principle ensuring civil society participation at every stage of the management of the funds¹⁰⁹⁷, however the final version of the Regulation stipulated that partners would be involved 'where appropriate' (Article 11(2)).

While the Commission has a number of levers to influence the programming/implementation of EU funds in relation to environmental integration in Member States (through regulation, conditionality, negotiations, SEA/EIA requirements, etc.); the actual decision-making concerning financial allocations and the selection of concrete projects lies with Member States or respective regional authorities under the principle of '**shared management**' (Article 14 of General Regulation). In this respect, the extent of environmental integration and environmental quality of investments from EU funding depend on the ambition, political will, administrative capacity of national and regional/local authorities to manage projects and facilitate partnerships as well as the beneficiaries' ability to put forward quality environmental projects. Previous research, for instance, have showed that often the effectiveness of environmental integration in the EU funds programmes and projects depends on a domestic environmentally progressive agenda and culture (as in some Nordic countries)¹⁰⁹⁸ or on committed 'policy entrepreneurs'¹⁰⁹⁹.

A barrier to environmental integration has been the **low absorption of EU funds** at the national and regional levels. According to the 2010 Strategic Report, the uptake of funds as

¹⁰⁹⁶ European Parliament, (2005), Resolution on the proposal for a Council regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund. 06/07/2005.

¹⁰⁹⁷ European Parliament, (2007), MEPs approve €308bn Structural Funds 2007-13 package. Press Release, 04/07/2007. 19/05/2010.

¹⁰⁹⁸ Clement, K (2005): Environment and Sustainable Development in the EU Structural Funds: a review of Nordic Performance. *European Environment* (15) 294-312.

¹⁰⁹⁹ DG Regional Policy (2009) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 11: Management and implementation.

of December 2009 was 27.1% (€93 billion) and varies significantly across countries with some Member States experiencing significant delays in the absorption of funds. The report underlines that environmental investments are 'underperforming at this stage' utilising 21% of the total amount available for such measures with Greece and the Czech Republic facing major delays while Estonia, Spain and Hungary making some progress. Investments in environmental infrastructure (e.g. waste water treatment) are taking place faster compared to investments in climate adaptation and risk prevention, in which the uptake of funds is 'especially weak' in countries like Spain, Greece, Poland and Romania. Spending on energy efficiency has been successful in the Czech Republic, Italy and Lithuania but almost non-existent in several other countries including the UK. Spending in wind energy is also slow, utilising only 2.9% of the available EU funds for this measure¹¹⁰⁰.

Environmental funding often gives priority to **large-scale infrastructure projects** related to the implementation of EU environmental acquis in the field of waste and water. These projects are often favoured as they can have lower administrative costs and high political gains. There is already some evidence that even in the case of the newly negotiated housing expenditures under the ERDF Regulation in the Visegrad countries, regional and local authorities appear reluctant to apply the new measures as 'these are more difficult, long-lasting and complex than simply spending EU money on new Greenfield investments'¹¹⁰¹. Some of the consequences of this can be illustrated with an example from the 2000-2006 period when priority in the waste sector was given to large treatment facilities which resulted in oversized investments leading to overcapacity and difficulties to ensure financial viability as well as lower consumer demand and unwillingness to pay for the services¹¹⁰².

Sometimes EU funding tends to favour **oversized end-of-the-pipe technologies**. Research of previous EU funding found that even if investments are allocated for environmental measures, priority is often given to end-of-the-pipe solutions. A good example of this can be found in the waste sector. Under the EU landfill Directive, Member States are obliged to reduce the amount of biodegradable waste going to landfill by 65% by 2016. The Commission's own report shows that implementation of this target causes problems in many Member States which tend to divert waste to incineration facilities instead¹¹⁰³. Environmental groups in new Member States have criticised the current 2007-2013 programming period in which Member States have proposed a significant amount of the available EU funding for waste to be allocated to incineration facilities rather than in support of waste prevention and recycling in line with the waste hierarchy embedded in the waste framework Directive¹¹⁰⁴.

¹¹⁰⁰ CEC, (2010), Cohesion policy: Strategic report 2010 on the implementation of the programmes 2007-2013, (COM(2010) 110), 31/03/2010.

¹¹⁰¹ Tosics, I. (2008) Negotiating with the Commission: the debates on the 'housing element' of the Structural Funds. *Urban Research and Practice*. 1 (1) 93-100.

¹¹⁰² DG Regional Policy (2010) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 5b: Environment and climate change.

¹¹⁰³ CEC, (2010a), Communication from the Commission to the Council and the European Parliament on future steps in bio-waste management in the European Union, COM(2010)235, Brussels, 18/05/2010.

¹¹⁰⁴ Friends of the Earth Europe/CEE Bankwatch Network. Faster ... but smarter or more destructive? Mapping controversial anti-crisis paths for EU and EIB funding in central and eastern Europe.

EU funding requires co-financing from the private and public beneficiaries. The availability of **national co-financing** has been challenged by the economic crisis and could potentially further delay the absorption of EU funding for environmental measures.

1.6.2.11 Sustainable Consumption and Production

The most important factor hindering the adoption of a more ambitious **energy taxation Directive** was the **difficulty in reaching a unanimous agreement** on the proposal due to the different positions of several Member States which opposed, to varying extents, the implementation of minimum rates at EU level. The ambition of the adopted Directive was significantly weakened by a decade of intense negotiations which accompanied its development. In particular, as all taxation and fiscal issues in the EU require unanimity in the Council, single Member States were able to block progress in the negotiations. The first proposal for a Community CO₂/energy tax, put forward in 1992, never resulted in a substantial agreement. A proposal for a Directive on the taxation of energy products¹¹⁰⁵ put forward in 1997 was less ambitious than the 1992 text, but still encountered strong opposition from Member States¹¹⁰⁶. Modifications were also proposed under several EU Presidencies in 1999 and 2001. Several countries expressed concerns about the proposed Directive – e.g. the UK did not want the minimum rates applied to domestic energy, while Spain and countries with low duties on motor fuels feared inflationary pressures¹¹⁰⁷. The prospect of **enlargement** helped speed up the negotiations to some extent - given the difficulty in reaching a unanimous agreement between 15 Member States, the possibility of reaching agreement with 25 or more Member States was considered very small, thus acting as an incentive to reach agreement. An agreement on the Directive was finally reached in March 2003.

Changes in the area since the adoption of the energy taxation Directive, including technological advancements and in particular the adoption of the CARE package, have increased discussions on other instruments such as energy and carbon taxes to reduce CO₂ emissions and encourage the uptake of renewable sources of energy. These changes have stimulated the debate on future revisions of the Directive. The 1997 EU renewable energy strategy and White Paper on renewable energies established renewable energy targets and stressed the importance of an exemption or reduction of taxes on renewable energy products. The Commission subsequently exempted renewable energy from the scope of the energy taxation Directive. As such, the Directive presents an incentive to move towards renewable energy sources; however the low minimum levels and exceptions for conventional energy sources do not induce great changes. In this respect, energy taxation is still seen as

¹¹⁰⁵ Proposal for a Council Directive restructuring the Community framework on the taxation of energy products COM (97)30. Text with EEA relevance

¹¹⁰⁶ Hasselknippe and Christiansen (2003) Energy Taxation in Europe: Current Status- Driver and Barriers – Future Prospects. FNI Report 14/2003.

¹¹⁰⁷ IEEP (2010) Manual of European Environmental Policy. Earthscan.

a tool to move towards the EU renewable energy targets, but only in combination with other policy instruments¹¹⁰⁸.

International commitments have also been used to justify action in relation to energy taxation. The preamble to the energy taxation Directive notes that 'As a party to the United Nations Framework Convention on Climate Change, the Community has ratified the Kyoto Protocol. The taxation of energy products and, where appropriate, electricity is one of the instruments available for achieving the Kyoto Protocol objectives.' International obligations and competition issues were also to justify the need to exempt energy products for air and sea navigation, the preamble of the Directive states that 'existing international obligations and the maintaining of the competitive position of Community companies make it advisable to continue the exemptions of energy products supplied for air navigation and sea navigation'. International agreements, in particular the Kyoto Protocol objectives, may also have encouraged certain Member States to set national tax rates above the minimum common rates (e.g. Sweden).

Throughout the decade of negotiations on common energy taxes, **public opinion** has in some cases negatively influenced discussions. In particular the fuel protests in autumn 2000, induced by an increase in fuel prices, helped firm up opposition to the proposal in many countries¹¹⁰⁹. Public consultations in the context of the MBI Green Paper indicated a more favourable approach towards a revision of energy taxes, in particular the proposal to split taxes into an environmental and energy component – which has been taken up in a pending draft proposal for a revised energy taxation Directive.

The scope and ambition of the adopted **eco-design Directive** was also influenced by the **co-decision procedure**. During informal negotiations with the Council, the Parliament failed to achieve its recommendation that the scope of the Directive be expanded immediately to all products (except vehicles). This expansion would have made it easier to use the Directive to cover all products with an impact on resource use. However, due to the opposition of some Member States, the agreed text notes that the Commission will assess the appropriateness of extending the scope of the Directive to non-energy related products in 2012 and as appropriate come up with proposals for a further amendment of the Directive. The Parliament was however successful in securing a review of the methodology for the identification and coverage of significant environmental parameters, including resource efficiency, and considering the whole life cycle of products no later than 2012.

Issues related **implementation** of the eco-design Directive could impact the performance of the Directive. In evaluating each new product on a case by case basis, the Directive outlines a process through which new standards can be determined through associated implementing measures. The conclusion of standards for each new energy-related product will involve input from a panel of experts. In cases where industry supports innovative eco-design standards for particular energy-related products, the Directive is likely to have significant impact both in terms of indirect emissions reductions and in terms of spurring innovation. In

¹¹⁰⁸ Hasselknippe and Christiansen (2003) Energy Taxation in Europe: Current Status- Driver and Barriers – Future Prospects. FNI Report 14/2003.

¹¹⁰⁹ IEEP (2010) Manual of European Environmental Policy. Earthscan.

cases where industry challenges the standards put forth for the suggested energy-related products, it is possible that the effectiveness of the Directive could be undermined.

ETAP

Although conditions for the development of environmental technologies in the EU have improved as a result of a number of coordinated activities such as increased attention on developers and on the market, several barriers, mainly of an **administrative and financial nature**, still hamper the full exploitation of the opportunities offered by ETAP.¹¹¹⁰ The Commission's second report on ETAP also concluded that 'all activities have to be stepped up and carried out on a new scale with much more emphasis on demand'.¹¹¹¹

The promotion of environmental technologies was called for by the **European Council** in the context of the **Lisbon Strategy** and the **EU SDS**. EU leaders recognised that environmental technologies are an important bridge between the two strategies with the potential to contribute to growth and at the same time improving the environment and protecting natural resources. The Stockholm European Council in March 2001 committed to review the contribution that the environment technology sector can make to promoting growth and employment and the European Council in Göteborg in June 2001, subsequently, requested the Commission to prepare a report on this topic.¹¹¹² The Commission's report 'Environmental technology for sustainable development'¹¹¹³ published in 2002 suggested the development of an Action Plan on environmental technologies. This marked the start of a process to develop an EU Action Plan on environmental technologies.¹¹¹⁴ The 2003 Barcelona European Council, where the Commission's 2003 Communication on 'Developing an action plan for environmental technology' was presented, reiterated the strategic importance of investments in research and development (R&D) for enhancing the European economy including eco-technologies. At the European summit it was agreed that the EU's overall spending on R&D should increase to up to 3% of its GDP by 2010. ETAP was developed to help meet this target and is closely linked to the fifth and sixth framework programmes of the European Community for research, technological development and demonstration activities.¹¹¹⁵

A number of **political issues** have been raised in relation to progress in the eco-innovation area. Concerns have been raised over **inter-Commission bargaining** that apparently led to less ambitious actions in ETAP relating to the demand side for eco-technologies. One concrete example is the low emphasis given to the potential of tax incentives among the

¹¹¹⁰ Ecorys, 2009.

¹¹¹¹ EC (2007). Report of the Environmental Technologies Action Plan (2005-2006). COM(2007)162. Brussels. 2 May 2007.

¹¹¹² EC (2002). Report from the Commission. Environmental technology for sustainable development. COM(2002)122. Brussels. 13 March 2002.

¹¹¹³ COM(2002)122.

¹¹¹⁴ Withana, S., Baldock, D., Farmer, A., Pallemmaerts, M., Hjerp, P., Watkins, E., Armstrong, J., Medarova-Bergstrom, K., Gantioler, S. (2010). Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future. Report for the IBGE-BIM. IEEP. London.

¹¹¹⁵ Ibid.

priority actions of ETAP.¹¹¹⁶ Another example is the relatively few concrete actions put forward to address the long standing issue of environmentally harmful subsidies.¹¹¹⁷ In addition, tax incentives are an area in which the Commission is reluctant to venture in view of the **national sensitivities about fiscal sovereignty** and the **requirement of unanimity** for Community measures aimed at fiscal harmonization.¹¹¹⁸

A number of ETAP actions are highly dependent on Member States for **implementation**. ETAP seeks to rely on the open method of coordination (OMC) to encourage Member State action, but the steering mechanisms established by ETAP are very weak compared to the typical instruments of OMC. ETAP lays down general guidelines but no clear targets and timetables, and no indicators or benchmarks against which national policies could be evaluated. The translation of the ETAP guidelines into national and regional policies is variable, as the 'roadmaps' show. The quality of reporting is generally low and does not provide a basis for systematic evaluation. There is no organised peer review process under ETAP, as opposed to other policy areas where the OMC is applied.¹¹¹⁹

1.6.2.12 Environmental Information

During the formulation of the **eco-label Regulation**, the European Parliament called for fees to be abolished for the application and annual use of the eco-label. However this did not make it into the compromise agreement negotiated with the Council. Several aspects of the Regulation are still in the pipeline, such as an exploration of the feasibility of establishing eco-label criteria for food and feed products (by 31 December 2011) and the production of a working plan, including a non-exhaustive list of product groups (by 19 February 2011). The Commission report on the public consultation relating to the revision of the eco-label Regulation¹¹²⁰ concluded that public opinion was in favour of keeping an EU-wide eco-label which overruled some calls for the scheme to be abolished in favour of national schemes.

There was considerable discussion between the European Parliament and the European Council over the proposed **energy labelling Directive**, particularly regarding the rating scale used on the product label. The new scale remains 'A-G' with the option of three additional categories above A: 'A+', 'A++' and 'A+++' which is intended to increase competition between manufacturers to increase the efficiency of their products. Public opinion also influenced the design of the energy labelling Directive. A consumer survey carried out in 2009 to investigate consumers' understanding of the proposed new label layout concluded that the three new categories were deemed appropriate by respondents¹¹²¹.

¹¹¹⁶ Pallemmaerts, et al, 2007.

¹¹¹⁷ Withana, et al, 2010.

¹¹¹⁸ Pallemmaerts, et al, 2007.

¹¹¹⁹ Ibid.

¹¹²⁰ European Commission (2007) Report on the Public Consultation, Revision of the EU Ecolabel Regulation (EC) No 1980/2000 http://ec.europa.eu/environment/ecolabel/about_ecolabel/revisions/revision_report2007.pdf.

¹¹²¹ Institute for European Environmental Policy (2010) Manual of European Environmental Policy, <http://www.europeanenvironmentalpolicy.eu>.

In terms of some of the drivers behind **GPP**, political support has been found to be extremely important in pushing forward action and is necessary to establish a national GPP scheme¹¹²². A review of green and/or sustainable public procurement schemes in nine Member States¹¹²³ found that more developed national GPP schemes exist where political support is strongest, e.g. in Denmark, the Netherlands and Sweden. The promotion of GPP has been called for in the context of a number of other strategic discussions including the renewed EU SDS, the Lisbon Strategy, ETAP, and in discussions on the promotion of IPP and SCP/SIP. There have also been calls from the European Parliament and the European Council for further action on GPP, including calls for ambitious targets (EP resolution on ETAP in 2005)¹¹²⁴ and for the adoption of environmental criteria and targets (European Council in March 2006)¹¹²⁵. These developments built up a certain momentum for action on GPP, while the continued support for action in the Council and EP helped to maintain this momentum and led to the adoption of the 2008 GPP Communication. International developments have also played a role. In 2002, the OECD adopted a Recommendation on GPP. As a follow-up to the Johannesburg World Summit on Sustainable Development (September 2002), a Marrakech Task force on sustainable procurement was created with the aim of spreading sustainable procurement practices, particularly in developing countries. Sustainable procurement policies had been launched in many OECD countries (USA, Japan, Canada, and Australia) and in rapidly developing countries (such as China, Thailand, South Korea and Philippines) and the EU was considered to have been lagging behind its international trading partners¹¹²⁶. These international developments, together with the need to maintain the EU's international position in the market for innovation and eco-technologies¹¹²⁷ may have provided some additional motivation for further EU action in this regard.

The perceived greater financial cost is one of the first barriers to the promotion of GPP. Other barriers include low awareness of the benefits of environmentally friendly products and services and uncertainty about the legal options to include environmental criteria within tender documents. The lack of management support, lack of practical tools and information and the lack of technical and legal expertise to apply green/sustainable procurement

¹¹²² AEA Technology Plc, (2010), Assessment and Comparison of National GPP/SPP Criteria and Underlying Schemes, Service contract ENV.G.2/SER/2009/0059r .

¹¹²³ AEA Technology Plc, (2010), Assessment and Comparison of National GPP/SPP Criteria and Underlying Schemes, Service contract ENV.G.2/SER/2009/0059r.

¹¹²⁴ European Parliament, (2005), European Parliament resolution on the communication from the Commission to the Council and the European Parliament on Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union.

¹¹²⁵ Council of the European Union, (2006), Presidency Conclusions of the Brussels European Council, 23/24March 2006,

¹¹²⁶ CEC (2008a): Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, Impact Assessment, SEC(2008)2124), 16/07/2008

¹¹²⁷ CEC, (2008), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, (COM(2008)400), 16/07/2008.

standards among public administrations in general and the relevant purchasing officers in particular are other limiting factors^{1128,1129}.

1.6.2.13 Environmental Liability

Changes in the target area

No notable drivers or barriers.

Conformity/lack of conformity with 6EAP priority action

The priority action (output requirement) contained in Article 3, para. 8, '*(t)o create a Community liability regime requires inter alia: legislation on environmental liability*' implies that there are other actions which must be taken in order to establish an environmental liability regime as envisaged by 6EAP. However, as mentioned above, no requirements other than legislation on environmental liability were explicitly mentioned in Article 3. Thus it is not possible to assess whether the priority action would have required another form of legislation besides the adopted Directive, and, if so, of what nature and content these other actions should have been.

Decision-making

The ELD has a long history spanning over a decade. The Commission had long intended to create an environmental liability regime long before the adoption of the 6EAP, and the eventual Directive was driven and influenced by a previous lengthy and controversial discussion.

The move towards such a regime began as early as 1989, when the Commission proposed a Directive dealing with liability for damages caused by waste.¹¹³⁰ This approach was quickly abandoned, however.

In 1993, the Commission published a Green Paper on Remedying Environmental Damage, which dealt with ways in which an EC liability regime could be constructed and intended to spark discussion on such a regime in the area of environmental law.¹¹³¹ In the course of the ensuing debate, the Commission considered the possibility of the EC joining the 1993 Council of Europe Lugano Convention¹¹³², but soon abandoned this idea.¹¹³³ A detailed

¹¹²⁸ Environment (2010), Barriers to the uptake of GPP, http://ec.europa.eu/environment/gpp/barriers_en.htm, Site accessed 15/12/2010.

¹¹²⁹ AEA Technology Plc, (2010), Assessment and Comparison of National GPP/SPP Criteria and Underlying Schemes, Service contract ENV.G.2/SER/2009/0059r

¹¹³⁰ Proposal for a Directive on civil liability for damage caused by waste, O.J. C251/3 (1989), as amended Com(91)219 final O.J.C192/6 (23.07.91).

¹¹³¹ Commission of the European Communities, Communication from the Commission to the Council and Parliament: Green Paper on Remedying Environmental Damage, COM(93)47 final, Brussels, 14 May 1993 (the 'Green Paper').

¹¹³² Council of Europe Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, done at Lugano, 21 June 1993 ('The 1993 Council of Europe Lugano Convention'), not in force; aimed to provide adequate compensation for damage resulting from activities dangerous to the environment, and to provide for prevention and restitution (Art. 1).

¹¹³³ L. Bergkamp, *The Commission's White Paper on Environmental Liability: A Weak Case for an EC Strict Liability*, p. 2, available at http://papers.ssrn.com/paper.taf?abstract_id=223108.

Opinion on the Green Paper by the Economic and Social Committee, issued in February 1994, supported EC action on liability for environmental damage and suggested that this could take the form of a framework directive.¹¹³⁴

In April 1994, the European Parliament adopted a Resolution which called on the Commission to submit 'a proposal for a directive on civil liability in respect of (future) environmental damage'.¹¹³⁵ The Commission then issued a working paper on environmental liability in late 1997, in which it presented a rough outline of its ideas on the matter at that point.¹¹³⁶

The White Paper which eventually followed in February 2000 was somewhat less ambitious compared to the 1997 working paper.¹¹³⁷ The White Paper differentiated between damage to biodiversity and the contamination of sites on the one hand and traditional damage on the other. Traditional damage was mainly to remain under the Member States' jurisdiction, whereas the restoration of biodiversity damage and decontamination was to be subject to the EC's framework legislation. While the national law of Member States provided a civil law mechanism for traditional damage, the restoration of the impaired environment was to become an administrative task. This approach mirrored the situation in the USA, where the Environmental Protection Agency was in charge of environmental clean-up at the federal level.¹¹³⁸

Prior to the adoption of the ELD, Member States were concerned that their national systems of tort law were going to be touched by traditional damage liability. The White Paper had stated that 'all the elements of the regime dealt with in this paper should [...] also be applied to traditional damage'.¹¹³⁹ Each Member state wanted its national system to remain largely untouched. The common law / civil law divide further added to the difficulties of reaching a consensus.¹¹⁴⁰ Already the term 'environmental liability' is confusing in that it does not clearly indicate whether the focus is to be on civil or administrative liabilities or responsibilities. This lack of clarity in the terminology was one of the factors leading to the long gestation period of the Directive.¹¹⁴¹

Implementation

The ELD entered into force on 30 April 2004 and the transposition deadline was set for 30 April 2007. Only four Member States met this deadline, however, and transposition remained

¹¹³⁴ Economic and Social Council Opinion of 23 February 1994, CES 226/94.

¹¹³⁵ European Parliament Resolution of 20.4.94 (OJ C 128/165).

¹¹³⁶ Commission of the European Communities, Working Paper on Environmental Liability, Brussels, 17 November 1997.

¹¹³⁷ Commission of the European Communities, White Paper on Environmental Liability, COM(2000)66 final, Brussels, 9 February 2000 (the 'White Paper').

¹¹³⁸ G. Winter, J. Jans, R. Macrory, L. Krämer, *Weighing up the EC Environmental Liability Directive*, Journal of Environmental Law 2008, p. 165.

¹¹³⁹ White Paper at 4.5.3, p. 21.

¹¹⁴⁰ Winter et al., p. 165.

¹¹⁴¹ Winter et al., p. 165.

slow thereafter.¹¹⁴² This resulted in infringement proceedings of the Commission against 23 Member States, which reduced the number of non-compliant countries. Nevertheless, the Commission had to refer 7 Member States¹¹⁴³ to the European Court of Justice, with gave judgment against them in 2008 and 2009.¹¹⁴⁴

The main reasons for the delays in transposition were

- existing liability rules on environmental issues within the Member States' legislation;¹¹⁴⁵
- challenging technical requirements, eg. different types of remediation and the need for economic valuation of environmental damage, which were novelties to most Member States; this was judged by the competent authorities to be the most difficult issue in the implementation process;¹¹⁴⁶
- the framework character of the Directive, which leaves a wide margin of discretion to the Member States, leading to a lengthy deliberation and transposition process as the range of options needs to be debated at national level.¹¹⁴⁷

As a result of the slow transposition of the Directive, only a limited number of cases – an estimated 50 EU-wide – have so far been treated by the competent authorities.¹¹⁴⁸

Financial resources

No notable drivers and barriers.

Public opinion

As regards the public's opinion, the White Paper also encountered barriers in this domain, with European professional groups opposed to any EC legislation on environmental liability and tort lawyers arguing mainly in the context of their national legislation, while European environmental organisations often lacked the in-depth legal knowledge to fully participate in the debate.¹¹⁴⁹

Competing/Complementary EU priorities

Only in 2005 did the EU's **Lisbon Strategy** start to include 'a greener economy' as one of its goals.¹¹⁵⁰ Even then, the Lisbon Strategy focused mainly on issues of climate change and the

¹¹⁴² Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions Under Article 14(2) of Directive 2004/35/CE on the environmental liability with regard to the prevention and remedying of environmental damage, COM(2010)581 final, Brussels 12 October 2010, p.3.

¹¹⁴³ France, Finland, Slovenia, Luxembourg, Greece, Austria and the UK, according to the above report.

¹¹⁴⁴ *ibid.*

¹¹⁴⁵ *ibid* p. 3.

¹¹⁴⁶ *ibid* p. 5.

¹¹⁴⁷ *ibid.*

¹¹⁴⁸ *ibid* p. 5.

¹¹⁴⁹ Winter et al. p. 165.

¹¹⁵⁰ 'The Commission proposes to refocus the Lisbon agenda on actions that promote growth and jobs in a manner that is fully consistent with the objective of sustainable development. The actions falling under this strategy should reinforce the Union potential to meet and further develop our environmental [...] objectives.' on p. 12 of The Commission of the

promotion of a competitive, efficient green sector with particular attention for energy security.¹¹⁵¹ Creating legislation on environmental liability was never among its aims. The ELP was thus not driven by the Lisbon Strategy.

As regards the EU's **Sustainable Development Strategy**,¹¹⁵² which was communicated in 2001 and thus before the adoption of the ELD in 2004, it explicitly listed 'EU legislation on strict environmental liability in place by 2003' as a priority action.¹¹⁵³ The Sustainable Development Strategy is named in the seventh preambular paragraph of the 6EAP:

'The Programme [...] indicates priorities for the environmental dimension of the Sustainable Development Strategy and should be taken into account when bringing forward actions under the Strategy.'

This mention, however, implies that actions taken under the Strategy should be influenced by the 6EAP, not the other way around, although a mutual influence is likely as both share a range of objectives.

While the ELD makes no specific reference to the Sustainable Development Strategy, its third preambular paragraph does state that

'[t]he prevention and remedying of environmental damage should be implemented [...] in line with the principle of sustainable development'.

Since the Sustainable Development Strategy aimed to move the principle of sustainable development up the political agenda and this principle is directly referred to in the text of the ELD, it is possible that the Sustainable Development Strategy at least marginally affected and drove the achievement of the 6EAP's priority action of enacting environmental liability legislation.

The same is true of the **Global Partnership for Sustainable Development**¹¹⁵⁴ which was launched by the Göteborg European Council in May 2001. It, too, presents specific activities to contribute to global sustainable development, but focuses on the external dimension. The Communication thus complements the Sustainable Development Strategy of the same year. It contributed to the heightened awareness of sustainable development as a whole, but did not mention the necessity of enacting an environmental liability regime.

International Commitments

European Communities *Working together for growth and jobs – A new start for the Lisbon Strategy*, Communication from President Barroso, Brussels, 02.02.2005, COM(2005)24.

¹¹⁵¹ Commission Staff Working Document, *Lisbon Strategy evaluation document*, Brussels, 2.2.2010, SEC(2010) 114 final, p. 17.

¹¹⁵² Commission Communication of 15 May 2001, *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development* (Commission proposal to the Gothenburg European Council), COM(2001)264 final – not published in the Official Journal.

¹¹⁵³ *ibid* p. 12, under 'Manage natural resources more responsibly – Measures at EU level'.

¹¹⁵⁴ Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, of 21 February 2002, *Towards a global partnership for sustainable development*, COM(2002)82 final – not published in Official Journal.

No single instrument sets forth the generally applicable international rules governing responsibility and liability.¹¹⁵⁵

However, the Rio Declaration on Environment and Development,¹¹⁵⁶ though not binding, explicitly calls on states to develop liability regimes (see below). The EU, although it only has observer status at the UN, actively promoted the adoption of the Rio Declaration.¹¹⁵⁷ It is thus fair to say that the EU contributed to the creation of a driver, albeit in non-binding soft law, to carry out the objectives set out therein.

In relation to the issue of environmental liability, Principle 10 of the Rio Declaration requires the provision of

'effective access to judicial and administrative proceedings, including redress and remedy'.

The ELD is a means for ensuring the provision of 'access to redress and remedy'.

Principle 13 of the Rio Declaration calls on states to

'develop national law regarding liability and compensation for the victims of pollution and other environmental damage.'

This requirement mirrors the wording in Art. 3 para.8 of 6EAP as regards the stated necessity to develop a liability regime.

Finally, Principle 16 of the Rio Declaration contains the polluter-pays-principle:

'the polluter should, in principle, bear the cost of pollution'.

As detailed above, the ELD incorporates the polluter-pays-principle.

The Rio Declaration, adopted ten years prior to the enactment of the ELD, thus already required in soft law what the 6EAP formulates as regards environmental liability legislation. By virtue of the global attention the Rio Declaration received, it can thus be seen as an early driver for the eventual enactment of the ELD.

1.6.2.14 EU Enlargement

The realization of 6th EAP goals in a general context as well as in an enlargement setting is potentially influenced by a number of factors including the decision to use 'soft' or 'hard' approaches, political culture, institutional capacity and the interpretation of the role of the EU presidency.

¹¹⁵⁵ cf P. Birnie, A. Boyle, C. Redgwell, *International Law and the Environment*, Third Edition, 2009, p. 316 f.

¹¹⁵⁶ Rio Declaration on Environment and Development of 14 June 1992, United Nations Document A/Conf.151/26, 'The Rio Declaration', adopted by the United Nations Conference on Environment and Development (UNCED), meeting in Rio de Janeiro 3 – 14th June 1992. The European Union has observer status at the UN, but since all its Members are UN Members, the Rio Declaration applies to them and therefore to the EU.

¹¹⁵⁷ S. Lightfoot, J. Burchell, 'The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?', *Journal of Common Market Studies*, March 2005, p. 76.

Changes in target area:

According to the EEA Report, 'Environmental trends and perspectives in the Western Balkans: future production and consumption patterns' some trends are worrying including: the increase in consumerism, growth in transportation, urban and coastline development, increase in waste production, and biodiversity impacts from agricultural practices.¹¹⁵⁸

Barroso's administration is considered to be a unique driver in the environmental policy context, and hence influences the capacity for impact of the 6th EAP especially with regard to Better Regulation. An official with a lot of experience within the Commission commented that presidential power in light of the Treaty of Nice and under the Barroso administration has increased and Barroso is using it.¹¹⁵⁹ His Better Regulation agenda has been questioned.¹¹⁶⁰ 'Better Regulation' by some, for example, was thought to be 'cover for producing less regulation.'¹¹⁶¹

Conformity/lack of conformity:

A 2003 June report from the Commission to the European Parliament and the Council on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC): How successful are the Member States in implementing the EIA Directive, for example, concluded that at that point in time, 'It appears that the main problem lies with the application and implementation of the Directive [EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC) and not, for the most part, with the transposition of the legal requirements of the Directive'

Decision-making: no data

Implementation

Implementation of the 6th EAP remains a significant challenge for new member states on some issue areas.¹¹⁶² The 2009 Annual Management Plan of the DG Environment asserts that potential candidates and candidate countries need further to strengthen their administrative capacity and environmental governance while at the same time secure funding to facilitate their efforts to implement the acquis.¹¹⁶³ The European Commission reported that, '[e]nvironment policy can and should be further **integrated into other policy areas.**'¹¹⁶⁴

¹¹⁵⁸ EEA Report No 1/2010, 'Environmental trends and perspectives in the Western Balkans: future production and consumption patterns.'

¹¹⁵⁹ Peterson, John. 2008. Enlargement, reform, and the European Commission. Weathering a perfect storm?, *Journal of Public Policy* 15:5:761-780.

¹¹⁶⁰ Ibid; Pollack, Mark A. and Emilie M. Hafner-Burton. 2010. Mainstreaming international governance: The environment, gender, and IO performance in the European Union.

¹¹⁶¹ Peterson, 2008.

¹¹⁶² Tews, Kerstin (2009): From Law-Taking to Policy-Making. The Environmental Dimension of the EU Accession Process – Challenges, Risks and Chances for the SEE countries. *Environmental Policy and Governance* 19:130-139.

¹¹⁶³ European Commission. 2009. 2009 Annual Management Plan. DG Environment.

¹¹⁶⁴ European Commission. 2010. Commission Staff Working Paper '2009 Environment Policy Review.' SEC (2010) 975 final, Brussels, 2.8.2010.

Bulgaria, for example, was especially challenged to assert timely waste management. Across the potential candidates and candidate countries, there is wide variation in terms of what is needed to adopt and implement the environmental acquis. Albania, for example, is a long way from being able to implement EU environmental acquis, and will need time and considerable support to do so in the future.¹¹⁶⁵ Enlargement in the current scheme is especially concerned with further institutionalization of political stability and democratic approaches. It is important to note here too that, well-functioning institutions and low corruption are associated with environmental quality (and economic growth).¹¹⁶⁶

Such challenges have launched several debates including the effectiveness of 'soft' approaches political culture and will, capacity including skills and expertise, and corruption. Some suggest that the 6th EAP could benefit from harder incentives such as binding regulations,¹¹⁶⁷ and designated specific targets where called for.¹¹⁶⁸ The 6th EAP asserts a strategical direction but with minimal standards; it is not sufficient to get implementation.¹¹⁶⁹ For example, it needed to provide detailed requirements on soil standards.¹¹⁷⁰ 'Soft law' is also implicated in occupational health and safety challenges in the new member states that joined the EU in 2004, particularly the Baltics.¹¹⁷¹

The Thematic Strategies emphasize soft law new governance instruments with few proposals for binding regulations.¹¹⁷² Falkner and Treib, however, pointed out that the need for better enforcement systems was not only true for CEE countries, but also the EU-15 countries (2008). Pollack and Hafner-Burton¹¹⁷³ concluded that, 'the most important policy actors in the EU have chosen not to adopt the procedural and institutional forms that, official and scholarly evaluation suggest, are most likely to produce policy outputs in line with the Union's stated social and environmental goals.'¹¹⁷⁴

Implementation of environmental considerations associated with IPA and Cohesion Policy funds is receiving more attention. For example, the Commission is strengthening Cohesion Policy aid conditionality by linking funds to EU environmental legislation compliance, environmental management strategies, and transport planning. At the same time,

¹¹⁶⁵ Füle, Štefan. 2010. European Commissioner for Enlargement and Neighbourhood Policy Press points on Enlargement Package. European Commission – Press Conference. SPEECH/10/639. Brussels, 9 November.

¹¹⁶⁶ Pellegrini, Lorenzo and Reyer Gerlagh. Are EU's environmental policies too demanding for new members states? <http://www.sme-environment.org/EuropeanEnvironment%5B2%5D.pdf> (last visited November 25, 2010).

¹¹⁶⁷ Pollack, Mark A. and Emilie M. Hafner-Burton. 2010. Mainstreaming international governance: The environment, gender, and IO performance in the European Union.

¹¹⁶⁸ Homeyer, I. 2007. The Thematic Strategies: Governance for Environmental Policy Integration? EPIGOV Paper No. 8, Ecologic –Institute for International and European Environmental Policy, Berlin.

¹¹⁶⁹ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁷⁰ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁷¹ Woolfson, Charles (2006): Working Environment and 'Soft Law' in the Post-Communist New Member States. *Journal of Common Market Studies*, 44(1):195-215.

¹¹⁷² Pollack & Hafner-Burton, 2010.

¹¹⁷³ Ibid.

¹¹⁷⁴ Pollack & Hafner-Burton, 2010: 309.

enlargement countries are challenged to spend the allocated funds, especially on projects simultaneously related to biodiversity and rural development.¹¹⁷⁵

Several factors are additionally implicated in the transposition and implementation of EU laws. Government political attitudes towards EU accession, for example, impact the ability to meet transposition deadlines.¹¹⁷⁶ Transposition can depend on the number of parties in government, bureaucratic capacity, and the regulatory context within a particular country.¹¹⁷⁷ When trade barriers are involved, directives are more likely to be implemented compared to complicated and costly laws which are less likely to be implemented in a timely manner.¹¹⁷⁸ Additionally, multiple studies indicate that implementation is correlated with political will and capacity.¹¹⁷⁹

Levels of skill and expertise vary across old and new member states and across candidate countries tend to vary. Regarding the Urban Strategy and enlargement, for example, decentralization put planning into local hands where there is a lack of resources to support the development of sound plans which require strong expertise and are costly. Additionally, there are different levels of understanding about performance and implementation. Climate, biodiversity and soil issues are considered to be 'above the tipping point,' hence they need to become active knowledge for decisionmakers.¹¹⁸⁰ This raises the question of whether there is perhaps an 'overstretching' of capacity in a given candidate country.

Hence, while a candidate country might embrace EU directives, the capacity to implement them may be particularly challenged, in some cases due to the need for expertise and training.¹¹⁸¹ While one could argue, for example, that the level of ambition in the IPA is impressive for its environmental content, candidate countries find it difficult to meet the procedural requirements for efficient utilisation of the funding mechanism and rather than enhancing performance, these requirements may simply result in a lower dispersal of funds despite their availability. However, the documentation surrounding implementation of the IPA process in its early stages, reveals a noteworthy commitment to the strengthening and participation of civil society organisations, and appears to have allocated funds to a number of projects that support the protection and wise use or valorisation of natural resources.¹¹⁸²

Implementation of public participation initiatives has varied across new member states, as environmental decisionmaking in general. For example, a European Commission, DG ENV Report, 'Study concerning the report on the application and effectiveness of the EIA Directive,' produced by COWI in June 2009 asserts that results from Directive 2003/35/EC

¹¹⁷⁵ EEA Technical Report No 10/2009, 'Territorial cohesion — Analysis of environmental aspects of the EU Cohesion Policy in selected countries.'

¹¹⁷⁶ Toshkov, 2008.

¹¹⁷⁷ Ibid.

¹¹⁷⁸ Ibid.

¹¹⁷⁹ Ibid.

¹¹⁸⁰ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁸¹ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁸² see Annual Work Programme for Grants 2009 – DG ELARG.

have been mixed across member states' reports. For example, while in Malta no major changes have been noted since the adoption of the measure, other states such as Romania, Cyprus, and Latvia have reported increased public involvement.

Financial resources: see section on Funding Mechanisms

Public opinion

Most citizens, with the exception of Hungary and Turkey, place a higher value on environmental protection than economic growth.¹¹⁸³ Ultimately, however, citizen approval for EU environmental policy is less strong in the previously acceding countries of 2004.¹¹⁸⁴ They add that the most influential factors explaining this are a country's level of economic modernisation and post-material value orientation.

Civil society and dialogue gained increasing importance as lessons were learned from the lack of public support for important EU initiatives and the pre-accession of new member states. The importance of civil society dialogue, for example, drew special attention with the French and Dutch rejection of the Constitution for Europe and the Irish rejection of the Lisbon Treaty. The lack of implementation capacity in new member states and candidate countries raised awareness regarding the important role of civil society in environmental governance and in facilitating implementation. Efforts to build civil society dialogue between the EU and candidate countries are noted in COM (2005) 290 final that asserts that, 'one of the lessons that can be drawn from the previous enlargement is that citizens in EU Member States were not sufficiently informed nor prepared. Any future enlargement of the EU needs to be supported by a strong, deep and sustained dialogue between the societies of the candidate countries and in the EU member States, as well as with the EU institutions' (2005:2).¹¹⁸⁵

Competing/complementary EU priorities:

With the financial crises, jobs and economic growth were reasserted as a priority while environmental concerns were downgraded. The Lisbon Treaty was an opportunity to assert sustainability, yet the opportunity was sidelined in 2005 in favour of an emphasis on jobs and economic growth.¹¹⁸⁶

The thread of environmental policy integration is not sufficiently interwoven across sectors, which can be interpreted as a 'mixed signal,' 'hypocrisy,' 'a contradiction,' or as a lack of harmonization of positions between the EU and new member states or candidate countries. There are contradictions with the simultaneous introduction of the Climate Energy Packet and financial support for a new coal powered plant in Slovenia, for example; or a gap between climate policy and energy and transport policies in Hungary.¹¹⁸⁷ Biodiversity is

¹¹⁸³ Gerhards, Jurgen and Holger Lengfeld. 2008. Support for European Union Environmental Policy by Citizens of EU-Member and Accession States. *Comparative Sociology* 7:215-241.

¹¹⁸⁴ Ibid.

¹¹⁸⁵ COM(2005) 290 final. Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Civil Society Dialogue between the EU and Candidate Countries.

¹¹⁸⁶ Pollack & Hafner-Burton, 2010.

¹¹⁸⁷ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

contradicted by spatial planning and conversion rates; windmill farms are opposed for the sake of Natura 2000. In Turkey, the environmental chapter is open, but the energy chapter is not so open.¹¹⁸⁸ There are concerns regarding ‘conflicts of interest’ in which urban plans or environmental impacts are prepared by investors.¹¹⁸⁹ The Cohesion Fund simultaneously supports biodiversity and challenges it through transport infrastructure (e.g., Egnatia Highway project and brown bear protection). According to the EEA Technical Report, ‘Territorial cohesion — Analysis of environmental aspects of the EU Cohesion Policy in selected countries,’ indeed such funding needs to support more sustainable mobility and strengthen conformity with the objectives of the EU Sustainable Development Strategy.¹¹⁹⁰

1.6.3 Assessment of the policy mix and approach of the 6EAP

1.6.3.1 Improvement of the process of policy making through evaluation

Overall aims

As the EU IA system includes environmental, social and economic issues it corresponds to the EU Sustainable Development Strategy. In practice, however, the assistance the IA system provides for achieving a more sustainable development is likely to be limited as the three impact dimensions usually are not treated equally.

The EU’s overall evaluation system is not likely to directly help with implementing the EU Sustainable Development Strategy as its scope is much broader and does not specify any area specific policy to be considered in evaluations.

Specific objectives

Judged from a formal viewpoint, the tools adopted for implementing an ex-ante and ex-post evaluation system were the right ones. At least this can be concluded from the fact that both, the IA system as well as the EU’s evaluation system are up and running. Whether they really contributed to the 6EAPs objectives of using the most effective and appropriate means available, basing policy making on an analysis of benefits and costs and on best available scientific evidence, however, cannot be said. However, the EU has invested great efforts to establish ex-ante and ex-post evaluation systems that meet the 6EAP’s requirements.

Timing of the measures and overall timeframe

The timing of the measure as well as the overall timeframe were appropriate

1.6.3.2 Provision of regular information

Overall aims

The tools adopted for ensuring more regular information were the right ones, at least this can be concluded from the fact that Eurostat is regularly publishing its monitoring reports and is

¹¹⁸⁸ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁸⁹ 6th Environmental Action Programme and EU Enlargement Expert Workshop, October 6, 2010, Budapest, Hungary.

¹¹⁹⁰ EEA, 2009.

collecting the relevant data. The reports build the basis for the annual Commission's review on progress of the EU SDS.

Timing of the measures and overall timeframe

The fact that the system is smoothly working allows to assume that the timing of the measure as well as the overall timeframe were appropriate.

1.6.3.3 Integration of environmental requirements in transport policy

Creating a sustainable European transport sector is in accordance with the 6EAP as well as with broader European and international objectives. The European Commission uses a number of policy measures to integrate environmental and sustainability objectives into European transport policy, best described as a push-pull strategy. Measures aim at both fostering demand for sustainable transport, such as through internalising transport costs (pull), and restricting the supply of the most inefficient technologies through standards and regulations to reduce emissions and other harmful environmental effects and encourage innovative new technologies (push).

EU measures aimed at integrating environmental objectives into transport have been mostly issued between 2008 and 2010 and had not yet entered into force by the time the 6EAP was accomplished, thus making it difficult to assess their effectiveness within the scope of the 6EAP. However, the diverse policy mix underpinned by the Greening Transport Package indicates that measures have been pursued which address multiple modes of transport and from different angles (i.e. the push-pull strategy). The focus of policies was foremost on climate change mitigation, followed by air quality consideration and to some degree noise regulation. Other issues that are also linked to transport include urban sprawl and impervious cover, fragmentation of habitat and biodiversity loss, environmental impact of infrastructure construction and up-stream impacts of fuels, vehicles and materials. Another important aspect that has been neglected altogether so far is climate change adaptation of transport infrastructure.

The EU predominantly uses relatively open policy measures such as broadly formulated directives, strategies and recommendations to integrate environmental considerations into transport policies. The Greening Transport Package and other relevant instruments often set goals but do not specify specific actions to be implemented. This enables Member States flexibility in policy making. The Package aims at a pragmatic approach by establishing timelines and providing common methodologies as well as monitoring progress. Policy assessment and evaluation through tools such as impact assessment and stakeholder consultation are critical for measuring progress at different stages throughout the policy cycle and are essential to the open policy strategy in which the Commission takes more of a guiding role.¹¹⁹¹

The Greening Transport Package still does not fully deliver a clear and all-encompassing framework by which to steer European transport towards sustainability because:

¹¹⁹¹ EC (2007): The use of indicators in the European Commission.

Little attention has been given to EU enlargement and the possible consequences this may have for EU transport policies. The diversity of Member States, enhanced by EU enlargement, means that Member States' needs may drastically vary or contradict one another (e.g. congestion in the West and accessibility issues in the East), requiring different solutions.

The use of soft measures and directives, combined with the growth of inefficient transport modes (i.e. air and road) for both freight and passenger transport, suggests that binding legislation may be necessary to address the environmental and climate change objectives for the transport sector.

Support for new technologies to address environmental and climate change concerns of the transport sector is not provided, or only indirectly (e.g. Regulation on CO₂ emissions from passenger vehicles and the Directive on the promotion of clean and energy-efficient road transport vehicles).

Measures to address spatial, landscape or biodiversity impacts of transport are not addressed in the package.

In addition, multiple proposals included in the Package regarding issues such as emissions from maritime transport or revisions to the Energy Tax Directive have yet to be delivered.¹¹⁹²

In summary, earlier measures in transport policy focus rather on conventional environmental protection issues, while the majority of the assessed measures falls into the 2008-2010 timeframe and addresses predominantly climate change mitigation aspects. In addition, the earlier measures tend to be non-binding or guiding in character, whereas the later measures are more binding and specific.

1.6.3.4 Environmental Integration in Cohesion Policy

Many of the provisions for environmental integration from the Cohesion Policy Regulations are currently being challenged during the implementation process, thus it is perhaps too early to evaluate the appropriateness and effectiveness of the adopted approach. However, the current mix of tools and measures is not likely to guarantee overall policy coherence between Cohesion Policy and the objectives of the 6EAP. The current approach is primarily instrumental and does not address the foundations of how Cohesion Policy is defined. Despite calls for pursuing sustainable development and ensuring environmental protection, Cohesion Policy is mostly defined as stipulated in the Treaty in terms of pursuing economic and social objectives. Sustainable development is translated as a horizontal principle (more in line with the EU SDS than the 6EAP) which is often interpreted narrowly to its environmental pillar. Consequently, environmental integration efforts rely on the effectiveness of different instruments (SEA, partnership, etc), which in turn vary significantly in their application and implementation across Member States. Furthermore, Cohesion Policy gives strong priority to other Community policies, e.g. Trans-European Transport network, which are based on a different set of principles and objectives (e.g. establishing a core

¹¹⁹² European Parliament (2009): European Parliament resolution of 11 March 2009 on the greening of transport and the internalisation of external costs (2008/2240(INI)).

European transport network, tackling transport bottlenecks and fostering mobility of goods and people) where considerations for the environment are less central to the agenda. Thus environmental integration in Cohesion Policy will also depend on environmental integration actions in other Community policies, such as transport, and the policy coherence across different sectoral policies.

ETAP

The 6EAP paid limited direct attention to improving eco-innovation or the development and dissemination of environmental technologies. The 6EAP, nevertheless, addressed most of the major barriers to development and dissemination of environmental technologies which are identified in the ETAP to be tackled as priority. However, some barriers such as mobilizing financial instruments to share the risks of investing in environmental technologies, reviewing state aid guidelines (priority actions in ETAP) have not been put forward by the 6EAP.

1.6.3.5 Environmental information

The **GPP Communication** is non-legislative and the measures proposed are not mandatory but rather considered as guidelines for implementing GPP. The IA highlighted the importance of securing increased political support for GPP and recognised that the most effective way of doing this would be through the adoption of mandatory measures and identified a series of mandatory options, ranging from mandatory targets for GPP to mandatory GPP for all contracts covered by the public procurement Directives. However, at the time, data on the costs and benefits of potential mandatory options were insufficient to warrant proposing a mandatory approach. An additional IA was to be carried out at a later stage, in view of possibly adopting an appropriate legal instrument to complement the guidance provided in the GPP Communication¹¹⁹³. The OMC approach advocated will help realise some of the benefits of increased up-take of GPP. However, progress is likely to be patchy, reflecting the current uneven Member State approach, where leading Member States convinced of the benefits of GPP have taken different types of constructive initiatives, while developments in other Member States tend to be incremental / slower. Adopting more ambitious mandatory measures will achieve these and more results earlier and at the same time encourage a more harmonised internal market. A mandatory approach would help to increase the percentage of GPP across the EU – with increases in both the GPP-advanced countries and the less (GPP) advanced countries. The extent of the benefits achieved would depend on criteria used, the choice and level of targets, the products focused on and on local circumstances (e.g. product availability in the market and other purchase criteria)¹¹⁹⁴.

¹¹⁹³ CEC, (2008a), Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, Impact Assessment, SEC(2008)2124, 16/07/2008

¹¹⁹⁴ ten Brink P et al. (2008): Collection of evidence on the costs and benefits of various types of mandatory measures & targets in the field of Green Public Procurement (GPP). A report to the European Commission. Brussels 2008.

1.6.3.6 INSPIRE

Between 2008 and 2010 three regulations and one Commission Decision have come into force as the implementing rules for the priority measure. Two more regulations are currently in draft form. The

The most important achievement of the priority measure to this time has been the push it has given to national and local governmental authorities to develop and link their spatial data infrastructure. The priority measure has a very active community of stakeholders, and there are INSPIRE related activities occurring throughout Europe. The linkages between INSPIRE and related measures such as GMES are developing and can be expected to grow.

The interest and commitment of stakeholder organizations has contributed the most to the achievements of the priority measure. Stakeholder organizations are willing to share and learn from each other but are often unable to do so. Coordination appears to be a major hurdle.

1.6.3.7 GMES

Global Monitoring for Environmental Security (GMES) is a complex system of data gathering and organization that should provide sophisticated environmental information to the public and decision makers. If fully operational It has the potential to reinforcing the development and the use of earth monitoring applications and tools in support of policy-making and implementation.

1.6.3.8 SEIS

A number of instruments make up the policy mix for this area in addition to SEIS:

The Directive on Public Access to Environmental Information (2003/4/EC) guarantees the public's right to access environmental information and requires public authorities to respond to information requests.

Global Monitoring for Environmental Security (GMES) is a complex system of data gathering and organization that provides sophisticated environmental information to the public and decision makers. GMES and INSPIRE are already linked through an interservice group and can be expected to generate significant synergies.

The INSPIRE Directive aims to create an EU-wide spatial data infrastructure that will allow governmental organizations to share spatial data, improve decision making, and facilitate public access to spatial data throughout Europe.

In addition, data harmonization and sharing projects at Member State level throughout the EU have been initiated and are making incremental progress. The commitment on the part of environmental authorities in Member States to develop their environmental information system capacities plays the most important role in achieving the objectives of the measure.

1.6.4 Impact of the 6EAP on the adoption of measures

1.6.4.1 Impact of the 6EAP

Improvement of the process of policy making through evaluation

The extent to which the successful establishment of the Commission's IA system can be attributed to the 6EAP remains disputable. The literature on the Commission's IA system does not provide any clues that would allow to attribute major impacts of the 6EAP on setting up the IA system. The main driving forces for setting up the IA system were the EU-SDS and the EU's better regulation agenda. Both processes were endorsed by the European Council,¹¹⁹⁵ which at the same time also called for introducing an IA system. Though the 6EAP requirements respond surprisingly well to the features of the EU's overall evaluation and IA systems it is quite likely (and anecdotal evidence from personal conversation with DG Environment officials confirms this assumption) that there was no influence of the 6EAP on the process of setting up one of these two systems.

From the IA literature the 6EAP's impact does not become evident. This would need to be explored further in interviews.

Research

The **6FP** Decision cites the 6EAP and the EU SDS among the important commitments of the EU which require efforts to deploy technologies in the short term and medium and long-term research efforts to develop sustainable European transport systems, ensure the availability of the most appropriate energy sources, and progress in the context of global change and protection of biodiversity and preserving ecosystems.¹¹⁹⁶ The preamble of the **7FP** Decision states that 'The Seventh Framework Programme should contribute towards promoting growth, sustainable development and environmental protection, including by addressing the problem of climate change'. The 7FP recognises the research needs arising from international commitments and existing and emerging EU level policies, including implementation of the 6EAP and associated thematic strategies (e.g. the EU marine strategy), the action plans, programmes and directives on Environmental Technologies and Environment and Health, the Water Framework and NATURA 2000.¹¹⁹⁷ It is difficult to conclude from these references that the 6EAP has had a direct impact on the development and implementation of the 6th and 7th FPs, however it is used in both Decisions as reference point for the EU's environmental objectives and commitments and is noted as a justifying factor for EU action in relation to sustainable development, global change and ecosystems.

SDI

The 6EAP has played a role in defining the SDIs in so far as the indicators were designed in a way that they also measure progress on the 6EAP's objectives. The 6EAP has been mentioned in the Communication 'Sustainable Development Indicators to monitor the

¹¹⁹⁵ Laeken European Council for better regulation and Göteborg European Council for the EU-SDS.

¹¹⁹⁶ Decision 1513/2002/EC.

¹¹⁹⁷ Decision 1982/2006/EC.

implementation of the EU Sustainable Development Strategy', though it was not mentioned as a cause for the communication. However, it has been mentioned in the context of indicator selection, because the suggested SD indicators were also chosen with a view to measuring selected 6EAP objectives (e.g. achieve a more sustainable use of pesticides).¹¹⁹⁸

Implementation and enforcement

At first sight the impact of the 6EAP on the adoption of horizontal policy measures regarding implementation and enforcement appears to be rather limited or indirect. This results from the fact that the 6EAP provisions on implementation and enforcement are rather vague and broadly formulated. For instance, the 6EAP did not call explicitly for a review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States or for the development by the Commission of a new strategy towards implementation and enforcement of EU environmental law. However, the 6EAP did have some indirect impact on the adoption of measures as it contributed to a climate within the EU in which increased priority was attached by the EU institutions to implementation and enforcement and therefore facilitated the adoption of some of the measures discussed above. It should be noted that implementation was already a priority for the Commission before the adoption of the 6EAP. The 5EAP and the 1996 Communication on implementing EU environmental law had already established implementation as a priority. The 6EAP thus reiterated this priority. Nevertheless, most of the measures discussed would have probably been taken anyway, i.e. even if the 6EAP was not there, as there were often other drivers present that pushed policy actors such as the European Commission to take action.

The 6EAP was more frequently referred to or had a stronger facilitating role for certain measures than for others. For instance the adoption of the 2008 Communication on implementing European Community Environmental Law¹¹⁹⁹ clearly reflected the priority attached to implementation as expressed in the 6EAP and its mid-term review. Although the initiative of the Secretariat General to publish a general Communication on applying Community law delayed the adoption of the Communication on the environment by two years. In this context, the 6EAP helped DG Environment push through its own Communication. The Communication also responded to a long-standing interest of the European Parliament.

The review of Recommendation 2001/331/EC on minimum criteria for environmental inspections would have been carried out anyway, as it was explicitly provided for by the Recommendation itself. The 6EAP nevertheless contributed to a favourable climate as it explicitly aimed for promoting improved standards of inspection in Member States, though it was not referred to in the political debate around the review (at least not in the EU documents such as the respective European Parliament resolution and opinion of the European Economic and Social Committee). In addition, the 6EAP was a major driver for the process of reviewing the Directive on integrated pollution prevention and control (IPPC) and

¹¹⁹⁸ Provision of regular information – Commission Communication – Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy (SEC(2005)161), p. 12.

¹¹⁹⁹ COM(2008)773.

related legislation on industrial emissions.¹²⁰⁰As the Commission took the opportunity to insert specific legally binding inspection requirements into its proposal for a new industrial emissions Directive and the final text indeed contains an article dedicated solely to inspection requirements, it can be concluded that the 6EAP facilitated the adoption of binding inspection requirements in the field of industrial emissions.

The two main drivers pushing forward the adoption of the proposal for a Directive on access to justice in environmental matters was its contribution to implementing the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the so-called Aarhus Convention) and in tackling the shortcomings in enforcement of EU environmental law (due to among others the lack of a financial private interest in enforcing environmental law) as identified among others in the Commission's annual surveys on the implementation and enforcement of Community environmental law. The 6EAP was not explicitly referred to in the Commission's explanatory memorandum attached to the proposal.

The 6EAP had limited impact on the adoption of the environmental crime Directive. The initiatives taken by Denmark (which came up with a proposal for a 'framework decision' under the 'third pillar' of the EU Treaty) and the Commission (which came up with a proposal for a Directive in March 2001 in response to the Danish initiative) towards the adoption of a European measure on the issue were taken before the 6EAP decision was adopted. As a result of the ECJ judgement in case C-176/03, the Commission came up with a new proposal in February 2007. Also here the impact of the 6EAP seems to be very limited. The 6EAP was not referred to in the Commission's proposal and did not affect the subsequent political debate during the decision-making process. Only the impact assessment related to the proposal referred to the 6EAP stating that the measure is intended to strengthen compliance with EU environmental policy and that it is the essential task of the Commission, as guardian of the Treaty, to ensure the full application, enforcement and implementation of all existing EU environmental legislation as a strategic priority under the 6EAP.¹²⁰¹

Integration of Environmental Requirements in Transport Policy

Regarding the Greening Transport Package, the 6EAP is mentioned in relevant documents¹²⁰² but not discussed in detail. However, specific goals of the 6EAP under Art 5(2)iii on 'promoting measures to reflect the full environmental costs in the price of transport' are reflected in the Greening Transport Package through the Commission's aim to internalise transport costs.

The 6EAP's Art 5(2)iii (reduction of GHG emissions) is perhaps the most influential objective regarding transport measures and climate change while other objectives on more general environmental concerns are less influential. It is used to help justify legislative action in this

¹²⁰⁰ EC, 2007.

¹²⁰¹ EC (2007c). Commission staff working document. Accompanying document to the proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law. Impact assessment. SEC(2007)160. Brussels.

¹²⁰² EC (2008a): Commission staff working document Communication from the Commission to the European Parliament and the Council, Greening Transport COM(2008) 433.

area and is directly referred to in the preamble of certain legislative acts. Most notably, the proposal to include aviation in the GHG emissions trading scheme demonstrates the influence of the 6EAP to foster measures. In this regard, the 6EAP outlined that actions to reduce emissions from aviation were to be taken in the case no action was taken by the International Civil Aviation Association. It was also influential in the Directive to promote clean and energy efficient road transport vehicles. Furthermore, the Fuel Quality Directive was mentioned in the preamble of both legislative acts.

However, although providing support, the 6EAP was not directly used to justify specific measures such as the Regulation to reduce CO₂ emissions from passenger vehicles or the Renewable Energy Directive. These measures were arguably more influenced by other EU strategies (see section 1.1.5.2).

Environmental Integration in Cohesion Policy

The Regulation on the Cohesion Fund 1080/2006/EC stipulates that the Fund should invest into environmental projects which are in line with the Community environmental policy and action programme (Article 2(b)).¹²⁰³ The Community Strategic Guidelines do not refer directly to the 6EAP, however in the section on urban development it refers to the Urban Thematic Strategy. The EU SDS and perhaps to a lesser extent the 6EAP influenced the 2007-2013 General EU Funds Regulation¹²⁰⁴ in a way that for the first time environmental integration and sustainable development were explicitly embedded in the Regulation as a cross-cutting theme which should be incorporated horizontally and addressed adequately in the national/regional OPs and project preparation/implementation. In this sense, the current period had a much stronger regulatory base for environmental integration than the previous programming cycles. However, the Lisbon Strategy has been a much more powerful driver for establishing economic and social priorities and allocating more funding to these (through compulsory earmarking of funds) (see section 4.2). In addition, even though sustainable development and environmental integration were embedded in the Regulatory framework, in practice, their operationalisation and application (for instance, in setting priorities, discussing tradeoffs, translating it into project selection or indicator systems) varies significantly across countries/regions¹²⁰⁵. In many new Member States in particular, administrations and beneficiaries have struggled to interpret the concept of sustainable development as a horizontal principle and its application can be considered to be relatively weak.

Sustainable Consumption and Production

The **energy taxation Directive** was the result of a 10-year negotiation process which started in 1992 with the first proposal for a common CO₂/energy tax¹²⁰⁶. Thus the rationale for the

¹²⁰³ Article 2(b).

¹²⁰⁴ 1083/2006/EC.

¹²⁰⁵ Ferry, M. Mendez, C. and Bachtler, J. (2008) From environmental sustainability to sustainable development? Making concepts tangible in Structural Funds Programmes. IQ-Net Thematic paper (22)2, European Policies Research Centre.

¹²⁰⁶ Proposal for a Council Directive introducing a tax on carbon dioxide emissions and energy, (COM(92)226), 30/06/1992, http://aei.pitt.edu/4830/01/000990_1.pdf.

Directive preceded the adoption of the 6EAP and the development of the Directive was not directly influenced by the 6EAP.

The preamble of the **eco-design Directive** makes several references to the 6EAP. The preamble states that 'eco-design requirements should be set taking account of the goals and priorities of the Sixth Community Environment Action Programme, including, as appropriate, applicable goals of the relevant thematic strategies of that Programme'. It states that climate change is one of the priorities of the 6EAP and given that improvements in energy efficiency can contribute to the achievement of GHG emission targets substantial demand-side measures and targets should be adopted. The preamble also refers to the Integrated Product Policy (IPP) approach which is said to be 'a major innovative element of the Sixth Community Environment Action Programme' which has the potential to facilitate improved environmental performance in a cost-effective way, including in terms of resource and material efficiency, and thereby to contribute to achieving the objectives of the Thematic Strategy on the Sustainable Use of Natural Resources. These multiple references seem to imply that the 6EAP had some influence on the eco-design Directive.

ETAP

The 6EAP is mentioned several times in the ETAP Communication. Firstly, the 6EAP is mentioned in the section of the Communication describing the policy context within which the ETAP has been developed. This section states that the time is right for an action plan as both the Göteborg European Council and the 6EAP have set the overall objective of decoupling economic growth from environmental degradation. Further in that section, it states that existing EU policies are a firm basis to build on, thereby referring to the 6EAP. The four priority areas identified by the 6EAP as areas on which particular attention needs to be focussed on during the 6EAP's 10-year term, provide a clear and ambitious policy framework for the development and dissemination of new environmental technologies. The 6EAP is also being referred to in the section relating to creating incentives and removing economic barriers, in particular with respect to environmentally-harmful subsidies. In the financial statement annexed to the ETAP Communication, the 6EAP is mentioned as the legal basis for the action plan, next to the EC Treaty (in particular Article 174) and Decision No 1513/2002/EC on the sixth research framework programme (FP6).

The 6EAP is also explicitly referred to in two Commission documents preceding the 2004 ETAP Communication. The Commission report on 'Environmental technology for sustainable development'¹²⁰⁷ states that 'increasing predictability and coherence of the legislative framework facilitates long-term and consistent planning and avoids incremental change that drives up costs for researchers and investors alike'. It recognises that the 6EAP is helpful in this respect as it identifies four environmental priority areas for the next 10 years: tackling climate change, protecting nature and bio-diversity, improving environmental health and our quality of life and managing natural resources and waste. In its Communication of March 2003 on developing an action plan for environmental technology¹²⁰⁸, the Commission clearly

¹²⁰⁷ COM(2002)122.

¹²⁰⁸ COM(2003)131.

states it that the 6EAP provided guidance to the Commission. In developing an action plan the Commission decided to focus on four environmental issues (climate change, soil protection, sustainable production and consumption, and water), issues that were all linked to the priority areas identified in the 6EAP.

The European Parliament Resolution on the Communication from the Commission to the Council and the European Parliament on an Environmental Technologies Action Plan for the EU (2004/2131(INI)) of 5 July 2005 also mentions the 6EAP several times.

These numerous references seem to indicate that the 6EAP had an impact on the development of ETAP.

Environmental Information

Although the 6EAP is not specifically mentioned in the **eco-label Regulation**, EAPs in general are referred to in section 9 of the Preamble which states that 'In order to ensure the overall coherence of the Community's action, it is also appropriate to require that the latest strategic objectives of the Community in the field of the environment, such as Environment Action Programmes, Sustainable Development Strategies and Climate Change Programmes, be taken into account in the development or revision of EU Ecolabel criteria'. A Commission Decision¹²⁰⁹ establishing the Community Eco-label working plan also refers to the 6EAP. The Annex of the Decision states that 'The Community Eco-label scheme is part of a broader strategy aimed at promoting sustainable production and consumption. This aim can be achieved in the context of a 'framework for an integrated life-cycle oriented product policy' as indicated in the Sixth Environmental Action Programme (6EAP). The key objectives are to ensure a high level of protection and to break the link between environmental pressures and economic growth, thus working in the framework of the European Union's Lisbon Strategy of Economic and Social Renewal (2000) and Sustainable Development Strategy (Gothenburg, 2001)'. The explanatory memorandum accompanying the Commission's proposal for a revised **energy labeling Directive**¹²¹⁰ states that 'The proposal is fully consistent with the objectives and aims of the Commission's Sustainable Consumption and Production / Sustainable Industrial Policy Communication and Action Plan, the European Union Sustainable Development Strategy, the Lisbon Strategy, the Community Sixth Environmental Action Programme'. These references to the 6EAP seem to imply that the Programme was part of the broader policy framework within which these specific developments took place although one cannot infer a direct impact based on these references alone.

Although the 6EAP was not explicitly mentioned in the political debate surrounding the development of the **GPP Communication** nor in the Communication itself, there is an underlying recognition of the contribution of GPP to wider EU environmental objectives. The IA recognises that increased GPP will contribute to achieving EU energy and environment policy objectives, in particular the 20-20-20 climate and energy targets, reinforce objectives of ETAP and contribute to the Lisbon Strategy, contribute to the development of a proper sustainable industrial policy, contribute to the objectives of the SDS, reinforce

¹²⁰⁹ 2006/402/EC.

¹²¹⁰ COM(2008)778.

implementation of EMAS and eco-labelling, contribute to Directive 2006/32/EC on energy end-use efficiency and energy services, and contribute to Community health and social policy objectives¹²¹¹.

GMES

The impact of the 6EAP on the adoption and implementation of GMES is not evident. Initially, GMES was driven to some extent by the decisions taken at the Gothenburg European Council in June 2001. The related European Commission Communication on the EU Sustainable Development Strategy states that ‘...the Community should contribute to establishing by 2008 a European Capacity for global monitoring of environment and security (GMES). Nowadays the main driver seems to be the service provider community and the European Space Agency. As stated earlier, addressing user needs remains problematic.

Environmental Liability

The impact of the 6EAP as compared to other major EU strategies and international commitments on the adoption of the ELD was minor.

The long lasting discussion on European environmental liability legislation described above took place before the European Parliament and the Council adopted the 6EAP in 2002. A lengthy and controversial debate which proceeded to significantly change the liability regime which the Commission had originally envisaged drove and influenced the enactment of the eventual legislation. It is thus fair to say that the 6EAP had little impact on the eventual enactment of the ELD, which was adopted a mere two years later. The text of the Directive confirms this conclusion, as it makes no reference whatsoever to the 6EAP.

The text of the Directive confirms this conclusion, as it makes no reference whatsoever to the 6EAP.

1.6.4.2 Impact of the 6EAP vis-à-vis other EU strategies and international commitments

Improvement of the process of policy making through evaluation

The 6EAP has not been mentioned in any relevant documents preparing and implementing the introduction of the IA system.

Research

The renewed **EU SDS** recognises the need to strengthen research and technological development to translate the objectives of the strategy into action and support progress towards greater sustainable development in Europe. Sustainable development and the EU SDS are repeatedly mentioned in evaluation documents and the 6th and 7th FP Decisions. The text of the 7FP Decision states that the 7FP ‘should contribute towards promoting growth, sustainable development and environmental protection, including by addressing the

¹²¹¹ CEC (2008a): Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, Impact Assessment, SEC(2008)2124), 16/07/2008

problem of climate change'.¹²¹² Moreover, the overarching aim of the Cooperation Programme (the largest programme of the 7FP) is to contribute to sustainable development. The link between the 7FP and the EU SDS is also emphasised in monitoring activities as can be seen in the launch of the special web-based monitoring system (FP7-4-SD.EU) which monitors the expected impacts of the 7FP on the objectives of the EU SDS. The 2009 implementation report of the 7FP states that 'A cross-reading of these two framework documents, i.e. FP7 (especially the specific programme Cooperation) and the EU SDS, shows that FP7 is well equipped to meet R&D expectations expressed in the EU SDS, hence aligning EU-funded cooperative research with sustainability goals'.¹²¹³ Thus it appears that the EU SDS has had a significant influence on the selection of different research themes within the 7FP Cooperation Programme, and on the monitoring and implementation of the 7FP.

The **Lisbon agenda** placed research and innovation at the core of its strategy to make the EU the 'most dynamic and competitive knowledge-based economy in the world'. Research is seen as a key activity in the Lisbon Strategy for generating enhanced economic growth, employment and competitiveness. 'In its content, organisation, implementation modes and management tools, [the 7FP] is designed as a key contribution to the re-launched Lisbon strategy'¹²¹⁴, to address and help move forward the Lisbon agenda. The Lisbon Strategy strengthened arguments for focusing the 7FP on enhanced cooperation between researchers and other sectors including industry, policy-makers and the public, to generate knowledge that can deliver increased economic growth, competitiveness, jobs and social cohesion across the EU. The Lisbon Strategy was an important driver for encouraging the development of a more integrated 'single market' approach to research and for the establishment of a European Research Area¹²¹⁵, thus having a significant influence on the design and implementation of the 7FP.

In line with the Lisbon strategy, the 2002 **Barcelona European Council** set the target of raising European research efforts to 3% of EU GDP, two thirds of which should come from private investment. The Barcelona Objective set an objective for European research funding and hence influenced the increase in budget for the 7FP. As stated in the First Annual Report of the 7FP¹²¹⁶, the embedding of research into the Lisbon Strategy appears to have strengthened the resolve for research funding to reach 3% of GDP and for this to be adopted in Member States' National Reform Programmes.

¹²¹² Decision 1982/2006/EC.

¹²¹³ CEC (2010), Third FP7 Monitoring Report - MONITORING REPORT 2009, 13/07/2010, http://ec.europa.eu/research/evaluations/pdf/archive/fp7_monitoring_reports/third_fp7_monitoring_report.pdf#view=fit&agemode=none.

¹²¹⁴ CEC (2005): Proposal for a Decision concerning the seventh framework programme of the European Community for research, technological development and demonstration activities (2007 to 2013); (COM(2005)119). 6/4/2005.

¹²¹⁵ CEC (2007): GREEN PAPER The European Research Area: New Perspectives, (COM(2007)1616), 4/4/2007.

¹²¹⁶ CEC (2008): FP6 Final Review: Subscription, Implementation, Participation, June 2008, Brussels.

SDI

The SD Indicators have been issued in (and partly probably also been pushed by) the broader context of the indicator development required by the Lisbon Strategy (structural indicators). In addition, the EU-SDS has been a driver to initiate SDI development.

As mentioned above, the Rio process may indirectly have facilitated the effectiveness of the priority measure.

Implementation and Enforcement

The Better Regulation agenda and the related need to avoid a distortion of competition and keep the single market running smoothly is generally considered as one of the drivers for improving implementation and enforcement of EU environmental law in general. As the Better Regulation agenda emerged out of the Lisbon Strategy, this Strategy seems to have had a similar impact as the 6EAP (though slightly more indirect) on the adoption of horizontal EU policy measures regarding implementation and enforcement. Next to the 6EAP, the Lisbon Strategy and the EU SDS have facilitated the adoption of binding inspection requirements in the field of industrial emissions. This results from the fact that the Lisbon Strategy and the EU SDS have been major drivers for the process of reviewing the Directive on integrated pollution prevention and control (IPPC) and related legislation on industrial emissions. In addition, the review had been identified in the context of Better Regulation and had been included in the Commission's simplification rolling programme covering the period 2006-2009 (EC, 2007). And as stated above, the review provided an opportunity for the Commission to insert specific legally binding inspection requirements into the new industrial emissions Directive.

Integration of Environmental Requirements in Transport Policy

Many transport policies, including the Greening Transport Package, were notably developed within the framework of the Sustainable Development Strategy, the Lisbon Strategy¹²¹⁷ and also the CARE Package. In this sense, it could be argued that the 6EAP played a supportive role to these measures regarding some transport policies.

Both the initial and the revised **EU SDS** include transport as one of seven key priority challenges for sustainable development and sets overall objectives and concrete actions to address it. The European transport policy which was established in 2001¹²¹⁸ and revised in 2006¹²¹⁹ includes sustainable mobility as a key element. This was also included in the initial White Paper¹²²⁰ from 1992. It covers multiple areas of transport and promotes a 'polluter pays' principle, establishing overall objectives and initial steps to develop sustainable

¹²¹⁷ EC (2008a): Commission staff working document Communication from the Commission to the European Parliament and the Council, Greening Transport COM(2008) 433.

¹²¹⁸ White Paper – European transport policy for 2010: time to decide (COM)2001 370.

¹²¹⁹ EC (2006): Communication from the Commission to the Council and the European Parliament, Keep Europe Moving – Sustainable mobility for our continent Mid-term review of the European Commission's 2001 Transport White Paper COM(2006) 314.

¹²²⁰ EC (1992): Communication from the Commission: The future development of the common transport policy, a global approach to the construction of a Community framework for sustainable mobility, COM (92) 494.

transport measures. Both the White Paper¹²²¹ and the Commission's initial communication on sustainable development from 2001¹²²², outline multiple actions such as internalising transport costs and using road pricing (i.e. the Eurovignette) which are echoed in the Greening Transport Package. While the EU SDS calls for a decoupling of transport and economic growth, this target has been abandoned from EU transport policy after the White Paper revision in 2006.

Support for environmental transport policies comes more indirectly from the Lisbon Strategy through integrated objectives for social, economic and environmental progress.

The Climate and Energy Package, implemented in 2008 and focusing on GHG emissions cuts, renewable energies and energy efficiency also had a substantial impact on transport policies to address environmental goals. The Package included the Spring 2007 European Council's 20-20-20 targets to reduce emissions and to increase energy efficiency and renewable energy use and biofuels use in transport. It directly influenced the measures to include aviation in the EU ETS, the Directive to regulate CO₂ emissions from passenger cars, the Renewable Energy Directive and also the Fuel Quality Directive. All of the measures were developed in 2008 or 2009, after the Package was agreed upon.

The Energy Efficiency Action Plan for 2007 to 2012 also influences transport policies which encourage energy efficiency. The Plan addresses the EU's goal to increase energy efficiency by 20% and helps to underpin measures such as the Directive to regulate CO₂ emissions from passenger cars, the amendment to include aviation in the GHG emissions trading scheme and the Action Plan on Urban Mobility as well as other measures regarding tyre pressure and CO₂ labelling for passenger vehicles.

Environmental Integration in Cohesion Policy

The **Lisbon Strategy**, and in particular its 2005 review, had a significant impact on the formulation of the 2007-2013 cohesion policy and the General Regulation 1083/2006/EC. In a way, EU funds were considered one of the financial instruments for the delivery of the Lisbon Strategy and the Lisbon Strategy and the Integrated Guidelines for growth and jobs constituted the overarching policy framework for the programming of the funds at national/regional levels. Article 9 of the General Regulation stipulates that the Commission and Member States shall ensure that 60% of expenditure for the Convergence objective and 75% of expenditure for the Regional competitiveness and employment objectives is set for the objectives of the Integrated Guidelines. This means that the abovementioned per cent of funding in the respective types of regions under the two cohesion objectives should be invested in a range of expenditure categories as set out in Annex IV of the General Regulation which include *inter alia* research and technological development, entrepreneurship, transport, energy, access to employment, improving human capital and

¹²²¹ White Paper – European transport policy for 2010: time to decide (COM)2001 370.

¹²²² EC (2001): Communication from the Commission: A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (Commission's proposal to the Gothenburg European Council), COM(2001) 264.

information society. This resulted in the ‘earmarking’ of €230 billion of total EU funds in 2007-2013 for Lisbon related objectives¹²²³.

It should be noted that funding for eco-innovation, clean transport and clean and efficient energy was envisaged as Lisbon related expenditure mirroring new green sources of growth, however, the actual funding allocated for these types of measures was significantly lower compared to traditional transport and industrial development¹²²⁴. The Lisbon Strategy also influenced the project selection process by favouring projects which foster the achievement of Lisbon related objectives. This was achieved through the Community Strategic Guidelines to which NSRF and OP had to be aligned with and the earmarking of a concrete amount of funding for Lisbon related expenditure. Some old Member States have undertaken novel approaches to bridge the economy and the environment through considering the environment as economic driver or exploiting the potential for enhancing ‘low carbon economy’¹²²⁵. However, further research is necessary to establish if such approaches were limited to a few environmentally progressive Member States.

The **EU SDS** also had an impact on the 2007-2013 EU funds Regulations. The General Regulation 1083/2006/EC included a stand-alone article which embeds sustainable development as a horizontal issue in all Cohesion Policy spending. Article 17 establishes that ‘the objectives of the funds shall be pursued in the framework of sustainable development and the Community promotion of the goals of protecting and improving the environment as set out in Article 6 of the Treaty’. This had a direct impact on EU funding made available for the four environmental themes identified in the EU SDS – mostly for the management of natural resources (water and waste) and to a less extent for climate change, sustainable transport and sustainable consumption and production. The EU SDS has influenced the delivery mechanisms of EU funds programmes/projects (partnerships, monitoring committees, SEA, etc.) and the institutional set up (new governance structure, sustainability managers, environmental networks). A Commission evaluation of all 2007-2013 OPs, however, concluded that the ‘Lisbon agenda has had a stronger influence on Cohesion Policy instruments than the Gothenburg agenda’¹²²⁶.

The **CARE Package** was only adopted in 2008 and therefore had little influence on the design of the General Regulations and other EU funds Regulations which had been adopted in 2006. The CARE package coupled with the European Economic Recovery Plan has however influenced the implementation of the EU Funds Regulation and led to the amendment of the Regulation to allow all Member States to revise their OPs to enhance the use of funding for clean and efficient energy in housing. The Strategic Report on Cohesion

¹²²³ DG Regional Policy (2009a): Working towards a new Europe: the role and achievements of Europe’s regional policy 2004-2009.

¹²²⁴ DG Regional Policy. Transport and Business support statistics, http://ec.europa.eu/regional_policy/themes/index_en.htm.

¹²²⁵ ENEA_REC (2009): Improving the climate resilience of Cohesion Policy funding programmes. http://ec.europa.eu/environment/integration/pdf/enea/climate_resilience_cfr_pr.pdf.

¹²²⁶ Nordregio (2009) The potential for Regional Policy Instruments, 2007-2013, to contribute to the Lisbon and Göteborg objectives for growth, jobs and sustainable development, Final report, http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/lisbon_gothenburg_study_22072009.pdf.

presented in April 2010 stated that some Member States have successfully revised their OPs so to make good use of the new possibilities to finance energy efficiency and renewable energy¹²²⁷, however further research is needed in this regard.

Sustainable Consumption and Production

In relation to the energy taxation Directive, the increased interest in **climate change**, adoption of the 20-20-20 targets and the CARE Package have increased discussions on other instruments such as energy and carbon taxes to reduce CO₂ emissions and encourage the uptake of renewable sources of energy. These changes have stimulated the debate on future revisions of the energy taxation Directive. A draft proposal for a revised Directive tabled in 2009¹²²⁸ aimed to bring the energy taxation Directive more closely in line with the EU's climate and energy objectives and to introduce an explicit environmental element into the tax. The proposal also recommended extending the scope of the Directive to products falling under the ETS, with the exception of taxation elements related to CO₂ emission in order to avoid duplication.

The EU's objectives relating to **energy efficiency and climate change** helped speed up the adoption of the eco-design Directive. The proposal to revise the eco-design Directive was published alongside the **Sustainable Consumption and Production and Sustainable Industrial Policy (SCP-SIP) Action Plan**¹²²⁹ in July 2008. The Action Plan and accompanying measures represented a package of measures on sustainable consumption, production and industry. It sets out an integrated series of legislative and non-legislative measures to green European manufactured products, working towards three major objectives: an integrated policy framework for eco-efficient products; cleaner and leaner production; and contributing towards consumption and production efforts internationally. The **Energy Efficiency Action Plan** (COM(2006)545) also called for implementation of the 2005 eco-design Directive and for the development of eco-design requirements for additional products.

ETAP

ETAP is the result of the conjunction of two different policy drivers: the effort to boost innovation as part of the Lisbon Strategy and the effort to decouple environmental impacts from economic growth as part of the EU's environmental policy and the EU SDS.

With its strong focus on innovation as a key condition of competitiveness, the **Lisbon process** was an essential element of the policy context which contributed to the launch of ETAP. The ETAP priority action 'increase and focus research, demonstration and

¹²²⁷ European Commission. Cohesion policy: Strategic report 2010 on the implementation of the programmes 2007-2013, (COM(2010) 110), 31/03/2010, http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/reporting2010/com_2010_110_en.pdf.

¹²²⁸ CEC (2009): Proposal for a Council Directive Amending Directive 2003/96 restructuring Community framework for the taxation of energy products and electricity (presented by the Commission), (COM (2009) XXXX).

¹²²⁹ CEC (2008): Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, (COM(2008)397), 16/07/2008.

dissemination' directly links with the provisions of the Lisbon Strategy, particularly those on innovation and on respect for the environment.¹²³⁰

The **EU SDS** was instrumental in furthering eco-innovation objectives by calling on the Commission to address the growth potential of environmental technologies, by affirming political support for 'decoupling' and 'getting the prices right' and by calling for strong measures especially in the areas of climate change and transport. It played an important role in keeping climate change and energy efficiency objectives high on the political agenda. The renewed SDS, adopted in 2006, provides further support for eco-innovation by confirming the EU's objectives in the area of climate change and renewable energy, including bioenergy, announcing an Action Plan for sustainable consumption and production, to be adopted in 2007, and calling for measures to encourage GPP and environmental performance labelling

Environmental Information

The **SCP-SIP Action Plan**¹²³¹ adopted on 16 July 2008 called for more coherent and simplified environmental labelling system and was accompanied by a proposal for the revision of the Eco-Label Regulation. The Action Plan also called for the recast of the energy labelling Directive stating that the scope of the previous energy labelling Directive 92/75/EEC (i.e. to household electrical products) limited its potential in helping to reach the EU's 20% energy efficiency target. Thus the SCP-SIP Action Plan can be considered to have some effect on the design and adoption of both the eco-label Regulation and the energy labelling Directive. The December 2008 Environment Council conclusions on the SCP/SIP Action Plan 'recalls' *inter alia* the 6EAP and the Council Conclusions on the Natural Resources Thematic Strategy. The **Communication on Integrated Product Policy**¹²³² highlights the usefulness of an EU eco-label, both for informing consumers and in encouraging green public procurement. The **Energy Efficiency Action Plan**¹²³³ also called for a recast of the energy labelling Directive as a priority.

EU policies and strategies that have influenced the development of the **GPP Communication** include:

- The **Communication on Integrated Product Policy** (2003) which called on Member States to adopt action plans for GPP by the end of 2006 and for the elaboration of information measures for public authorities - a practical handbook for public authorities, a Product Group Database on existing product criteria, and a GPP website.
- The **Environment Technology Action Plan** (2004) identified GPP as a priority instrument to stimulate the development and diffusion of environmental technologies. The Communication on the implementation of ETAP reaffirmed the need to draw up national action plans for GPP and provide guidance and practical tools for public

¹²³⁰ Ecorys, 2009 .

¹²³¹ CEC (2008c): Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, (COM(2008)397), 16/07/2008

¹²³² COM(2003)302.

¹²³³ COM(2006)545).

procurers. The EP resolution on implementation of ETAP called on the Commission to establish an ambitious target so that all public procurement includes environmental criteria and for Member States to develop standardised guidelines for the most important products and services.¹²³⁴

- The Kok Report (2004) by the High-Level Working Party on the implementation of the **Lisbon Strategy** recommended that national and local authorities draft action plans by the end of 2006 to 'green' their public procurement - with a particular focus on renewable energy technology and new vehicle fuels. Subsequently the re-launched Lisbon Strategy (2005) called on Member States to refocus public procurement on innovative products and services and for eco-innovation and environmental technologies to be encouraged through public procurement, particularly in energy and transport.
- The **renewed SDS** (2006) set the objective of bringing the average level of EU GPP in 2010 up to the standard achieved by the best performing Member State in 2006. The SDS called on the Commission and Member States to develop a structured process to share best practice and expertise on GPP. The Commission is to facilitate regular EU-wide benchmarking of GPP performance according to an assessment methodology based on agreed objective parameters and examine with Member States how to promote GPP for other major product groups by 2007. The SDS also announced that an SCP Action Plan would be drawn up in 2007.
- The conclusions of the **spring 2006 European Council** called for the 'exploration of specific actions to bring about more sustainable consumption and production patterns at EU and global level, including the development of an EU SCP Action plan, and fostering green public procurement, inter alia by promoting environmental criteria and performance targets'.
- The **GPP Communication** was part of the **SCP/SIP Action Plan** and GPP provisions are considered part of an integrated approach (together with benchmarks on the eco-design of products, voluntary tools for eco-labelling and environmental management, and enhanced energy labelling) to making consumption and production more sustainable in the EU.

Environmental Liability

It is impossible to tell whether the 6EAP had equal or less impact on the enactment of the ELD as compared to the other EU strategies and international commitments from the period before the issuance of the 6EAP (Sustainable Development Strategy, Global Partnership for Sustainable Development, Rio Declaration). Neither the 6EAP nor the above mentioned strategies and Declaration are referred to in the preamble or text of the ELD. They are also not mentioned in the White Paper of 2000, which refers exclusively to the discussion within the Member States on EU level on the enactment of liability legislation.¹²³⁵ While the White

¹²³⁴ European Parliament (2005): European Parliament resolution on the communication from the Commission to the Council and the European Parliament on Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union.

¹²³⁵ White Paper, Executive Summary, p. 3; Introduction, at 1.3, p. 9 f..

Paper states that '[t]he purpose of this White Paper is to explore how the polluter pays principle can best serve these aims of Community environmental policy'¹²³⁶, it does not name the Rio Declaration as having influenced the EU's position on the polluter-pays-principle, despite the fact that it was at Rio that this principle for the first time secured international support as an environmental policy.¹²³⁷

Therefore, while it is not unlikely that the Rio Declaration and the Sustainable Development Strategy as complemented by the Global Partnership for Sustainable Development furthered along the goal of creating environmental liability legislation by calling for such legislation and increasing awareness of this topic, their direct impact on the eventual enactment of the ELD as compared to the 6EAP is impossible to gauge.

EU Enlargement

The Enlargement Strategy is important in promoting the objectives of the 6th EAP both in terms of civil society dialogue and environmental, especially in terms of climate change (see, for example, Communication from the Commission to the European Parliament and the Council: Enlargement Strategy and Main Challenges 2009-2010). However, the Enlargement Strategy is especially concerned with the accession process and political and economic reform. But, as noted earlier, such reforms are linked to environmental improvements and civic engagement.

The EU has been influential in promoting environmental policies beyond its borders.¹²³⁸ For example, EU–Russia Environmental Dialogue was launched in 2006; and the European Neighborhood Policy (ENP) recently launched the Eastern Partnership (EaP) in 2009. The EaP recently engaged a 'flagship project' that will focus on environmental governance and access to information.¹²³⁹ It is important to note, however, that EU efforts beyond its borders can focus on adoption, but adoption does not necessarily mean implementation. Adoption of the European EIA scheme has been noteworthy, for example.

The Lisbon Strategy and The EU Sustainable Development Strategy tend to be influential in Cohesion Policy. It is currently being debated whether to tie the Cohesion Policy to the EU's Stability and Growth Pact; and to bring the Structural Funds closer to the 'Europe 2020' strategy.

¹²³⁶ White Paper, Introduction, at 1.3 'The Aim of this White Paper', p. 9.

¹²³⁷ cf P. Birnie, A. Boyle, C. Redgwell, *International Law and the Environment*, Third Edition, 2009, p. 322.

¹²³⁸ Tina Freyburg; Sandra Lavenex; Frank Schimmelfennig; Tatiana Skripka; Anne Wetzel. 2009. EU promotion of democratic governance in the neighbourhood *Journal of European Public Policy*, Volume <http://www.informaworld.com/smpp/title~db=all~content=t713685697~tab=issueslist~branches=16> - v1616, Issue : 916 – 934.; Knill, Christoph and Jale Tosun. 2009. Hierarchy, networks, or markets: how does the EU shape environmental policy adoptions within and beyond its borders? *Journal of European Public Policy*, Volume <http://www.informaworld.com/smpp/title~db=all~content=t713685697~tab=issueslist~branches=16> - v1616, Issue 6 September 2009 , pages 873 - 894

¹²³⁹ EUROPA. 2010. The European Commission launches environmental flagship project under the Eastern Partnership. IP/10/341, Brussels, 23 March 2010.

EU implementation measures associated with the Aarhus Convention contribute directly to 6 EAP objectives; COM (2005) 291 final was implemented shortly after the EU became a party to the Convention (Decision 2005/370/EC).

The Lisbon Treaty is especially relevant and cited frequently as a basis for strengthening civil dialogue. See, 'Motion for A European Parliament Resolution on the perspectives for developing civil dialogue under the Treaty of Lisbon' (2008/2067(INI))

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3 Annex C: Inventory of measures

The following annex is a screening of all relevant legislative and non-legislative Community policy initiatives and related tools proposed or adopted **between July 2002 and December 2009**. The tables cover the four thematic priority areas of the 6EAP; the international dimension and strategic/horizontal issues. Each area is further sub-divided according to the issues covered within each relevant Article of the 6EAP. This screening process provided the basis for the analysis of our report. In certain cases, subsequent policy developments in 2010 were identified and included in the analysis of the report. However this Annex only covers those developments that took place before 31 December 2009 and should be read with this in mind.

6EAP Thematic Area: Climate Change

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Implementation of international climate commitments	Directive 2003/87/EC establishing a scheme for greenhouse gas allowance trading within the Community	23.10.2001	13.10.2003	Yes, date of transposition: 31/12/2003
	Commission Report (COM(2003)735) for a monitoring mechanism of Community greenhouse gas emissions		28.11.2003	
	Second ECCP Progress Report: Can We Meet Our Kyoto Targets?		01.04.2003	

	Commission Communication on guidance to assist MS in implementation of the criteria listed in Annex III to Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, and on the circumstances under which force majeure is demonstrated		07.01.2004	
	Decision 2004/156/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions	23.10.2001	29.01.2004	Decision Repealed by Commission Decision 2007/589/EC
	Decision 2007/589/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council	N/A	18.07.2007	
	Monitoring Decision: Decision No 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol	05.02.2003	11.02.2004	
	Commission Communication COM(2004)5900 on Commission Decisions of 7 July 2004 concerning national allocation plans for the allocation of greenhouse gas emission allowances of Austria, Denmark, Germany, Ireland, the Netherlands, Slovenia, Sweden, and the United Kingdom in accordance with Directive 2003/87/EC		07.07.2004	

	Commission Communication COM(2004)681: on Commission Decisions of 20 October 2004 concerning national allocation plans for the allocation of greenhouse gas emission allowances of Belgium, Estonia, Finland, France, Latvia, Luxemburg, Portugal, and the Slovak Republic in accordance with Directive 2003/87/EC		20.10.2004	
	Linking Directive (Directive 2004/101/EC amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms)	24.11.2003	27.10.2004	Yes, date of transposition: 13/11/2005
	Commission Report (COM(2004)818) Catching up with the Community's Kyoto target		20.12.2004	
	Commission Regulation (EC) No 2216/2004 for a standardised and secured system of registries pursuant to Directive 2003/87/EC and Decision No 280/2004/EC	21.12.2004	21.12.2004	30.12.2004
	Commission Communication COM(2005)35: Winning the battle against climate change		09.02.2005	
	Decision 2005/166/EC Laying down rules implementing Decision No 280/2004/EC	05.02.2003	10.02.2005	

	Enter into Force Kyoto Protocol (EC contribution: Council Decision 2002/358/EC concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments there under)	23.10.2001	16.02.2005	
	Second European Climate Change Programme		Launched in 24/10/2005, results presented on 20.05.2006	
	Commission Communication (COM(2005)615): Report on demonstrable progress under the Kyoto Protocol (including evaluation of ECCP)		15.12.2005	
	Commission Report (COM(2005)655): Progress towards achieving the Community's Kyoto target		15.12.2005	
	Commission Communication (COM(2005)703): Further guidance on allocation plans for the 2008 to 2012 trading period of the EU Emission Trading Scheme		22.12.2005	
	Communication from the Commission COM(2006)40:- Fourth national communication from the European Community under the UN Framework Convention on climate change (UNFCCC) (required under Article 12 of the United Nations Framework Convention on Climate Change)		08.02.2006	

	Commission Communication (COM(2006)676): Building a global carbon market - Report pursuant to Article 30 of Directive 2003/87/EC		13.11.2006	
	Commission Decision 2006/780/EC on avoiding double counting of greenhouse gas emission reductions under the Community emissions trading scheme for project activities under the Kyoto Protocol pursuant to Directive 2003/87/EC of the European Parliament and of the Council	N/A	13.11.2006	
	Commission Report (COM(2006)658): Progress towards achieving the Kyoto objectives		27.11.2006	
	Commission Communication COM(2006)725 on the assessment of national allocation plans for the allocation of greenhouse gas emission allowances in the second period of the EU Emissions Trading Scheme accompanying Commission Decisions of 29 November 2006 on the national allocation plans of Germany, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Slovakia, Sweden and the United Kingdom in accordance with Directive 2003/87/EC		29.11.2006	

	Report from the Commission COM(2006)799- Assigned Amount Report of the European Union (required under Article 7(1) of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol)		05.12.2006	
	Commission Decision 2006/944/EC determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC	N/A	14.12.2006	
	Report from the Commission (COM(2006)799): on assigned amounts (required under Article 7(1) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol)		15.12.2006	
	Commission Communication COM(2007)2: Limiting Global Climate Change to 2° Celsius: The way ahead for 2020 and beyond		10.01.2007	
	Presidency Conclusion of the Council (Document 7224/07): Action Plan 'Energy Policy for Europe'	10.01.2007	8-9.03.2007	

	Commission Decision 2007/589/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council	N/A	18.07.2007	
	Commission Report (COM(2007)757): Progress towards achieving the Kyoto objectives		27.11.2007	
	Commission Communication (COM(2008)30): 20 20 by 2020 - Europe's climate change opportunity		23.01.2008	
	Commission Regulation (EC) No 994/2008 of 8 October 2008 for a standardised and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council	N/A	08.10.2008	02.11.2008
	Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community	23.01.2008	19.11.2008	Yes, by Belgium, Denmark, Germany, Spain, Italy, Latvia, Lithuania, Netherlands, Austria, Sweden; date of transposition: 2.2.2010
	Commission Decision 2009/73/EC amending Decision 2007/589/EC as regards the inclusion of monitoring and reporting guidelines for emissions of nitrous oxide	N/A	17.12.2008	

	Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community	23.01.2008	23.04.2009	Transposed in Denmark, Germany, Spain, Lithuania, Austria, Slovenia, Finland, Sweden, United Kingdom, date of transposition: 31 December 2012
	Effort-sharing-decision: Decision No 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020	23.01.2008	23.04.2009	
	Regulation (EC) No 842/2006 on certain fluorinated greenhouse gases (comes with a couple of detailed regulations concerning attendance, i.e. Commission regulations (EC) No 303/2008, No 304/2008, No 305/2008, No 306/2008, No 308/2008, No 1516/2007, No 1497/2007, No 1494/2007, No 1493/2007)	11.08.2003	17.05.2006	15.06.2006
	Communication from the Commission COM(2009)667: Fifth National Communication from the European Community under the UN Framework Convention on Climate Change (UNFCCC) (required under Article 12 of the United Nations Framework Convention on Climate Change)		03.12.2009	

Reduction of GHG emissions in the energy sector	Commission staff working paper SEC(2002)1275: Inventory of public aid granted to different energy sources		22.11.2002	
	Decision 1230/2003/EC adopting a multinational programme for action in the field of energy: Intelligent Energy - Europe (2003-2006)	23.04.2002	26.03.2003	
	Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport	07.11.2001	08.05.2003	yes
	Commission Directive 2003/66/EC with regard to energy labelling of household electric refrigerators, freezers and their combinations	N/A	03.07.2003	Yes, 29.06.2004
	Cogeneration Directive (Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market)	22.07.2002	11.02.2004	Yes (except Portugal), date of transposition: 21.02.2006
	Directive 2004/17/EC coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors	31.08.2000	31.03.2003	Yes
	Commission Communication (COM(2004)366): The share of renewable energy in the EU		26.05.2004	
	Green Paper on energy efficiency or 'Doing more with less' COM(2005) 265 final		22.06.2005	

	Eco-design Directive: Directive 2005/32/EC establishing a framework for the setting of eco-design requirements for energy using products	01.08.2003	06.07.2005	Yes, except of Greece; date of transposition:10.8.2007
	Commission Communication (COM(2005)628): Biomass Action Plan		07.12.2005	
	Commission Communication (COM(2006)34): EU strategy for biofuels		08.02.2006	
	Green Paper (COM(2006)105): 'A European Strategy for Sustainable, Competitive and Secure Energy'		08.03.2006	
	Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC	10.12.2003	05.04.2006	Yes (except Greece); date of transposition: 17.05.2008
	Commission Communication (COM(2006)545): Action Plan for energy efficiency: Realising the Potential		19.10.2006	
	Decision No 1639/2006/EC establishing a Competitiveness and Innovation Framework Programme CIP (2007 to 2013) (includes the Intelligent Energy - Europe IEE Programme)	06.04.2005	24.10.2006	

	Commission Communication (COM(2006)843): 'Sustainable power generation from fossil fuels: aiming for near-zero emissions from coal after 2020'		10.01.2007	
	Green Paper (COM(2007)140) on market based instrument for environment and related policy purposes; (including the issue how to best reform environmentally harmful subsidies)		28.03.2007	
	Decision 2007/372/EC amending Decision 2004/20/EC in order to transform the 'Intelligent Energy Executive Agency' into the 'Executive Agency for the Competitiveness and Innovation'	N/A	31.05.2007	
	Commission Communication (COM(2006)848): Renewable Energy Road Map Renewable energies in the 21st century: building a more sustainable future		10.01.2007	
	Commission Communication COM(2007)1: An Energy Policy for Europe		10.01.2007	
	Regulation (EC) No 106/2008 on a Community energy-efficiency labelling programme for office equipment	14.10.2006	15.01.2008	04.03.2008

	Commission Communication (COM(2008)13): 'Supporting early demonstration of sustainable power generation from fossil fuels'		23.01.2008	
	Commission Communication (COM(2009)241): Addressing the challenge of energy efficiency through Information and Communications Technologies		13.05.2008	
	Commission Communication COM(2008)397 on the Sustainable Consumption and Production and Sustainable Industrial Policy Action containing proposals for the extension of the Eco-design Directive (COM(2008)399), revision of the Eco-label Regulation (COM(2008)401), revision of EMAS Regulation (COM(2008)402) and Communication on Green Public Procurement		16.07.2008	
	Commission Communication (COM(2008)772): Energy efficiency: delivering the 20% target		13.11.2008	
	Commission Communication (COM(2008)768): Offshore Wind Energy: Action needed to deliver on the Energy Policy Objectives for 2020 and beyond,		13.11.2008	
	Proposal COM(2008)778 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products	13.11.2008		

	Commission Communication COM(2008)11 on a first assessment of national energy efficiency action plans as required by Directive 2006/32/EC on energy end-use efficiency and energy services - Moving forward together on energy efficiency		12.01.2008	
	Commission Communication (COM(2009)111): mobilising Information and Communication Technologies to facilitate the transition to an energy-efficient, low-carbon economy		13.03.2009	
	Proposal for a Council Regulation concerning the notification to the Commission of investment projects in energy infrastructure within the European Community and repealing Regulation (EC) No 736/96	16.06.2009	24.06.2010	
	Commission Recommendation (COM(2009)7604): on best use of ICTs in improving energy efficiency and reducing carbon emissions		09.10.2009	
	Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC	23.01.2008	23.04.2009	Transposed by Cyprus, Germany, Netherlands; date of transposition: 05.12.2010

	Directive 2009/31/EC on the geological storage of carbon dioxide	23.01.2008	23.04.2009	Transposed to Belgium, Lithuania, Austria; date of transposition: 25.6.2011
	Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products	25.06.2008	21.10.2009	date of transposition 20.11.2010
Reduction of GHG emissions in the transport sector	Commission Communication (COM(2002)595): A European Union strategy to reduce atmospheric emissions from seagoing ships		22.11.2002	
	Commission Communication (COM(2003)155): Programme for the Promotion of Short Sea Shipping		07.04.2003	
	Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport	07.11.2001	08.05.2003	Yes
	Commission Directive 2003/73/EC amending Annex III to Directive 1999/94/EC (i.e. car labelling directive)	N/A	24.07.2003	25.07.2003
	Regulation (EC) No 549/2004 laying down the framework for the creation of the Single European Sky ('Framework Regulation') — Statement by the Member States on military issues related to the Single European Sky.	31.03.2004	10.03.2004	20.04.2004
	1st Clean Marine Awards		01.06.2004	

	Proposal COM(2005)261 for a Directive on passenger car related taxes and carbon dioxide emissions	05.07.2005		
	Commission Communication (COM(2005)459): Reducing the climate change impact of Aviation		27.09.2005	
	Directive 2005/33/EC amending Directive 1999/32/EC (relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC)	20.11.2002	06.07.2005	11.08.2005
	Commission Communication (COM(2005)628): Biomass Action Plan		07.12.2005	
	Proposal COM(2005)634 for a Directive on the promotion of clean road transport vehicles	21.12.2005		
	Commission Communication (COM(2006)6): on the promotion of inland waterway transport 'NAIADES': 'an Integrated European Action Programme for Inland Waterway Transport'		17.01.2006	
	Commission Communication (COM(2006)34): EU strategy for biofuels		08.02.2006	
	Commission Recommendation 2006/339/EC on the promotion of shore-side electricity for use by ships at berth in Community ports		08.05.2006	

	Commission Communication (COM(2006)336): Freight transport logistics in Europe, the key to sustainable mobility		28.06.2006	
	Commission Green Paper (COM(2006)275): Towards a future Maritime Policy for the Union: a European vision for the oceans and seas		17.06.2006	
	Regulation (EC) No 1692/2006 establishing the second Marco Polo programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003	14.07.2004	24.10.2006	14.12.2006
	Communication from the Commission COM(2007)19: 6 Results of the review of the Community Strategy to reduce CO2 emissions from passenger cars and light-commercial vehicles		07.02.2007	
	Regulation (EC) No 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information	21.12.2005	20.06.2007	02.07.2007
	Commission Communication (COM(2007)574): 'Conclusions from the Consultation on a European Maritime Policy'		10.10.2007	

	Commission Communication (COM(2007)770): 'First progress report on the implementation of the NAIADES Action Programme for the promotion of inland waterway transport'		05.12.2007	
	Council Regulation (EC) No 71/2008 setting up the Clean Sky Joint Undertaking	13.06.2007	20.12.2007	07.02.2008
	Commission Communication (COM(2008)389): Single European Sky II: towards more sustainable and better performing aviation		25.06.2008	
	Commission Communication (COM(2008)433): Greening Transport		08.07.2008	
	Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures		08.07.2008	
	Commission Communication (COM(2008)435): Strategy for the internalisation of external costs		08.07.2008	
	Proposal COM(2008)779 on labelling of tyres with respect to fuel efficiency and other essential parameters		13.11.2008	
	Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community	23.01.2008	19.11.2008	Yes, by Belgium, Denmark, Germany, Spain, Italy, Latvia, Lithuania, Netherlands, Austria, Sweden; date of transposition: 02.02.2010

	Decision 2009/339/EC on the inclusion of monitoring and reporting guidelines for emissions and tonne-kilometre data from aviation activities	N/A	16.04.2009	
	Directive 2009/30/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions	31.01.2007	23.04.2009	No, date of transposition 31.12.2010
	Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles	21.12.2005	23.04.2009	04.12.2010
	Regulation 443/2009/EC setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO2 emissions from light duty vehicles	19.12.2007	23.04.2009	08.06.2009
	Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC	23.01.2008	23.04.2009	Transposed by Cyprus, Germany, Netherlands; date of transposition: 05.12.2010
	Commission Decision 2009/450/EC on the detailed interpretation of the aviation activities listed in the Annex I to Directive 2003/87/EC	N/A	08.06.2009	
	Commission Communication COM(2009)279: on a sustainable future for transport: Towards an integrated, technology-led and user friendly system		17.06.2009	

	Commission Proposal COM(2009)593 for a Regulation on emission performance standards for new light commercial vehicles and minibuses as part of the Community's integrated approach to reduce CO2 emissions from light-duty vehicles		28.10.2009	
Reduction of GHG emissions in industrial production	Commission Recommendation 2003/532/EC on guidance for the implementation of Regulation (EC) No 761/2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) concerning the selection and use of environmental performance indicators		10.07.2003	
	Directive 2003/87/EC establishing a scheme for greenhouse gas allowance trading within the Community	23.10.2001	13.10.2003	Yes
	Cogeneration Directive (Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market)	22.07.2002	11.02.2004	
	Council Decision 2006/1/EC on the conclusion, on behalf of the European Community, of the UN-ECE Protocol on Pollutant Release and Transfer Registers	N/A	02.12.2005	
	Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register	07.10.2004	18.01.2006	

	Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	11.08.2003	17.05.2006	Yes
	Proposal COM(2007)844 for a Directive on industrial emissions (integrated pollution prevention and control)		21.12.2007	
	Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control	25.09.2006	15.01.2008	18.02.2008
	Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community	23.01.2008	23.04.2009	Transposed in Denmark, Germany, Spain, Lithuania, Austria, Slovenia, Finland, Sweden, United Kingdom, date of transposition: 31 December 2012
	Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC	16.07.2008	25.11.2009	11.01.2010
Reduction of GHG emissions in other sectors	Directive 2002/91/EC on the energy performance of buildings	11.05.2001	16.12.2002	Yes
	CAP Reform	23.01.2003	26.06.2003	

	Commission Communication COM(2005)666 - Taking sustainable use of resources forward - A Thematic Strategy on the prevention and recycling of waste		21.12.2005	
	Regulation (EC) No 1698/2005 on support for rural development by the European Agriculture Fund for Rural Development	14.07.2004	20.09.2005	22.10.2005
	Council Decision 2006/144/EC on Community strategic guidelines for rural development (2007-2013)	05.07.2005	20.02.2006	
	Commission Communication (COM(2006)302): EU Forest Action Plan		15.06.2006	
	Commission Communication (COM(2006)231): entitled 'Thematic strategy for soil protection'		22.09.2006	
	Commission proposal COM(2006)232 final: setting out a framework for soil protection and amending Council Directive 2004/35/EC.		22.09.2006	
	Commission Report (COM(2007)120 on implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources for the period 2000-2003		13.11.2007	

	Commission Communication Preparing for the 'Health Check' of the CAP reform		20.11.2007	
	Directive 2008/98/EC on waste and repealing certain Directives	21.12.2005	19.11.2008	no information; date of transposition: 12.12.2010
	Proposal (COM(2008)644): for a Regulation laying down obligations for operators who place timber and timber products on the market		17.10.2008	
	Proposal COM(2008)780 on a recast of the Energy Performance of Buildings Directive		13.11.2008	
	Commission Communication (COM(2008)645): Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss	20.05.2008	17.11.2008	
	Council regulations related to the CAP 'Health Check' (Regulation (EC) No 72/2009, 73/2009, 74/2009)	20.05.2008	19.01.2009	
Use of other appropriate instruments	Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity	06.05.1997	27.10.2003	no information, date of transformation: 23.12.2003
	Environmental Technologies Action Plan (ETAP), COM(2004)38		28.01.2004	Almost all MS have submitted national ETAP road-maps

	Regulation (EC) No 1682/2004 amending Regulation (EC) No 1655/2000 concerning the Financial Instrument for the Environment (LIFE)	05.11.2003	15.09.2004	
	7th Framework Programme for RTD (Research and Technology Development)		01.04.2005	
	Commission Communication: Report on the implementation of the Environmental Technologies Action Plan in 2004 (COM(2005)16)		27.01.2005	
	Council Decision 969/2006/EC concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom) or nuclear research and training activities (2007-11).	06.04.2005	18.12.2006	
	Regulation (EC) No 1906/2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-13)	23.12.2005	18.12.2006	02.01.2007
	Commission Communication (COM(2007)723): A European strategic energy technology plan (SET Plan) - Towards a low carbon future		22.11.2007	

	Commission Communication COM(2009)519 : Investing in the Development of Low Carbon Technologies (SET-Plan)		07.10.2009	
Adaptation to consequences of climate change	Commission Communication (COM(2004)65): 'Global Monitoring for Environment and Security (GMES): Establishing a GMES capacity by 2008 - (Action Plan (2004-2008))'		03.02.2004	
	Commission Communication (COM(2005)565): 'Global Monitoring for Environment and Security (GMES): from concept to reality.'		10.11.2005	
	European Commission Green Paper COM(2007) 354 on adapting to climate change in Europe - options for EU action		29.05.2007	
	Commission Communication (COM(2008)748): 'Global Monitoring for Environment and Security (GMES): we care for a safer planet'		12.11.2008	
	White Paper on adaption COM(2009)147		01.04.2009	
	Commission staff working document: Impact Assessment and executive summary SEC(2009)387-388		01.04.2009	
	Commission staff working document: Adapting to Climate Change: A challenge for European Agriculture and Rural Areas SEC(2009)417		01.04.2009	

	Commission staff working document: Human, Animal and Plant Health Impacts of Climate Change SEC(2009)416		01.04.2009	
	Commission staff working document: Climate Change and Water, Coasts and Marine Issues SEC(2009)386)		01.04.2009	
	Proposal (COM(2009)223 for a Regulation on the European Earth observation programme (GMES) and its initial operations (2011–2013)		20.05.2009	
Climate change in enlargement	Council Regulation (EC) No 1085/2006 establishing an Instrument for Pre-Accession Assistance (IPA)	29.09.2004	17.07.2006	N/A
	Commission Regulation N (EC) No 718/2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA)	N/A	12.06.2007	N/A
Climate change in EU's external relations policy	Commission Communication (COM(2003)85): Climate change in the context of development cooperation		11.03.2003	
	Commission Communication (COM(2006)583): Mobilising public and private finance towards global access to climate-friendly, affordable and secure energy services: The Global Energy Efficiency and Renewable Energy Fund		06.10.2006	

	Council Decision 2006/1005/EC concerning conclusion of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment	N/A	18.12.2006	
	Commission Communication (COM(2007)540): Building a global climate change alliance between the European Union and poor developing countries most vulnerable to climate change		18.09.2007	
	Commission Communication on Financing carbon capture and storage (CCS) in Emerging and Developing Countries: financing the EU-China near Zero Emissions Coal Plant project		25.06.2009	
	Proposal COM(2009)326 for a Council Decision on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Community and on the exercise of its rights and obligations		26.06.2009	

6EAP Priority Area: Nature and Biodiversity

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Biodiversity Strategy and Action Plans	Commission Communication – Options for an EU Vision and Target for Biodiversity Beyond 2010 (COM(2010)4)	N/A	19.01.2010	No transposition required
	Commission Communication – A mid-term assessment of implementing the EC Biodiversity Action Plan (COM(2008)864)	N/A	16.12.2008	No transposition required
	Commission Communication - Halting the loss of biodiversity by 2010 - and beyond - Sustaining ecosystem services for human well-being (COM(2006)216)	N/A	22.05.2006	No transposition required
	SEBI 2010 initiative - Streamlining European 2010 Biodiversity Indicators	N/A	launched 2004	No transposition required
Promoting Biodiversity Research	Community Financial Support to Biodiversity and Ecosystem Services under the Sixth and Seventh Research Framework Programme	N/A	2002-2006 2007-2013	No transposition required
Sustainable consumption and production	Measures under specific sectoral policies (see below)			

Assessment, research and cooperation - threatened species	Sustainable Hunting Initiative	N/A	launched 2003	No transposition required
	Report on the Implementation in the EU of species action plans for 23 of Europe's most threatened birds	N/A	07/2004	No transposition required
	Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC	N/A	02/2004	No transposition required
	Commission Regulation (EC) No 865/2006 laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein	N/A (Implementing Legislative Act)	04.05.2006	Regulation 09.07.2006 applied from:

Access and benefit sharing - genetic resources	Commission Communication – The implementation by the EC of the ‘Bonn Guidelines’ on access to genetic resources and benefit-sharing under the Convention on Biological Diversity (COM(2003)821)	N/A	23.12.2003	No transposition required
Invasive Alien Species	Commission Communication – Towards an EU Strategy on Invasive Species (COM(2008)789)	N/A	03.12.2008	No transposition required
Natura 2000	Report from the Commission - Report on the Conservation Status of Habitat Types and Species as required under Article 17 of the Habitats Directive (COM(2009)358)	N/A	13.07.2009	No transposition required
	Regulation (EC) No 614/2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission statement	29.09.2004	23.05.2007	Regulation applied from: 12.06.2007

	Commission Communication - Financing Natura 2000 (COM(2004)431)	N/A	15.02.2004	No transposition required
Accidents and disasters	Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances	Proposed 10.12.2001 (COM(2001)624), amended proposal 26.09.2002 (COM(2002)540)	16.12.2003	01.07.2005
	Commission Communication on Reinforcing the Union's Disaster Response Capacity (COM(2008)130)	N/A	05.03.2008	No transposition required
	Commission Communication - A Community approach on the prevention of natural and man-made disasters, (COM(2009)82),	N/A	23.02.2009	No transposition required
	Commission Communication EU Strategy for Supporting Disaster Risk Reduction in Developing Countries (COM(2009)84)	N/A	23.02.2009	No transposition required

	Council Decision 2007/779/EC, Euratom establishing a Community Civil Protection Mechanism (recast) and Council Decision 2007/162/EC, Euratom establishing a Civil Protection Financial Instrument	26.01.2006 (Mechanism); 06.04.2007 (Financial instrument)	13.11.2007 (Mechanism); 05.03.2007 (Financial instrument)	Date of effect: 13/11/2007 (Mechanism); 01/01/2007 to 31/12/2013 (Financial instrument)
	Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements	05.03.2003	07.09.2005	01.03.2007
Soil	Commission Communication – Towards a Thematic Strategy for soil protection (COM(2002)179)		22.09.2006	No transposition required
	Proposal for a framework Directive for the protection of soil (COM(2006)232)	22.09.2006	TBC	TBC
Extractive industry	Directive 2006/21/EC on the management of waste from extractive industries (mining waste Directive)	02.06.2003	15.03.2006	01.05.2008

	Commission Communication - The raw materials initiative — meeting our critical needs for growth and jobs in Europe (COM(2008)669)	N/A	04.11.2008	No transposition required
Integration of landscape values in other policies	EAFRD - Axis 1 Measures	EAFRD came into force on 20 Sep 2005, with amendments applying from 1 Jan 2009	Draft rural development programmes submitted by December 2006, revised programmes by 30 June 2009	All relevant EAFRD measures implemented through national or regional DPs
	Advice and training measures (111, 114, 115)	End of plan period = 31 December 2013	Applies to Community support policies from 1 Jan 2007	
	EAFRD - Axis 2 Measures			
	Agri-Environment (214)			
	Non-Productive Investments (216)			

	Natural Handicap Measures (211, 212)			
	Natura 2000 (213)			
	EAFRD - Axis 3 Measures			
	Training and Information (331)			
	Conservation and upgrading of rural heritage (323)			
	Diversification (311)			
	Encouragement of tourism activities (313)			
	CAP - cross compliance (SMRs and GAEC standards)	Established in 2003 with Council Reg 1782/2003, amended Council Regulation 73/2009		SMRs mandatory. Following the CAP Health Check certain GAEC standards are mandatory, certain are voluntary - all mandatory requirements transposed into national legislation
	CAP - cross compliance (permanent pasture reqs)			

	Structural Funds				
	European Convention	Landscape	20. Okt 00	01. Mrz 04	No formal basis
Biodiversity in agriculture	EAFRD - Axis 1 Measures				
	Advice and training measures (111, 114, 115)				
	Farm modernisation (121)				
	Adding Value to Agricultural Products (123)				
	Infrastructure	development (125)			
	EAFRD - Axis 2 Measures				
	Agri-Environment (214)				
	Non-Productive Investments (216)				

	Natural Handicap Measures (211, 212)			
	Natura 2000 (213)			
	EAFRD - Axis 3 Measures			
	Training and Information (331)			
	CAP - cross compliance (SMRs and GAEC standards)	see above		
	CAP - cross compliance (permanent pasture reqs)			
	CAP - Article 68 of Council Regulation 73/2009)		19. Jan 09	
	LIFE+	29.09.2004	2007 - 2013	
	Structural Funds			
	Council Regulation (EC) No 834/2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91	21.12.2005	28.06.2007	N/A

Sustainable use of the seas	CFP Regulation 2371/2002	28.05.2002	20.12.2002	Yes
	Directive (92/43/EEC); Directive 79/409/EEC	21.05.1992; 02.04.1979	10.06.1992; 06.04.1979	Yes
	Commission Communication setting out a Community Action Plan to integrate environmental protection requirements into the Common Fisheries Policy	N/A	28.05.2002	
	Proposal for a Council Decision on the conclusion of the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, concerning cooperation to prevent pollution by ships and, in cases of emergency, to combat pollution of the Mediterranean (COM(2003)588)	09.10.2003		
	Proposal for a Directive in the field of insurance and civil liability for shipsource pollution (3rd package on maritime safety)			

	Commission Decision on Rolling Plan 2003-2005 to implement the Community framework for co-operation in the field of accidental or deliberate marine pollution established by the European Parliament and Council Decision (COM(2004)1240)	05.04.2004		
	Directive on ship-source pollution and on the introduction of penal sanctions for pollution offences	05.03.2003	01.10.2005	
	Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund	14.07.2004	27.07.2006	Yes
	Commission Communication - Report to the European Parliament and the Council: an evaluation of Integrated Coastal Zone Management (ICZM) in Europe (COM(2007)0308)		07.06.2007	N/A

	Commission Communication - An Integrated Maritime Policy for the European Union {COM(2007) 574 final} {SEC(2007) 1278} {SEC(2007) 1279} {SEC(2007) 1280} {SEC(2007) 1283}		10.10.2007	N/A
	Commission Regulation (EC) No 535/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 708/2007 concerning use of alien and locally absent species in aquaculture	15.10.2009	13.06.2008	04.07.2008
	Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)	10.01.2008	25.06.2008	No, summer 2010

	Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing	17.10.2007	29.10.2009	Yes
	Control Reg: Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC)	14.11.2008	20.11.2009	Yes

	No 1966/2006			
	Commission Communication on an EU Forest Action Plan (COM(2006)302)	N/A	15.06.2006	No transposition required
	Commission Regulation (EC) No 2152/2003 establishing a new Community scheme on monitoring of forests and environmental interactions to protect the Community (Forest Focus)	28.01.2003	01.12.2003	Regulation 01/01/2003 applied from: Expired: 31/12/2006
	Commission Communication - Forest Law Enforcement, Governance and Trade (FLEGT): Proposal for an EU Action Plan (COM(2003)251)	N/A	21.05.2003	No transposition required
	Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community	19.01.2005	20.12.2005	Regulation 30/12/2005 applied from:

	Commission Communication - Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss (COM(2008)645)	N/A	17.10.2008	No transposition required
	Proposal for a Regulation laying down the obligations of operators who place timber and timber products on the market (COM(2008)644)	17.10.2008	Not yet adopted	Not yet adopted
GMOs	Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC - Commission Declaration, OJ C 139	04.05.1998	12.03.2001	Yes, deadline: 17/10/2002

	Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, OJ C 331 E and OJ C 304 E	30.10.2001 and 31.12.2002	22.09.2003	No transposition required. Application of most articles starting according to Art. 13.2 90 days after establish a system for development and assignment of unique identifiers to GMOs; the latter happened through Commission Regulation (EC) No 65/2004
	Regulation (EC) No 1829/2003 on genetically modified food and feed, OJ C 304 E	30.10.2001	22.09.2003	No transposition required. Application starts 6 months after publication in OJ (publication date: 18.10.2003)
	Directive 2009/41/EC on the contained use of genetically modified micro-organisms	29.11.2007	06.05.2009	No transposition required as only comitology procedures concerned (see 28th para of preamble of the Directive)
	Commission Recommendation on guidelines for the development of national strategies and best practices (co-existence) (COM(2003)2624)	N/A	23.07.2003	N/A

	Commission Communication - Report on the implementation of national measures on the coexistence of genetically modified crops with conventional and organic farming (SEC(2006)313) (COM(2006)104)	N/A	09.03.2006	N/A
	Council Conclusions - Coexistence of genetically modified, conventional and organic crops- freedom of choice, 9810/06		24.05.2006	
	Regulation (EC) No 258/97 concerning novel foods and novel food ingredients, OJ No C 190	29.07.1992	27.01.1997	No transposition required. Entered into force in 2007.
	Regulation (EC) No 1946/2003 on transboundary movements of genetically modified organisms, OJ C 151 E,	25.06.2002	15.07.2003	No transposition required. In application according to Art. 20.

Animal Welfare	Proposal for a Directive of the European Parliament and of the Council on the protection of animals used for scientific purposes (COM(2008)543)	05.11.2008	Not yet adopted	N/A
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6EAP Priority Area: Environment and health and quality of life

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Research	Commission Communication - The European Environment & Health Action Plan 2004-2010 (COM(2004)416)		09.06.2004	No transposition required
	7th Framework programme of Research (2007-2013)			Dedicated Environment and Health activity within the Environment theme will continue funding of research related to health impacts of environmental stressors such as industrial chemicals, noise, electromagnetic fields or air pollutants
Chemicals	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals	06.11.2003	01.06.2007	The Regulation comes into force in stages with most of the initial activities being for pre-registrations and priority substances for inclusion in Annex XIV
	Proposal for a Regulation concerning the placing on the market and use of biocidal products (COM(2009)267)	12.06.2009	Not yet adopted	
	Commission Communication - Community Strategy Concerning Mercury (COM(2005)20)	28.01.2005	N/A	

	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	27.06.2007	20.01.2010	Classification, Labelling and packaging from 1/12/2010, Classification can be done by previous Regulation until 15/06/2015
Pesticides	Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides	12.07.2006	21.10.2009	Not yet transposed. Deadline for transposition is 14/12/2011
	Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC	12.07.2006	21.10.2009	Regulation to apply from 14/06/2011
	Commission Communication - Thematic Strategy on sustainable use of pesticides	N/A	01.07.2002	No need for transposition
	Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC	14.03.2003	23.02.2005	4/04/2005, apart from chapters II, III and IV, which have to be transposed by 1/09/2008
International dimension of chemicals and pesticides	Regulation (EC) No 689/2008 concerning the export and import of certain dangerous chemicals	30.11.2006	31.07.2008	No transposition required, entry into force 1/08/2008
	Regulation (EC) No 850/2004 on persistent organic chemicals, amending Directive 79/117/EEC	12.06.2003	29.04.2004	No transposition required

	Regulation 1102/2008/EC on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury	01.10.2006	2008	No transposition required. Deadline by which the export of metallic mercury, cinnabar ore, mercury chloride, mercury oxide and mixtures of metallic mercury with other substances will be banned from the Community is 15/03/2011. The mixing of metallic mercury with other substances for the sole purpose of export shall be prohibited from the same date. The prohibition shall not apply to exports of mercury compounds for research and development, medical or analysis purposes. Also from 15/03/2011, metallic mercury that is no longer used in the chlor-alkali industry, metallic mercury gained from the cleaning of natural gas, metallic mercury gained from non-ferrous mining and smelting operations, and metallic mercury extracted from cinnabar ore in the Community, shall be considered as waste and disposed of in accordance with relevant EU waste legislation.
Water quality	Directive 2006/118/EC on the protection of groundwater against pollution and deterioration	19.09.2003	12.12.2006	Deadline for transposition 16/01/2009
	Directive 2007/60/EC Directive on the assessment and management of flood risks	18.01.2006	23.10.2007	Deadline for transposition 26/11/2009
	Addressing the challenge of water scarcity and droughts in the European Union (COM(2007)414)	N/A	18.07.2007	No transposition required

	2006/7/EC Directive concerning the management of bathing water quality and repealing Directive 76/160/EEC	24.10.2004	15.02.2006	24/03/2008 Repeal of 76/160/EEC 31 December 2014
	Directive 2006/113/EC on the quality required for shellfish waters	12.05.2006	12.12.2006	05.11.1981
	2009/89/EC Protocol on Integrated Coastal Zone Management in the Mediterranean	04.12.2008	21.01.2008	Not yet in force. Will enter into force on the 30th day following the deposit of at least six instruments of ratification, acceptance, approval or accession.
	2008/105/EC Directive on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council	17.07.2006	20.12.2008	13.07.2010
Air quality	Commission Communication - Thematic Strategy on air pollution (COM(2005)446)	04.05.2001	21.09.2005	No need to transpose, as a Communication - other possible measures proposed
	Directive 2008/50/EC on ambient air quality and cleaner air for Europe	21.09.2005	21.05.2008	11.06.2010

	Regulation 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6).	01.12.2005	20.06.2007	As a Regulation, no transposition needed; will repeal preceding legislation on 2/01/2013
	Proposal for a Regulation on substances that deplete the ozone layer (COM(2008)505)	01.08.2008	Not yet adopted	No need for transposition, as will be a Regulation
	Regulation 850/2004 on persistent organic pollutants	12.06.2003	29.04.2004	No need for transposition, as will be a Regulation
	Directive 2009/30 amending Directive 98/70 as regards the specification of petrol, diesel and gas oil ... and ... fuels used by inland waterway vessels	31.01.2007	23.04.2009	31.12.2010
	Directive 2005/33 amending Directive 1999/32 as regards the sulphur content of marine fuels	20.11.2002	06.07.2005	11.08.2006
	Directive 2009/33 on the promotion of clean and energy-efficient road transport vehicles	Original proposal 21.12.2005 Revised proposal 19.12.2007	23.04.2009	04.12.2010

	Directive 2002/88/EC, amending Directive 97/68/EC on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery	Original proposal 18.12.2000 Modified proposal 26.10.2001	09.12.2002	Yes
	Directive 2004/26/EC on emissions from engines to be installed in non-road mobile machinery, which included emission limit values for inland waterway vessels and railway locomotives.	27.12.2002	21.04.2004	Yes
	Proposal for a Directive on industrial emissions (integrated pollution prevention and control) (recast) (COM(2007)844)	21.12.2007	Not yet	To be decided
	Directive 2004/42/EC on limiting emissions of volatile organic compounds from paints and varnishes	23.12.2002	21.04.2004	30.10.2005
Noise	2005/88/EC Amendement of Directive on the approximation of the laws of Member States relating to the noise emission in the environment by equipment for use outdoors	11.08.2005	14.12.2005	03.01.2006

	2003/10/EC Directive on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise)	23.12.1992	06.02.2003	14.02.2006
	2002/49/EC Directive relating to the assessment and management of environmental noise	26.07.2000	25.06.2002	18.07.2004
Urban environment	Commission Communication on Thematic Strategy on the urban environment (COM(2005)718)		11.01.2006	No need to transpose, as a Communication

6EAP Priority Area: Sustainable use and management of natural resources

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Sustainable use and management of resources	Commission Communication - Thematic Strategy on the sustainable use of natural resources {SEC(2005) 1683} {SEC(2005) 1684}		21.12.2005	
	Communication from the Commission of 7 December 2005 - Biomass Action Plan (COM(2005)628) - Official Journal C 49 of 28.02.2005].		07.12.2005	
	Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy related products (recast)	16.07.2008	21.10.2009	20/11/2010 (for some articles)
	Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EC	10.12.2003	05.04.2006	17/05/2008 (for most articles)
	Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC	22.07.2002	11.02.2004	21.02.2006

	Communication: Raw Materials Initiative - Meeting our critical needs for growth and jobs in Europe, COM(2008)699		04.11.2008	
	Studies: Analysis of the potential of the Ecological Footprint and related assessment tools for use in the EU's Thematic Strategy on the Sustainable Use of Natural Resources			
Waste prevention and management	Commission Communication 'Taking sustainable use of resources forward: A Thematic Strategy on the prevention and recycling of waste'		21.12.2005	
	Directive 2008/98/EC on waste	21.12.2005	19.11.2008	12.12.2010
	Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II to Directive 1999/31/EC	19.12.2002		
	Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipment of wastes	30.06.2003	14.06.2006	12.07.2007
	Commission Communication - An EU strategy for better ship dismantling (COM(2008)767)	19.11.2008	N/A	N/A

	Directive on the management of waste from the extractive industries	02.06.2003	15.03.2006	01.05.2008
Waste recycling	Directive 2008/98/EC on waste	21.12.2005	19.11.2008	12.12.2010
	Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators	21.04.2004	06.09.2006	26.09.2008
	Directive 2004/12/EC amending Directive 94/62/EC on packaging and packaging waste	30.04.2002	11.02.2004	18.08.2005
Development and revision of waste legislation	Proposal for a Directive on waste electrical and electronic equipment (WEEE, recast)	03.12.2008		
	Proposal for a Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS recast)	03.12.2008		

6EAP Priority Area: Environment policy making (Article 10)

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Good governance	Commission Working Document - Better Regulation and the Thematic Strategies for the Environment {SEC(2005)1197}, (COM(2005)466)	N/A	28.09.2005	N/A
	Commission Communication - A strategy for the simplification of the regulatory environment, (COM(2005)535)	N/A	25.10.2005	N/A
Participation in dialogue process by environmental NGOs	Decision No 466/2002/EC laying down a Community action programme promoting non-governmental organisations primarily active in the field of environmental protection	22.06.2001	01.03.2002	N/A
	Communication from the Commission - Towards a reinforced culture of consultation and dialogue - General principles and minimum standards for consultation of interested parties by the Commission (COM(2002)704)	N/A	11.12.2002	N/A
	Mid-term evaluation of the implementation of the Community action programme promoting NGO's primarily active in the field of environmental protection (Decision 466/2002/EC)		01.07.2005	N/A

	Commission Staff Working Document on the implementation of the programme for financial support to European non-governmental organisations primarily active in the field of environmental protection, SEC(2008) 2633 final		09.10.2008	N/A
	Regulation (EC) No 614/2007 concerning the Financial Instrument for the Environment (LIFE+)	Original proposal 29.09.2004 Modified proposal 24.05.2006	23.05.2007	N/A
	Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice	18.01.2001	26.05.2003	25.06.2005
	Proposal for a Directive on access to justice in environmental matters (COM(2003)624)	24.10.2003	Awaiting adoption	Awaiting adoption
	Directive 2003/4/EC on public access to environmental information and repealing Council Directive 90/313	29.06.2000	14.02.2003	14.02.2005

Improve policy making process through ex ante and ex post evaluations	Commission Impact Assessment Guidelines 2009 replacing the previous Guidelines 2005 and also the 2006 update (SEC(2009) 92)		15.01.2009	Doesn't need to; is applied
	Communication from the Commission on impact assessment (COM(2002)276)		05.06.2002	Yes, IA system is up and running
	Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 27	Original proposal 17.10.2000 Modified proposal 21.12.2001	25.06.2002	Yes
	Commission Regulation (EC, Euratom) No 2342/2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 21	24.07.2002	23.12.2002	Yes
	Communication to the Commission - 'Responding to Strategic Needs: Reinforcing the use of evaluation' SEC(2007)213		21.02.2007	Yes
	Annex to Communication SEC(2007)213		21.02.2007	Yes

	Annex I of the Commission Communication 'Impact Assessment Board Report for 2009' (SEC(2009)1728)		29.01.2010	Yes
Environment prioritised in Community research programme	Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)	06.04.2005	18.12.2006	Entry into force 01/01/2007; end of validity 31/12/2013
	Decision 1639/2006/EC establishing a Competitiveness and Innovation Framework Programme	06.04.2005	09.11.2006	Entry into force 24/10/2006
Provision of regular information	Directive 2003/4/EC on public access to environmental information and repealing Council Directive 90/313	29.06.2000	14.02.2003	14.02.2005
	Regulation (EC) No 1367/2006 on the application of the provisions of the Århus Convention to Community institutions and bodies	01.10.2003	28.09.2006	N/A
	Commission Communication - Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy (SEC(2005)161)		31.12.2005	Yes
	Annual Environment Policy Reviews		2003-2008	

	Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC	07.10.2004	18.01.2006	24.02.2006
Review and regular monitoring of information and reporting systems	Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	23.07.2004	15.05.2007	15.05.2009
	Commission Regulation (EC) No 1205/2008 implementing Directive 2007/2/EC as regards metadata	N/A	03.12.2008	N/A
	Commission Decision 2009/443/EC implementing Directive 2007/2/EC of the European Parliament and of the Council as regards monitoring and reporting	N/A	05.06.2009	N/A
	Commission Regulation (EC) No 976/2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services	N/A	19.10.2009	N/A
	Draft REGULATION implementing Directive 2007/2/EC as regards interoperability of spatial data sets and services		14.12.2007	N/A

	Draft Regulation implementing Directive 2007/2/EC as regards the access to spatial data sets and services by the Member States to the Community institutions and bodies under harmonised conditions		07.07.2009	N/A
	Draft COMMISSION REGULATION amending Regulation (EC) No 976/2009 as regards download services and transformation services		14.12.2009	N/A
	Commission Communication - Towards a Shared Environmental Information System (SEIS) (COM(2008)46)	N/A	01.02.2008	N/A
Reinforce use of earth monitoring tools	Commission Communication - Global Monitoring for Environment and Security (GMES): we care for a safer planet (COM(2008)748)	N/A	12.11.2008	N/A
	Commission Communication - Global Monitoring for Environment and Security (GMES): from concept to reality (COM(2005)565)	N/A	10.11.2005	N/A
	Proposal for a Regulation on the European Earth observation programme (GMES) and its initial operations (2011–2013) (COM(2009)223)	20.05.2009	TBC	TBC

Strategic Approaches to meeting environmental objectives

(Article 3)

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Implementation and enforcement	Directive 2008/99/EC on the protection of the environment through criminal law	09.02.2007	06.12.2008	26.12.2010
	Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage	23.01.2002	30.04.2004	30.04.2007
	Commission Communication on the review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States (COM(2007)707)	N/A	14.11.2007	N/A
	Commission Communication on implementing European Community Environmental Law (COM(2008)773)	N/A	18.11.2008	N/A
	Communication from the Commission A Europe of Results - Applying Community Law (COM(2007)502),	N/A	05.09.2007	N/A
	Commission communication better monitoring of the application of Community law (COM(2002)725)	N/A	11.12.2002	N/A

	Report from the Commission on the application and effectiveness of the EIA Directive (Directive 85/337/EEC, as amended by Directives 97/11/EC and 2003/35/EC) (COM(2009)378)		23.07.2009	N/A
	Report from the Commission on the application and effectiveness of the Directive on Strategic Environmental Assessment (Directive 2001/42/EC) (COM(2009)469)		14.09.2009	N/A
Integration	Report from the Commission on the application and effectiveness of the EIA Directive (Directive 85/337/EEC, as amended by Directives 97/11/EC and 2003/35/EC) (COM(2009)378)		23.07.2009	N/A
	Report from the Commission on the application and effectiveness of the Directive on Strategic Environmental Assessment (Directive 2001/42/EC) (COM(2009)469)		14.09.2009	N/A
	COMMISSION STAFF WORKING DOCUMENT on the links between employment policies and environment policies (SEC(2005)1530)		17.11.2005	N/A
	Commission Working Document Integrating environmental considerations into other policy areas- a stocktaking of the Cardiff process- (COM(2004)394)		01.06.2004	N/A

	Report from the Commission on the application and effectiveness of the EIA directive (directive 85/337/EEC as amended by directive 97/11/EC) (COM(2003)334)		23.06.2003	N/A
	NON-PAPER 'GREEN ELEMENTS FROM MEMBER STATES' RECOVERY PLANS'		31.07.2009	N/A
	ENEA: The European Network of Environmental Authorities for the Cohesion Policy Transformed to the ENEA-MA in 2009: European Network of Environmental and Management Authorities		01.09.2004	N/A
	Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan (COM(2008)397)	16.07.2008		N/A
	Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 amending the Directives on maritime safety and the prevention of pollution from ships	15.09.2000	05.11.2002	Yes - 23/11/2003 at the latest (see Art 13.1)
	Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999	14.07.2004	11.07.2006	N/A

	COUNCIL REGULATION (EC) No 1084/2006 of 11 July 2006 establishing a Cohesion Fund and repealing Regulation (EC) No 1164/94	14.07.2004	01.08.2006	N/A
	Regulation (EC) No 397/2009 of the European Parliament and of the Council of 6 May 2009 amending Regulation (EC) No 1080/2006 on the European Regional Development Fund as regards the eligibility of energy efficiency and renewable energy investments in housing	06.05.2009	10.06.2009	N/A
	Cohesion Policy in Support for Growth and Jobs: Community Strategic Guidelines, 2007-2013, (COM(2005)299)	05.07.2005		N/A
	Commission Communication on 'Greening Transport' (COM(2008)433)	08.07.2008	N/A	N/A
Promote sustainable production and consumption patterns through a blend of instruments including MBI	Commission Communication on 'Integrated Product Policy - Building on environmental life-cycle thinking' (COM(2003)302)	N/A	18.06.2006	No need for transposition
	Commission Communication Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union (COM(2004)38)	N/A	28.01.2004	No need for transposition

	Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan (COM(2008)397)	N/A	16.07.2008	No need for transposition
	Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products (recast)	16.07.2008	20.11.2009	20.11.2010
	Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity and proposed amendment (COM(2007)52)	06.05.1997	31.10.2003	01.01.2004
	Commission Communication on value added tax rates (COM(2007)380)	N/A	01.07.2007	N/A
	Proposal for a Directive amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures (COM(2008)436)	08.07.2008	TBC	TBC
	Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community	23.01.2008	23.04.2009	31.12.2012
	Proposal for a Council Directive on passenger car related taxes (COM(2005)261)	05.07.2005	TBC	TBC

	Green Paper on market-based instruments for environment and related policy purposes, (COM(2007)140)	N/A	28.03.2007	N/A
Collaboration and partnership with enterprises	Regulation (EC) No 1221/2009/EC establishing an eco-management and audit scheme (EMAS)	16.07.2008	December 2009	N/A
	Retail Forum	N/A	03.03.2009	N/A
	Commission Communication - Small, clean and competitive: A programme to help small and medium-sized enterprises comply with environmental legislation (COM(2007)379)	N/A	08.10.2007	N/A
	Regulation (EC) No 1221/2009/EC establishing an eco-management and audit scheme (EMAS)	16.07.2008	25.11.2009	11.01.2010
	Commission Communication - Implementing the partnership for growth and jobs: Making Europe a pole of excellence on corporate social responsibility (COM(2006)136)	N/A	22.03.2006	N/A
	Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan (COM(2008)397)	N/A	16.07.2008	No need for transposition

Better environmental information on environmental impacts of products and processes	Regulation (EC) No 66/2010 on the EU eco-label	16.07.2008	19.02.2010	No need for transposition
	Proposal for a Directive on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (COM(2008)778)	13.11.2008	TBC	TBC
	Commission Communication - Public procurement for a better environment (COM(2008)400)	16.07.2008	N/A	N/A
	Regulation (EC) No 106/2008/EC on a Community energy-efficiency labelling programme for office equipment (recast)	04.10.2006	04.03.2008	No need for transposition
Environmental integration in the financial sector	EIB Statement of Environmental and Social Principles and Standards	25.03.2008	03.02.2009	N/A
	European Principles for the Environment (EPE)	N/A	30.05.2006	N/A
	Directive 2003/51/EC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings	28.05.2002	18.06.2003	01.01.2005
	Commission Communication - Implementing the partnership for growth and jobs: Making Europe a pole of excellence on corporate social responsibility (COM(2006)136)	N/A	22.03.2006	N/A

Community liability regime	Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 257	10.10.1996	21.04.2004	30. Apr 07
	Directive 2008/99/EC on the protection of the environment through criminal law	09.02.2007	19.11.2008	Transposition deadline 26 Dec 2010, no transposition yet in any of the member states according to EurLex
Collaboration with consumer groups and NGOs and better understanding and participation of citizens in environmental issues	Directive 2003/4/EC on public access to environmental information and repealing Council Directive 90/313/EEC	29.06.2003	28.01.2003	14.02.2005
	Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC	18.01.2001	26.05.2003	25.06.2005
	Council Decision 2005/370/EC on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters	24.10.2003	17.02.2005	N/A
	Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC (Text with EEA relevance)	07.10.2004	18.01.2006	N/A

Regulation (EC) No 1367/2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies	24.10.2003	06.09.2006	N/A
Commission Decision 2008/50/EC laying down detailed rules for the application of Regulation (EC) No 1367/2006 on the Aarhus Convention as regards requests for the internal review of administrative acts	N/A	13.12.2007	N/A
2008/401/EC,Euratom: Commission Decision amending its Rules of Procedure as regards detailed rules for the application of Regulation (EC) No 1367/2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institution and bodies	N/A	30.04.2008	N/A
Aarhus Convention - Implementation report of the European Community (SEC(2008)556)		07.05.2008	N/A
European Mobility Week	launched 2002		N/A
Annual Green Week			N/A
EU Sustainable Energy Week	since 2005		N/A

Promote sustainable use and management of land and sea	EAFRD - Axis 2 Measures			
	Agri-Environment (214)			
	Commission Communication - Report to the European Parliament and the Council: an evaluation of Integrated Coastal Zone Management (ICZM) in Europe (COM(2007)308)		07.06.2007	N/A
	2009/89/EC Protocol on Integrated Coastal Zone Management in the Mediterranean	04.12.2008	21.01.2008	Not yet in force. Will enter into force on the 30th day following the deposit of at least six instruments of ratification, acceptance, approval or accession.

Enlargement

Article 2(5)

Sub-area	EU measure	Date proposed	Date adopted	Has the measure been transposed? If not, when will it be?
Integrate environmental protection requirements into Community Programmes including those related to development of infrastructure	COUNCIL REGULATION (EC) No 1085/2006 establishing an Instrument for Pre-Accession Assistance (IPA)	29.09.2004	17.07.2006	N/A
	COMMISSION REGULATION (EC) No 718/2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA)	N/A	12.06.2007	N/A
Cooperate with civil society, environmental NGOs and business in Candidate Countries to help raise public awareness and participation	Commission Communication - Civil Society Dialogue between the EU and Candidate Countries (COM(2005)290)	N/A	29.06.2005	N/A

4 Annex D: List of priority measures

Proposed list of priority measures to be evaluated in detail

Together with the inventory of measures (see separate document), the selected priority measures will form the basis for assessing the degree to which the 6EAP succeeded in achieving its objectives. The inventory of measures provides a first comprehensive overview of adopted measures. However, given the large number of measures, it is not possible to analyse all measures. The actual analysis of measures with respect to the achievement of the objectives of the 6EAP and the barriers and drivers therefore focuses mainly on the priority measures.

The priority measures were pre-selected on the basis of two criteria:

1. At around the time when the Commission made its proposal for the measure in question, major stakeholders and important decision-makers saw the measure as a potentially major (=significantly above average) contribution to achieving relevant objectives, in particular those stated in the 6EAP ('potentially major contribution' in both relative and absolute terms = as compared to related measures relevant for the 6EAP, but also in terms of expected impacts/outcomes);
2. The measure has in fact already had, or is still expected to have, a major positive impact on the achievement of 6EAP objectives

For a final cross-issue, cross-sectoral balancing two additional criteria were used:

1. Priority measures need to pass a threshold of 'minimum importance' in terms of the broad aims of the 6EAP.
2. In cases of doubt, preference is given to 'innovative' measures as opposed to measures reflecting more incremental processes (for example amendments of legislation), in particular if major steps in the incremental process predate the 6EAP.

It should be noted that many measures not included in the list of priority measures will nevertheless be covered in the final report. This may happen either because such measures are directly relevant for the analysis of particular priority measures or because they figure in the description of the broader context.

Climate Change	
Implementation of international climate commitments	<ol style="list-style-type: none"> 1. Directive 2003/87/EC establishing a scheme for greenhouse gas allowance trading within the Community 2. Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community 3. Decision No 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020
Reduction of GHG emissions in the energy sector	<ol style="list-style-type: none"> 4. Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC
Reduction of GHG emissions in the transport sector	<ol style="list-style-type: none"> 5. Regulation 443/2009/EC setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO2 emissions from light duty vehicles 6. Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (with focus on biofuels for transport) 7. Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community 8. Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions
Reduction of GHG emissions in other sectors	<ol style="list-style-type: none"> 9. Council regulations related to the CAP Health Check (Regulation (EC) No 72/2009, 73/2009, 74/2009)

Nature and Biodiversity	
Biodiversity	<ol style="list-style-type: none"> 1. Commission Communication - Halting the loss of biodiversity by 2010 - and beyond - Sustaining ecosystem services for human well-being (COM(2006)216) 2. Regulation (EC) No 614/2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission statement
Accidents and disasters	<ol style="list-style-type: none"> 3. Communication - A Community approach on the prevention of natural and man-made disasters (COM(2009)82)
Soil	<ol style="list-style-type: none"> 4. Commission Communication – Towards a Thematic Strategy for soil protection (COM(2002)179) 5. Proposal for a framework Directive for the protection of soil (COM(2006)232)
Biodiversity in agriculture	<ol style="list-style-type: none"> 6. Council Regulation 1698/2005, the European Agricultural Fund for Rural Development (EAFRD) 7. Regulation 73/2009 establishing common rules for direct support schemes for farmers under the common agricultural policy (cross compliance and Article 68)
Sustainable use of the Seas	<ol style="list-style-type: none"> 8. CFP Regulation 2371/2002 9. Commission Communication - Thematic Strategy on the protection and conservation of the marine environment. (COM(2005)504) 10. Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) 11. Recommendation 2002/413 concerning the implementation of Integrated Coastal Zone Management (ICZM) in Europe 12. Communication from the Commission – An Integrated Maritime Policy for the EU (COM(2007)575)
Forests	<ol style="list-style-type: none"> 13. Proposal for a Regulation laying down the obligations of operators who place timber and timber products on the market (COM(2008)644) 14. Communication from the Commission to the Council and the European Parliament of 15 June 2006 on an EU Forest Action Plan (COM(2006)302)

GMOs	<p>15. Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC</p> <p>16. Directive 2001/18 on the deliberate release into the environment of GMOs</p>
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Environment and Health	
Research	1. Commission Communication - The European Environment & Health Action Plan 2004-2010 (COM(2004)416)
Chemicals	2. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
Pesticides	<p>3. Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides</p> <p>4. Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC</p> <p>5. Commission Communication - Thematic Strategy on sustainable use of pesticides (COM(2006)372)</p>
Water quantity	6. Communication from the Commission to the European Parliament and the Council - Addressing the challenge of water scarcity and droughts in the European Union (COM(2007)0414)
Water quality	<p>7. Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC</p> <p>8. Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC</p>

	<p>9. Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration.</p>
Air quality	<p>10. Commission Communication - Thematic Strategy on air pollution (COM(2005)446)</p> <p>11. Directive 2008/50/EC on ambient air quality and cleaner air for Europe</p> <p>12. Proposal for a Directive on industrial emissions (integrated pollution prevention and control) (recast) (COM(2007)844)</p> <p>13. Directive 2004/42/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (the so-called VOC Paints Directive)</p>
Urban environment	<p>14. Commission Communication - Thematic Strategy on the urban environment (COM(2005)718)</p>

Natural Resources and Waste	
Sustainable use and management of natural resources	1. Commission Communication - Thematic Strategy on the sustainable use of natural resources COM(2005)670)
Waste prevention and management	2. Commission Communication - Thematic Strategy on the prevention and recycling of waste (COM(2005)666) 3. Directive 2008/98/EC on waste 4. Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste
Specific waste streams	5. Proposal for a Directive on waste electrical end electronic equipment (WEEE, recast) 6. Proposal for a Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS recast) 7. Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC
	8. Directive 2006/21/EC on the management of waste from the extractive industries (the mining waste directive).

International	
Integration of environment protection in Community's development policies	<ol style="list-style-type: none"> 1. Joint declaration by the Council and the representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission on the development policy of the European Union (The European Consensus on Development) 2. Tools and procedures to integrate environment in EU development cooperation activities, e.g. CEPs
Multilateral environmental agreements and international environmental governance	<ol style="list-style-type: none"> 3. Implementation of the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and the EU role in post-Kyoto negotiations 4. Regional and multilateral environmental treaties, conventions and protocols 5. EU role in multilateral negotiations
Trade, foreign investment and export credits	<ol style="list-style-type: none"> 6. Council Regulation (EC) No 2173/2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community 7. Trade Sustainability Impact Assessments (SIAs) 8. EU's role in WTO negotiations
Cross border environmental cooperation	<ol style="list-style-type: none"> 9. European Neighbourhood Policy

Strategic approaches and governance	
Public Participation	<ol style="list-style-type: none"> 1. Directive 2003/4/EC on public access to environmental information 2. Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice
Improve policy making process through ex ante and ex post evaluations	<ol style="list-style-type: none"> 3. Commission Impact Assessment Guidelines 2009 replacing 2005 Guidelines and 2006 update (SEC(2009) 92)
Environment prioritised in Community research programme	<ol style="list-style-type: none"> 4. Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)
Provision of regular information	<ol style="list-style-type: none"> 5. Commission Communication - Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy (SEC(2005)161)
Use of earth monitoring tools	<ol style="list-style-type: none"> 6. Regulation (EU) No 911/2010 of the European Parliament and of the Council of 22 September 2010 on the European Earth monitoring programme (GMES)
Implementation and enforcement	<ol style="list-style-type: none"> 7. Various measures
Review and regular monitoring of information and reporting systems	<ol style="list-style-type: none"> 8. Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) 9. Commission Communication - Towards a Shared Environmental Information System (SEIS) (COM(2008)46)
Environmental Policy Integration	<ol style="list-style-type: none"> 10. Communication from the Commission to the European Parliament and the Council of 8 July 2008 on 'Greening Transport' (COM(2008)433) 11. Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999 <p>Further measures, in particular regarding energy, agriculture and fisheries are covered under the Climate Change and Nature and Biodiversity headings.</p>

<p>Promote sustainable production and consumption patterns through a blend of instruments</p>	<p>12. Commission Communication - An Environmental Technologies Action Plan for the European Union (COM(2004)38)</p> <p>13. Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products (recast)</p> <p>14. Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity and proposed amendment (COM(2007)52)</p> <p>15. Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community</p>
<p>Better environmental information on environmental impacts of products and processes</p>	<p>16. Proposal for a Directive on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (COM(2008)778)</p> <p>17. Commission Communication - Public procurement for a better environment (COM(2008)400)</p>
<p>Community liability regime</p>	<p>18. Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage</p>

<p style="text-align: center;">Enlargement</p>	
<p>Integrate environmental protection requirements into Community Programmes including those related to development of infrastructure</p>	<p>1. Commission Regulation (EC) No 718/2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA)</p>
<p>Cooperate with civil society, environmental NGOs and business in Candidate Countries to help raise public awareness and participation</p>	<p>2. Commission Communication - Civil Society Dialogue between the EU and Candidate Countries (COM(2005)290)</p>

Total number of Priority Measures - 76

5 Annex E: Results of electronic survey

This chapter begins by providing an overview of the approach to and implementation of the Electronic Survey which was carried out to support and provide input for the overall evaluation of the 6EAP. This is followed by a summary and analysis of the results of the survey. The full results of the survey can be found in Annex D.

5.1 Approach to and Implementation of the electronic survey

The following section outlines the design and implementation process of the Electronic Survey and describes the method by which the results were collected and analysed.

Aims and objectives of the electronic survey

The aim of the electronic survey was to support and provide input for the overall evaluation of the 6EAP as well as to provide specific input for the study of selected priority measures and in-depth interviews to be carried out in the second phase of the project.

Design of the survey

The electronic survey included 26 sections involving a mixture of closed and open-ended questions. For the closed questions, a mixture of likert-scale, ordinal, categorical and numerical questions were used depending on the type of question being asked. In order to facilitate the final analysis of the questionnaire, the number of open-ended questions was limited.

It was decided that the questionnaire should begin with a series of 13 obligatory questions. These asked participants general questions about the 6EAP in relation to other strategies and agreements as well as questions about the 6EAP in relation to EU environmental policy as a whole. The section that followed was based on the 4 priority areas and 2 cross-cutting themes of the 6EAP.¹²⁴⁰ These questions were optional and made it possible for participants to choose which sections to complete based on their own areas of expertise. An opportunity was also given to participants to make further overall comments about the 6EAP in a final free text field.

Once the questionnaire had been designed, an online survey was set up by the Ecologic web-team and a test-run was carried out with 5 trial participants. The reasons for the test-run were two-fold: firstly, to receive feedback on the content and logic to the questions being asked, and secondly to receive feedback on the mechanics of the survey so that technical issues could be addressed before the survey was sent out to the main list of participants. The feedback was integrated into the questionnaire.

Identification of participants

The choice of participants was a lengthy and considered process involving input from the European Commission, Ecologic Institute, IEEP and CEU. All partners suggested stakeholders, groups and key organisations to be contacted for the survey, including, for

¹²⁴⁰ The 4 priority areas of the 6EAP that were examined were: Climate Change; Nature and Biodiversity; Natural Resources and Waste; Environment and Health as well as 2 cross-cutting issues of: International; Strategic Approaches and Governance.

example, MEPs, members of Business Europe, environmental NGOs in the 'Green 10' as well as the relevant EPAs from each member state.

A great deal of attention was paid to ensuring that regional¹²⁴¹ and sectoral¹²⁴² balance was maintained as well as ensuring that a range of interests across the priority areas¹²⁴³ were represented. Potential participants were added and removed at a number of stages and were carefully rebalanced at each stage to ensure equal distribution in the final list.

Implementation of the survey

Once the questionnaire had been designed and checked, the survey was sent out to the final list of 712 participants (according to the proposal about 400 participants), intended to return a response rate of around 250-300 participants. A personalised email was sent with a formal invitation as well as a link to the online survey which participants were given 2 weeks to complete. In order to secure more reliable responses, respondents were asked to complete the survey anonymously and personally, rather than on behalf of any organisation or institution.

Of the original 712 participants, a number of mail delivery failures and out of office messages were returned. Time was spent, researching the email addresses to identify potential errors in email syntax or otherwise. As a consequence of this work, 3 further mailouts with extensions on the original deadline took place. Reminder emails were sent to participants in the week that completion was due, as well as on the due date itself. Both methods proved useful in increasing the numbers of surveys returned.

Some participants asked for time extensions in order to be able to complete the questionnaire and these were also granted wherever possible.

The survey was completed by a total of 121 respondents, giving an overall return rate of 17%. Even though we invited about 300 participants more than planned according to the proposal the number of respondents was about 100 participants lower than envisaged. We received about 80 direct reactions to our invitation which gave i.a. the following reasons for not being able to participate: A number of respondents wrote with concerns that they did not have sufficient knowledge about the 6EAP to be able to answer the survey (9 participants). Some felt that even with time extensions, their own work pressures and travel commitments made it impossible for them to give the survey the necessary time and attention (14 participants). We received 51 out of office replies and one participant did not give a reason for not participating, 5 participants reported technical problems we were not able to accommodate. Given that the threshold to personally respond to an anonymous survey is quite high, we can assume that the number of respondents who have felt similarly but have not reported this to us is quite high.

¹²⁴¹ The 27 member states were divided into regions as follows: The northern countries (UK, Ireland); The Scandinavian countries (Sweden, Finland, Denmark); The Baltic States (Estonia, Latvia, Lithuania); The Western Countries (France, Belgium, The Netherlands, Luxembourg); Central Europe (Germany; Poland; Czech Republic; Austria); Eastern Europe (Slovenia, Slovakia, Hungary, Romania, Bulgaria); Southern Europe (Spain, Portugal, Italy, Greece, Malta, Cyprus).

¹²⁴² The participants were divided according to the main sector that they represented: Academia; Enforcement Body; Non-Governmental Organisation; Trade Union; Regional European Organisation; Business and Industry; Member of the European Parliament.

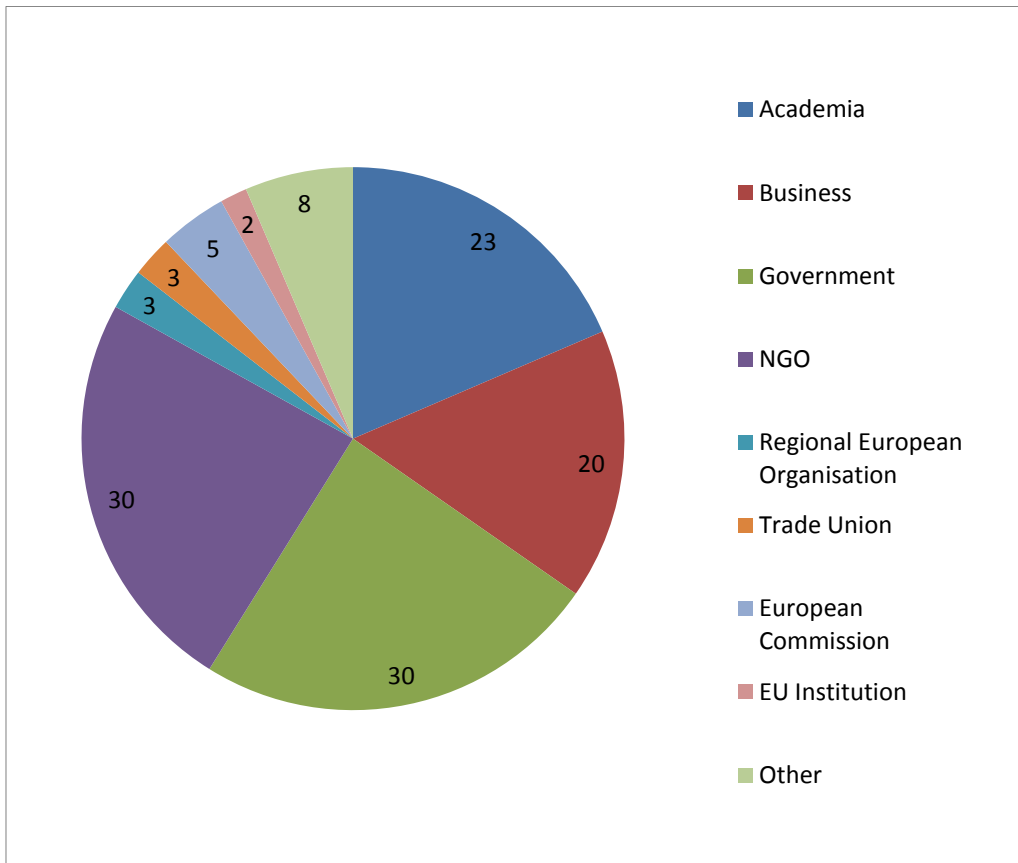
¹²⁴³ The sectors were divided as follows: Climate Change; Nature and Biodiversity; Natural Resources and Waste; Environment and Health; Governance and Policy; No specific interest.

Collection and interpretation of results

The results were initially returned in a coded format which was then interpreted and converted into tables and pie charts to enable members of the Ecologic project team to examine the results and carry out a preliminary analysis. Due to a number of late submissions, it was also necessary to carry out a further round of decoding and reinterpretation of the data. As well as analysing the quantitative results, the comments made in response to the open-ended questions were compiled and examined for reoccurring or salient points raised.

In addition to the question wise evaluation we decided to also analyse the results according to stakeholder groups. As resources for this exercise were limited we decided to concentrate on the most important stakeholder groups namely, academia, business, government and NGO. As the number of participants within each of these groups was fairly the same (see figure below) we were also able to compare the answers of each stakeholder group and to identify whether they all agreed or whether the single stakeholder groups had a divergent opinion.

Figure 18: Number of electronic survey participants by stakeholder group



In the final free-text section, some comments were made about the questionnaire and electronic survey. It was mentioned that the questions were too detailed but also by another participant that it was not detailed enough. Amongst those who specified having difficulties in answering the questions, it was pointed out that it was difficult to distinguish the 6EAPs effect on the creation of specific policies.

5.2 Survey results

The following section presents an analysis of the most important results of the survey. Where the analysis according to stakeholder groups yields interesting results they are included into the findings. A full presentation and interpretation of the results according to questions and stakeholder groups can be found in Annex D.

5.2.1 6EAPs function and position vis-à-vis other EU Strategies (Q1 & 2)

6EAPs Function as an overarching environmental strategy (Q1)

A slight majority (56%) felt that the 6EAP has fulfilled its function as an overarching environmental strategy. In this response category the stakeholder groups of business and government showed a stronger tendency towards this statement than the other stakeholder groups. 27% of the participants did not share this assessment. The remaining participants did not know (17%).

6EAPs position vis-à-vis other EU strategies (Q2)

Overall, the **UNFCCC** (88%) and the **6EAP** (86%) were found to be the most relevant strategies, followed by the **CBD** (70%), the **EU-SDS** (64%) and the **Lisbon Strategy** (52%). Opinions on the relevance of International **Free Trade Agreements** in influencing EU environmental policy were rather equally divided, ranging from those who thought it was very influential (12%) to those who thought it was not relevant at all (12%). However, a quarter (26%) said that they either did not know or were not familiar with this issue.

Compared to the 6EAP, the Lisbon Strategy and the EU-SDS seem to be clearly less relevant in influencing EU environmental policy. This is confirmed not only by the higher share of respondents assessing the 6EAP to be more relevant than Lisbon Strategy and the EU-SDS (see above) but also by the fact that more respondents found the EU-SDS (31%) or Lisbon Strategy (35%) not very relevant. The largest group which considered the Lisbon Strategy not to be relevant were business while NGOs, government and academia tended to find the Lisbon Strategy more relevant. The two international conventions (UNFCCC and CBD) seem to have generated more momentum in influencing EU environmental policy than the EU-SDS, the Lisbon Strategy or the Free Trade Agreements.

Despite the fact that the quantitative answers show the Lisbon Strategy to have less relevance in influencing EU environmental policy, the free text section suggests a different interpretation. Although it may be seen that the Lisbon Strategy had less of a direct impact on EU environmental policy, it may still have had an important role to play in the sense that it detracted from other initiatives such as the 6EAP.

Evaluation of Objectives (Q3)

Overall the objectives of the 6EAP were seen to have a **clear** (85%) and **strategic** character (86%). There was no clear sense of whether the objectives were too **ambitious** (the largest stakeholder group to confirm this was business), too **numerous** (the largest stakeholder group to confirm this was business, while academia and government tend to disagree) or **inconsistent**. However, in the comments sections, participants asked for the interrelation between different objectives to be addressed and for an increased emphasis to be placed on integration at a strategic level.

Nearly two-thirds of the participants (61%) either fully (34%) or partly (27%) agreed that the objectives should have been specified by quantitative **targets**. The stakeholder group business tends to disagree to this statement. Free text answers supported this asking for more specific deadlines to accompany the targets.

5.2.2 Evaluation of areas (Q4 & 5)

Choice of the Four Priority Areas (Q4)

Overall, participants considered the areas to be **well chosen** with 89% finding the choice either quite (50%) or fully (39%) appropriate. This was confirmed by the findings on the individual priority areas: in each case, 82% - 90% considered the choice of the priority area in question to be appropriate. The largest stakeholder group to disagree to this statement was business (especially as regards nature and biodiversity).

The findings on the **balance** of the priority areas were less clear with 61% considering the balance to be appropriate and 17% considering it to be either not very appropriate (16%) or not appropriate at all (1%).

Missing Issues (Q5)

Participants did not take a strong view on whether issues were missing from the 6EAP or not. The responses were evenly split between Yes (41%; the largest stakeholder group to agree to this statement was business) and No (43%; the largest stakeholder groups to agree to this were business and government).

For those who felt that there were issues missing, a number of areas were identified in the free text answer option including suggestions made about missing areas, instruments and approaches.

- **Areas:** Sustainable consumption and production, eutrophication, health and damage from air pollution, green economy, free trade agreements and environment, cities and urban-rural relationship, rural development, transport and its impact on air, climate and noise, land use planning, welfare of animals, water and ecosystem services, environmental inequalities, nanotechnologies, natural resources.
- **Instruments:** implementation and enforcement, getting prices right, environmental policy integration, awareness-raising.
- **Decision-making:** Greater use of cost-benefit analysis in decision-making and economic accounting tools, establish overarching principles for smart environmental policies, public participation.
- **Strategic governance:** Consistency of 6EAP and other EU strategies.
- **Geographical scope:** 6EAP should take a world- perspective; better climate and biodiversity policies, new agriculture, transport and cohesion policy in an enlarged Europe.

5.2.3 6EAPs influence and achievements (Q6, 7 & 8)

6EAPs Influence on EU Environmental Policy-Making (Q6)

Overall, participants agreed that the 6EAP had had some kind of influence on EU environmental policy-making (78%), though participants assessed the degree of its influence

differently: A slight majority of 51% said that the 6EAP had had a moderate influence on policy-making while 27% even thought that the 6EAP had had a strong influence. None answered that it had had no influence at all.

Types of Influence (Q7)

The way the 6EAP has influenced EU policy-making was qualified as follows:

A majority of participants thought that the 6EAP **had influenced** EU environmental policy-making by:

- **Setting environmental priorities**
This statement was found to be overall quite (58%) or very (24%) relevant.
- **Increasing legitimacy**
This statement was found to be quite (57%) to very (25%) relevant.
- **Increasing coherence of EU environmental policy over time**
This statement was found to be quite relevant by just over half of respondents (54%) with just over a quarter (27%) saying that it was either not very relevant (22%) or not relevant at all (5%). The largest stakeholder group finding the statement not relevant or not relevant at all were business and academia.
- **Improving predictability of environmental policy-making**
This statement was found to be quite relevant by 48%, very relevant by 15%. However, this statement was also found to be not very relevant by almost a quarter (23%) of respondents and mainly by the stakeholder group of academia.
- **Providing substantial environmental principles**
This statement was found to be quite (46%) or very relevant (21%). However, around one quarter (24%) found it to be not very relevant.

A majority of participants thought that the 6EAP had **not influenced** EU environmental policy-making in:

- **Increasing coherence among environmental policies**
This statement was found by the majority of respondents to be quite (52%) or not very relevant (28%); only a small proportion (9%) found it to be very relevant or relevant. The largest stakeholder group to confirm this finding was NGO.
- **Choosing regulatory instruments/approaches**
This statement was found by most respondents to be quite (47%) or not very relevant (26%); roughly a quarter (24%) found it to be very relevant.
- **Increasing coherence with other, non-environmental policies**
This statement was found by most respondents to be not very relevant (43%) or not very relevant at all (17%); only a small proportion 5% found it to be very relevant.

A majority of participants were **equally split as to** whether the 6EAP has influenced EU environmental policy-making by:

- **mobilising civil society and business**
This statement was found to be overall not very relevant (48%; mainly the stakeholder groups of NGO, academia and government) or quite relevant (31%; mainly the stakeholder group of business).
- **mobilising Member States' representatives**
This statement was found to be quite relevant (42%) or not very relevant (34%).

- **mobilising Members of the European Parliament**

This statement was 'quite relevant' (37%; mainly the stakeholder group of business) or 'not very relevant' (29%).

Participants disagreed that the 6EAP had had no influence on environmental policy-making (77%) thereby confirming the outcomes of Q6.

Comments in the free text section highlighted the lack of impact the 6EAP had had on increasing coherence of environmental policies with other policies and were critical in their evaluation of its achievements with regard to environmental policy integration. One participant felt that the 6EAP did not instigate consistent implementation at Member State level. Another participant found that EU legislation provided a safety net for Member States' environmental policies (danger of shifting priorities).

Achievement of Environmental Objectives (Q8)

Overall, 82% participants valued the overall goal achievement of the 6EAP negatively.

Issues **hindering goal achievement** were considered to be the following:

Participants agreed that goal achievement **was hindered** by

- **Poor implementation**
The majority either partly (57%) or fully (23%) agreed.
- **Too long decision-making**
The majority either partly (49%) or fully (30%) agreed.
- **Inadequate funding**
The majority either partly (44%) or fully (32%) agreed.
- **Other more important priorities**
The majority either partly (43%) or fully (31%) agreed.
- **Too complicated decision-making**
The majority partly (48%) or fully (23%) agreed.
- **Poor design of the measures**
The majority of respondents either partly (61%) or fully (8%) agreed; 22% partly disagreed.

Participants agreed that goal achievement **was not hindered** by

- **Unfavourable public opinion**
A small majority of 63% either partly (46%; this statement was mainly shared by academia and government) or fully (17%) disagreed. 20% partly agreed (this statement was mainly shared by business).
- **Unrealistic level of ambition**
About half of the participants agreed: 12% fully disagreed, 43% partly disagreed; 33% partly agreed and 8% fully agreed.

Participants were **equally split as to** whether goal achievement was hindered or not by

- **Lack of environmental data / scientific knowledge**
49% partly or fully disagreed, 45% partly or fully agreed.
- **Too low level of ambition**
65% either partly agreed (37%) or partly disagreed (28%); 20% fully disagreed. The largest stakeholder group that either partly or fully disagreed was business.

Comments in the free text section identified a lack of commitment and political will as one of the main hindering factors for that led to limited goal achievement. This may be due to the fact that short term economic objectives were considered to be more urgent and that the 6EAP was marginalised by the high-level focus on the Lisbon Agenda. A few participants criticised the lack of integration of business perspectives. One participant said that goals were not sufficiently described at the beginning of the process making it consequently difficult to measure achievements.

5.2.4 Evaluation of 6EAPs legal character (Q9)

A majority of participants **agreed** that the adoption of the 6EAP as a joint decision of the European Parliament and the Council through the formal legislative co-decision procedure had the following implications:

- **It added legitimacy**
Almost all respondents (88%) either fully (56%) or partly (32%) agreed.
- **It increased awareness of 6EAP in the EU institutions**
The majority (75%) of participants agreed: 43% partly agree, and one third (32%) fully agreed.
- **It improved the contents of the 6EAP**
Generally, most (64%) participants agreed: 39% partly agree, 25% fully agreed.

A majority of participants **disagreed** that the adoption of the 6EAP as a joint decision of the European Parliament and the Council through the formal legislative co-decision procedure had the following implications:

- **The involvement of the EP/Council made no difference because the 6EAP remains legally non-binding**
The majority 60% partly (28%) or fully (32%) disagreed

Participants were **equally split as to** whether the adoption of the 6EAP as a joint decision of the European Parliament and the Council through the formal legislative co-decision procedure had implications for the following:

- **Effect on clarity and coherence of 6EAP**
19% did not know, 54% either partly (24%) or fully (30%) disagreed, 18% partly agreed.
- **Increased level of ambition**
19% did not know, 22% partly disagreed, and the largest group (39%) partly agreed.
- **Effectiveness of 6EAP**
17% did not know, 34% partly agreed, 33% partly disagreed.
- **Involvement made no difference because political priorities have changed**
14% did not know, 28% partly agreed, 24% partly disagreed, 23% fully disagree.

It was also of note that a larger percentage than usual (up to 19%) answered that they did not know what impact the co-decision procedure had had in the areas covered under Q9.

In the **comments**, most participants agreed that the involvement of the EP has been more helpful for the 6EAP than the involvement of the Council.

5.2.5 Evaluation of 6EAPs instruments and approaches (incl. Thematic Strategies) (Q10 & 11)

Effectiveness of Instruments (Q10)

A majority of participants considered the following approaches and instruments to be **effective**:

- **Development of new legislation**
Most participants (72%) found it to be either quite (52%) or very (20%) effective; none found it to be totally ineffective.
- **Revision / amendment of existing legislation**
Most participants (70%) found it to be either quite (56%) or very (14%) effective; only 1% found it to be totally ineffective.
- **Awareness-raising among stakeholders**
Overall, 67% found this to be either quite effective (45%) or very effective (12%); However, over a third (38%) found this to have been not very effective (29%), or totally ineffective (9%).
- **Improving the knowledge base for decision-making**
A majority (65%) thought it had been quite (49%) or very (16%) effective. The largest stakeholder group sharing this statement was academia. Over a quarter (26%) found it had not been very effective, although only 2% found it to have been totally ineffective.
- **Provision of better information about products and services in terms of their environmental impact**
64% of respondents found this to be quite (49%) or very (15%) effective. The largest stakeholder group sharing this statement was academia. However, over a quarter (27%) found it not very effective 22% or totally ineffective 5%.

Participants were **equally split** regarding whether the following approaches and instruments had been effective:

- **Environmental policy integration**
40% found this to be quite effective, 38% not very effective.
- **Public participation**
40% not very effective, 35% quite effective, 8% totally ineffective.
- **Collaboration and partnership with enterprises**
37% found this to be quite effective, 33% not very effective, 7% thought it was totally ineffective.
- **Encouraging more effective implementation**
48% found it had either been not very effective (45%) or totally ineffective (3%) while 46% found it had either been quite (32%) or very (14%) effective.

Of note was the increased number of respondents who thought that certain policy instruments had been **'totally ineffective'**: Collaboration and partnership with enterprises (7%), information provision on environmental impact of products and processes (5%), awareness raising (9%), improving public participation (8%).

In the free text **comments**, participants made the criticism that Impact Assessment studies have not always been effective. In a number of cases they failed to properly measure and present the impacts on costs and benefits. More emphasis on compliance and enforcement

is needed. One participant noted the lack of common headline environmental indicators and integration indicators to inform policy- and decision-makers.

Effectiveness of Thematic Strategies Approach (Q11)

Overall, the thematic strategies were found to have been **effective** (65%). Only the stakeholder groups of academia and NGOs partly disagreed to this statement.

- *As to qualifying in which ways they have been effective participants agreed that the process to develop the Thematic Strategies (TS) was useful (66%). The largest stakeholder group to agree to this statement was academia. However, it was certainly felt by nearly all respondents (83%) that the effectiveness depended on the issue area (41% fully agree and 42% partly agree).*

As to **the effectiveness of the approach of the TS**, participants **disagreed** that:

- **There should have been more TS**
34% fully disagree and another 31% partly disagree (mainly business).
- **TS were not the right instrument**
34% partly disagree and 23% fully disagree while 27% partly agree. The largest stakeholder group to either partly or fully disagree was business.
- **TS distract from the adoption of other measures**
29% partly disagree and 27% fully disagree while 22% partly agree.
- **TS should have been legally binding**
30% fully disagree and 23% partly disagree while 26% partly agree and 13% fully agree. The largest stakeholder group to either partly or fully disagree was business.
- **TS were not specific enough**
30% partly disagree and 22% fully disagree while 32% partly agree. The largest stakeholder group to either partly or fully disagree was business.
- **Too many strategies**
27% partly disagree and 28% fully disagree while 24% partly agree.

Although participants disagreed overall with the above statements, a fairly large proportion (around a quarter) of participants tended to agree.

In the **comments**, one participant suggested improving the process for elaborating TSs: first a political agreement on the Strategy should be reached and then the tools and legislation to achieve these should be developed. Another participant preferred legislation over TSs.

One participant noted a disconnect between the TSs and the legislation adopted (e.g. Thematic Strategy on Soil Protection and proposal for a Soil Framework Directive. This may have contributed to TSs contributing to fragmentation of the 6EAP as mentioned by another respondent.

Suggestions for additional Thematic Strategies include:

10. Nitrogen,
11. Governance,
12. Health / Connection between workplace and environment,
13. Quality of Life,
14. Inland waters,
15. Forest and biodiversity protection,
16. Chemical Safety.

5.2.6 Evaluation of 6EAPs Time Frame (Q12 & 13)

Appropriateness of 10 year Timeframe

Overall people thought that the 10 year time frame was **fine**, although around a third felt that, if anything, it was **too long**. 13% thought that an 8 year time frame would be more appropriate while 22% favoured a 5 year time frame.

In the **comments** section, respondents mentioned the need to take mid-term reviews seriously and to adapt work accordingly. It was felt that the 6EAP needed to fit in better with other timeframes, such as industrial and funding cycles as well as the 5-year terms of the Commission. Participants also found that on the one hand the legislative process is so long that a 10 year timeframe is necessary but others found on that on the other hand that environment, economy and society change more rapidly than a 10 year strategy is able to capture.

Advantages and Disadvantages of the 10-year Timeframe

Most participants agreed that the 10 year time frame had the following **advantages**:

- **It provides an appropriate planning horizon for complex environmental challenges**
47% partly agree and 27% fully agree.
- **It provides continuity by bridging election periods**
48% partly agree and 21% fully agree.
- **It broadly corresponds to the timeframe of other important EU strategies**
46% partly agree and 19% fully agree.

Regarding the following disadvantages participants gave an unclear picture:

- **Newly elected EP or Commission are not likely to share the programme's priorities thus weakening political commitment to previously agreed priorities**
45% partly agree and 9% fully agree while 33% partly disagree and 6% fully disagree.
- **The time frame allows too little flexibility to react to new environmental challenges**
33% partly agree and 17% fully agree while 32% partly disagree and 15% fully disagree. The largest stakeholder groups to either partly or fully disagree were business and academia.

5.2.7 Area Specific Questions (Q14-25)

6EAP's influence on the adoption of environmental measures (Q14, 16, 18, 20, 22 & 24)

Looking at how the absence of the 6EAP would have affected the adoption of environmental measures across all priority areas, participants found most often that the measure would have been adopted **later** or in a **weaker** form. A similar number of participants found the 6EAP to have made **no difference**. The effect that the 6EAP had on the debate about the measure/initiative is generally low.

Within the fields participant's opinions varied as follows:

- **Climate change:** *Most participants agreed that the absence of the 6EAP would have made no difference (mainly academia and government) or the respective measures would have been adopted later (mainly business).*

- **Nature and Biodiversity:** Most participants found that the respective measures would have been adopted later or in a weaker form. A number of participants assumed that the Soil Protection Framework Directive would not have been adopted without the 6EAP (mainly business, government and NGO), though the number of participants who felt that the 6EAP made no difference (mainly business) in this case was similar. Another interesting finding in this area is that there were a number of participants who were not familiar with the Fisheries Fund Regulation and the Marine Strategy Framework Directive.
- **Environment and Health and Quality of Life:** Most participants found that the respective measures would have been adopted later (mainly business) or in a weaker form. In only two cases did participants think that the absence of the 6EAP would have made no difference. In one case, participants thought that the measure would not have been adopted (Communication on the European Environment and Health Action Plan). The largest stakeholder groups sharing this statement were business and government.
- **Natural Resources and Waste:** Most participants found that the respective measures would have been adopted later without the 6EAP. In two cases participants also thought that the absence of the 6EAP would have made no difference, namely the WEEE and RoHS Directives. A number of participants also thought that the Thematic Strategy on the Sustainable Use of Natural Resources would not have been adopted in the absence of the 6EAP.
- **International:** In two cases participants felt that the measure would have been adopted in a weaker form, namely the EU-SDS and the Council Conclusions on Integrating Environment into Development Co-operation. In the case of the measures to implement the UNFCCC, participants found that the absence of the 6EAP would have made no difference. Participants were not familiar or did not know the following two measures: The Regulation Establishing a European Neighbourhood and Partnership Instrument and the Council Conclusions on Integrating Environment into Development Co-operation.
- **Strategic Approaches:** Most measures within the Strategic Approaches section were found to have been adopted later or in a weaker form in absence of the 6EAP. In a few cases participants found that the absence of the 6EAP would have made no difference: The Access to Environmental Information Directive, the 7th Research Framework Programme and EMAS. A number of participants were not familiar or did not know the following measures: the 7th Research Framework Programme, INSPIRE, the Criminal Law Directive and the ETAP.

6EAP's Influence on the Choice of the Regulatory Approach Taken (Q15, 17, 19, 21, 23 & 25)

The 6EAP has affected the choice of regulatory approaches and instruments in the following ways:

- **Climate Change:** It was felt on the whole that the Climate Change agenda would have pushed forward and would have evolved with or without the 6EAP due to the UNFCCC process and independent commitments from member states. However, the 6EAP was felt to have facilitated, the adoption of **market-based instruments** and **increased the cooperation between civil society and business**. It was often

mentioned that there was too much focus on 'soft law' and voluntary approaches and a need to improve **implementation**.

- **Nature and Biodiversity:** It was mentioned by a number of respondents that **implementation** and enforcement was weak due to a lack of political will in Member States. There is a **lack of scientific data** needed to improve protection (at present many habitats and species are simply designated as 'unknown'). The need to integrate the **precautionary principle** was mentioned by respondents. 6EAP was less specific in terms of biodiversity **legislation** – indeed it would seem that this is a priority area that has been particularly neglected compared to other areas of the 6EAP. **Environmental policy integration** as a regulatory approach has not been achieved. The chance to introduce cross-sectoral instruments has been missed. The 6EAP has contributed to more regional/ local initiatives. Finally, participants called for more **flexibility** in managing site boundaries over time. Some participants noted too much **participation**.
- **Environment and Health and Quality of Life:** Enforcement and **implementation** were again key points. It was felt that 6EAP was useful for developing **regulatory measures** e.g. bathing waters and REACH and also the WFD which may not otherwise have been created. As with Nature and Biodiversity, there is a need for solid **scientific evidence base**. It was mentioned that the 6EAP has been a driving force in **placing connections between health and environment higher on the agenda**.
- **Natural Resources and Waste:** A number of participants mentioned sectoral approaches and **lack of integrated and strategic thinking**. One comment mentioned that there has been a positive influence on linked policies aimed at promoting sustainable production and consumption patterns. (However, this 'linked up thinking' was generally commented on as being lacking by most feedback from the survey). In terms of mainstreaming and integrating the waste issues, the comments suggest there has been some level of success, moving management from 'end of the pipe' to more integrated thinking as well as integrating environmental concerns into energy policies. Participants highlighted a need for assessments and **research** to show whether decoupling growth from resource use is taking place. **Implementation** and investment gaps were mentioned, as with the other priority areas, particularly in new Member States.
- **International:** It was reiterated that 6EAP did not give enough scope to the economic or social or human concerns such as employment, social cohesion, skills and training and education as well as good governance. Finally, it was once again mentioned that it was the **international dialogue** that affected decisions such as the post-Kyoto negotiations, not the 6EAP. The 6EAP, however, contributed to an enhanced **use of scientific knowledge** in this area.
- **Strategic Approaches:** A number of respondents mentioned the **environmental liabilities directive**, for which the 6EAP was responsible for instigating. However, it was said that although this was a good idea in the initial stages, in practice, and once handed over to institutions, there was little evidence of its effectiveness. Company reporting and liability are still unresolved issues. The 6EAP has positively affected the introduction/reinforcement of the **lifecycle principle**. Lack of **consideration** for social and economic aspects were once again mentioned, with the need for more **public participation** and access to **scientific data** which should be improved in quality.

5.2.8 Overall assessment (Q26)

Suggestions for improvement/for 7EAP

- *Learn from success of other programmes e.g. CARE*
- *Serious legislative approaches would need to be applied across all major themes, and not just 'cherry-picked' from those that are politically less challenging.*
- *It is absolutely necessary that the next EAP retains focus on Environment and Health*
- *A future EAP (7th and thereafter) should emerge swiftly with the entry into office of a new Commission and should be as compact (brief) as possible.*
- *Decision-making should not be dragged on by elaboration of subsidiary elements like Thematic Strategies.*
- *The Commission can make use of the existing arsenal of possibilities for discussion, consultation and strategy: Green Papers, Communications, public consultations, etc.*
- *A future EAP could usefully include a mechanism for augmenting the strategy to deal with emerging or unanticipated issues and technologies.*
- *Lack of coordination and need for an environmental inspectorate to monitor implementation in member states and enforce environmental law.*
- *Improved access to information and transparency with a view to instigating sustainable consumption patterns.*
- *Strong need to publish information on time on the DG Environment website with information for stakeholders and the public regarding the EAP.*
- *Create incentives for change and engage with stakeholders for increased cooperation.*
- *First agree on strategic aims, then develop integrated policy in priority areas*
- *Focus on agriculture and biodiversity, climate change is now taken care of and just needs implementation rather than strategy.*

Positive Points Raised

- *6EAP has provided clarity, consistency and coherency*
- *The 6 EAP was a milestone, for Environment and Health, crucial in shaping not only the EU Action Plan on Environment and Health, but other EU policies.*
- *The EAP, in its evolving forms, is a useful and probably necessarily instrument. It expresses the EU's environmental ambitions and the boundaries to that ambition - it is helpful to policy formulation to have the boundaries clarified.*
- *The 6EAP has been successful in providing the framework for a range of key legislative and other instruments published in the past decade. It is not sufficient alone, but it is a useful feedback loop.*
- *The real added-value of the EAP (or equivalent overarching strategic paper) is :*
 - *to provide coherence, consistency, clarity and predictability in the policy priority initiatives that will be implemented in the agreed timeframe.*
 - *to fix a number of key guiding principles which must be applied when initiating renewed or new policy initiatives.*

Negative Points Raised

It was overall felt that in general, the 6EAP had little effect or influence on high-profile areas of environmental policy such as climate change and biodiversity, where different, independent policy drivers were already in place before the 6EAP was adopted. It had some

influence on other areas where there were no other strategic documents, but was implemented very unevenly. In more detail:

- *Many objectives yet to be achieved*
- *Not enough quantifiable targets and indicators*
- *Need for better integration*
- *Impact Assessment used to water down environment agenda*
- *Too much focus on numerous political legislative administrative etc. instruments papers discussions*
- *Not enough energy spent on linking measures/initiatives to other sectors policies and monitoring their impact on national circumstances*
- *The timescale of the 6EAP is very lengthy and may be somewhat inflexible in its ability to react to emerging issues and changes in the wider economic and environmental context.*
- *Integration of environmental objectives into different sectoral directives was an aim of the 6EAP but has not been achieved.*
- *Absence of distinction between properly run/successful projects, and those which produce less satisfactory results.*
- *Inconsistencies in contractual and financial requirements e.g. abrupt demands for information, for retrospective audits.*
- *Disproportionate effort needed in administration and bureaucracy which are difficult for small organisations to deal with give less human resources and finances.*
- *Too process oriented*
- *The subsidiarity principle has been widely misused to curb EU legislation on environmental matters*
- *Development of TS was used as opportunity to renegotiate objectives of 6EAP and delay implementation rather than as proper implementation tool. In the end Lisbon Agenda and Better Regulation had stronger impact on TS and resulting legislation than 6EAP itself.*

5.2.9 Overall evaluation

The following paragraphs summarise the most distinct findings of the survey:

6EAP's function: According to most participants the 6EAP has fulfilled its function as an overarching environmental strategy and seems to have influenced environmental policy. While more participants thought that the UNFCCC and CBD were of more influence than the 6EAP, the number of participants attributing influence to the Lisbon Strategy and the EU-SDS was lower. However, the Lisbon Strategy in particular may still have had an important role to play in the sense that it may have detracted attention from other initiatives such as the 6EAP.

- **Objectives & priority areas:** *Most participants agreed that the objectives were of clear and strategic character. Nearly two thirds of the participants agreed that the objectives should have been accompanied by quantified targets. Similarly, most participants agreed that the 6EAP priority areas were well chosen and balanced. Less than half of the respondents found a number of issues were considered to be missing. Proposals for additional issues include other policy areas, instruments, decision-making, strategic governance and geographical scope.*

- **Influence on EU environmental policy & goal achievement:** *Though a number of participants considered the 6EAP not to have influenced EU environmental policy in a number of issues (e.g. increasing coherence among environmental policies and with other non-environmental policies, choosing regulatory instruments and approaches), a majority of participants agreed that the 6EAP influenced EU environmental policy. The most important ways of influence include setting environmental priorities as well as adding legitimacy, coherence over time and predictability to EU environmental policy initiatives. According to the majority of participants, goal achievement of the 6EAP was valued positive while goal achievement was hindered by poor implementation, too long and complicated decision-making at EU level, other more important priorities and a poor description of the measures.*
- **Legal Character:** *Most participants agreed that the involvement of the EP/Council has made a difference. The majority agreed that it has added to its legitimacy, increased awareness towards the 6EAP in the EU institutions and improved its contents. According to comments raised, the EP's involvement was considered to have been more helpful than the Council's. The majority of participants disagreed that the involvement of the EP/Council made no difference because the 6EAP remains legally non-binding. Whether the legal character has had effects on clarity and coherence of the 6EAP, has increased either its level of ambition or its effectiveness participants were split. This also applies to the statement that the involvement made no difference because political priorities have changed.*
- **Effectiveness:** *Most participants agreed that the 6EAP has been effective in the following ways: developing new and revising existing legislation, awareness raising, improving the knowledge base and providing better information. The latter three were, however, also considered as totally ineffective by a number of participants. An increased number of respondents thought that the following policy instruments had been totally ineffective: Collaboration and partnership with enterprises, information provision on environmental impact of products and processes, awareness raising, improving public participation.*
- **Thematic Strategies:** *The Thematic Strategies (TS) were thought to be an effective instrument by the majority of participants. Their number, character and degree of specification were thought to be adequate. Overall, a majority of participants disagreed that there should have been more TSs or that there have been too many, they should have been legally binding, that they were not the right instrument or not specific enough. Although the majority disagreed to these statements a fairly large proportion (around a quarter) tended to agree to them. While some participants thought that the process of elaborating the TSs has contributed to fragmentation of the 6EAP the majority of participants agreed that the process had been useful.*
- **Time frame:** *Most participants agreed that the 10 year time frame of the 6EAP was an appropriate planning horizon providing continuity. Most participants agreed that an asset of the 10 year time frame was that it more or less corresponds to the time frame of other EU strategies. As regards the disadvantages (too little flexibility to react to new environmental challenges, new EPs or Commissions may not share the programme's priorities thus weakening political commitment to previously agreed priorities) participants gave an unclear picture. In the comments participants highlighted the importance of effective reviews.*
- **Area specific effects:** *Across areas, most participants agreed that measures would have been adopted later or in a weaker form without the 6EAP. In very few areas*

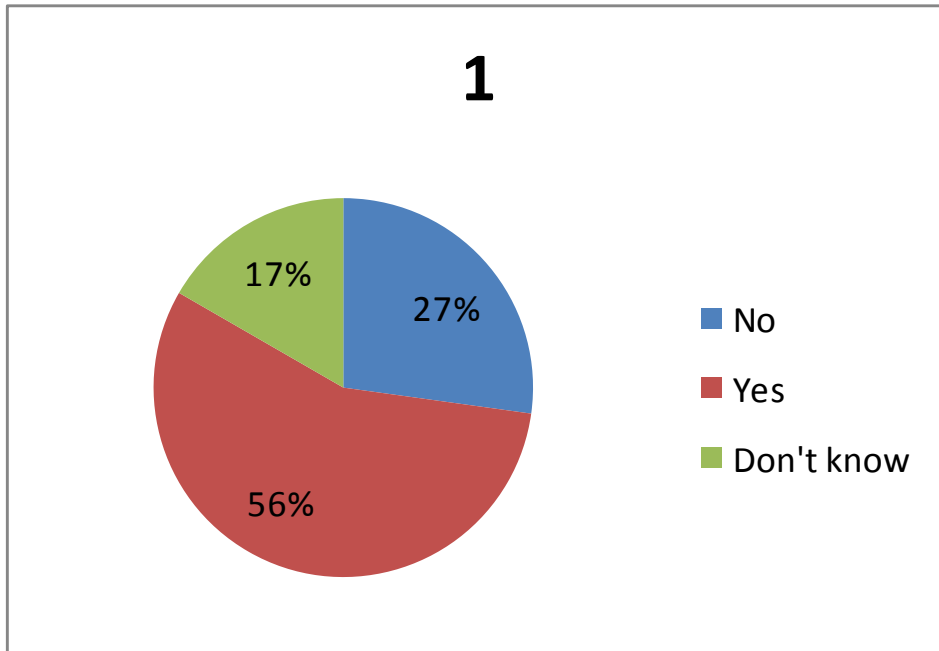
participants agreed that measures would not have been adopted without the 6EAP (e.g. soil protection). In areas with strong international environmental regulation, the 6EAP's influence was regarded as limited by a majority of participants (e.g. UNFCCC, CBD). The number of measures not known to participants or which participants were not able to judge was surprisingly high in the international and strategic areas.

- **Area specific regulatory approaches:** Approaches most often mentioned across areas (either as having been strengthened by the 6EAP or the 6EAP has failed to achieve) included implementation, environmental policy integration and coherence, market-based instruments, research and data needs and development of legislation.

6 Annex F: Detailed survey results

6.1.1 Part A: General Questions (1-13) obligatory

Question 1: The 6EAP constitutes a framework for the Community's environmental policy during the period 2002-2012. In your opinion, has the 6EAP fulfilled its function as an overarching environmental strategy?

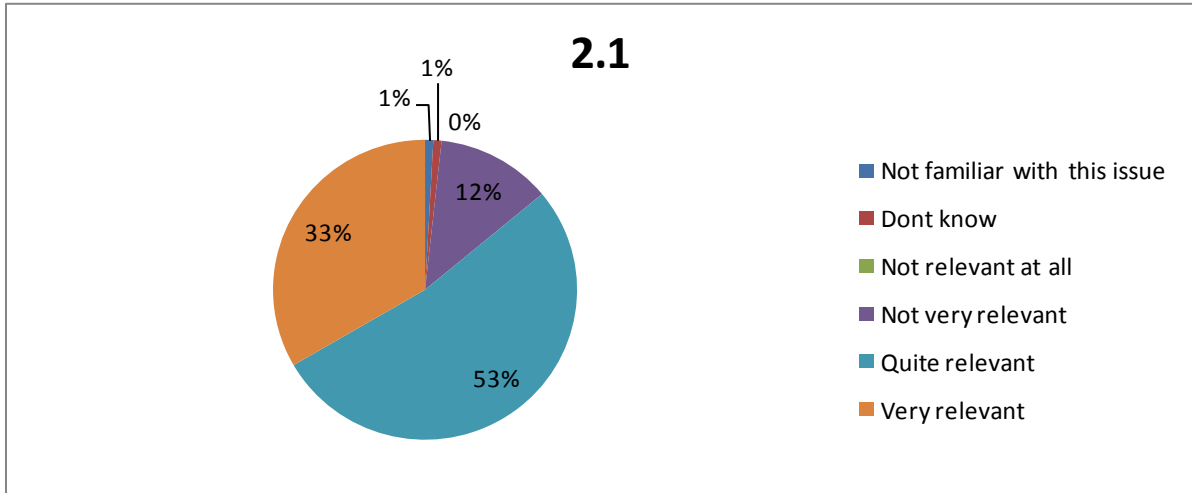


Just over half (56%) said that they thought the 6EAP **fulfilled its function** as an overarching environmental strategy.

Question 2: Please indicate your opinion on the relevance of the following EU strategies/agreements in influencing EU environmental policy since 2002.

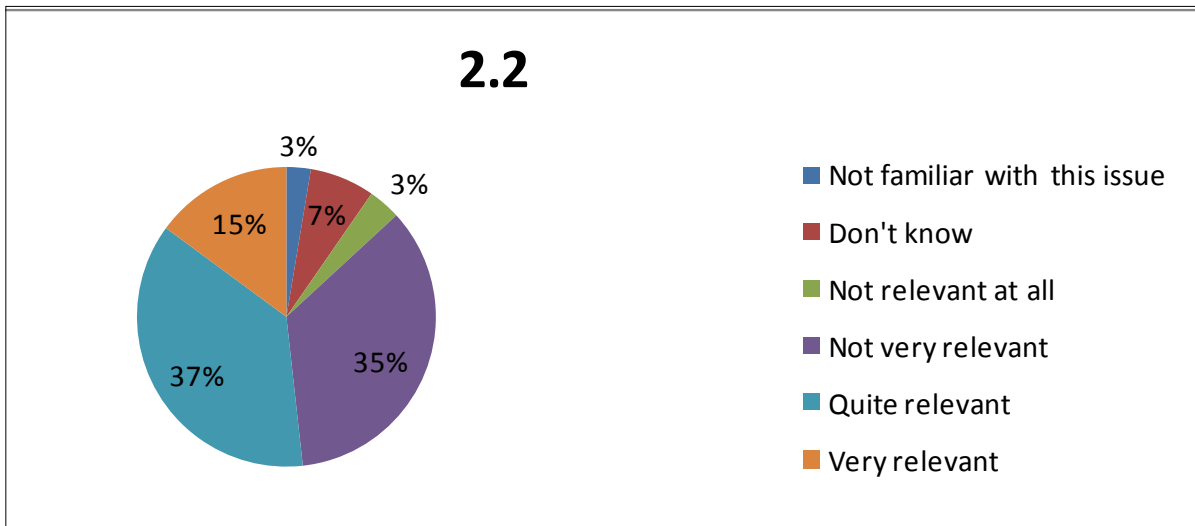
2.1: 6EAP

Overall, most people (86%) found the 6EAP to be **quite (53%) or very (33%) relevant**



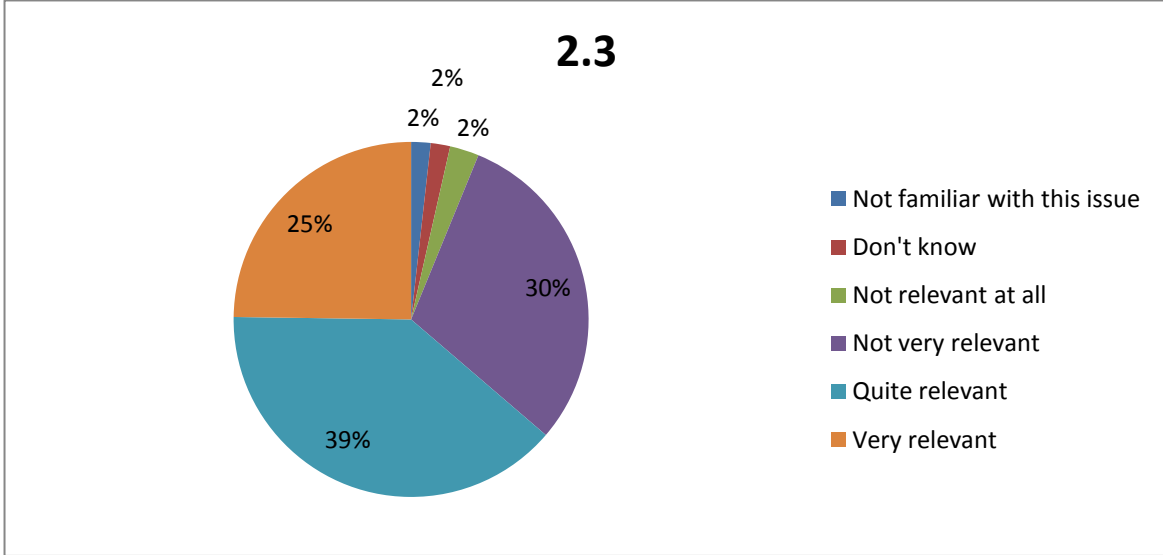
2.2: Lisbon Strategy

Just over half of respondents (52%) found the Lisbon Strategy to be **quite (15%) or very (37%) relevant**. 35% however found it to be not very relevant.



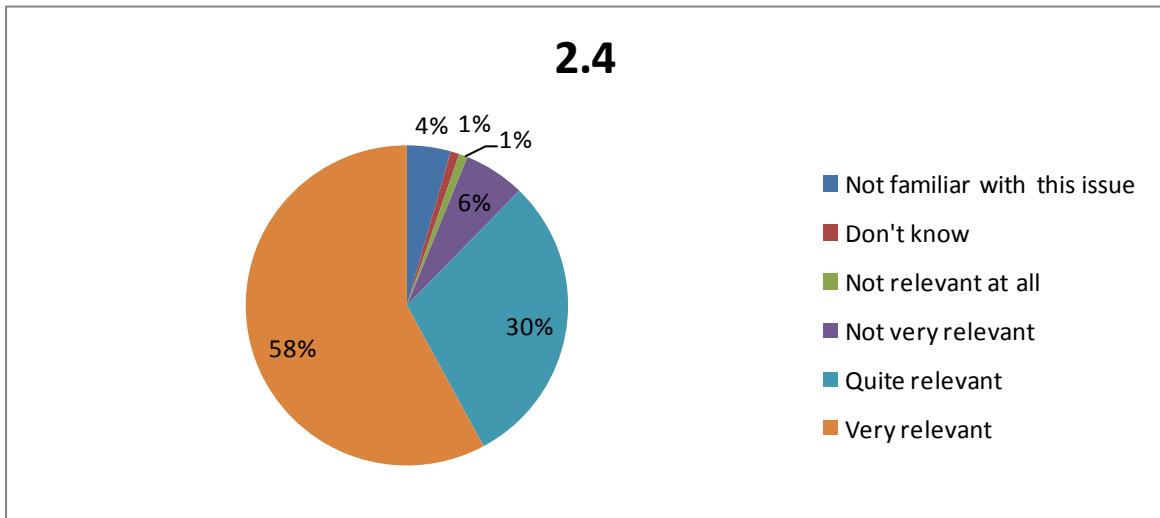
2.3: Sustainable Development Strategy

Overall, **most people** (64%) thought the SDS was either **quite relevant** (39%) or **very relevant** (25%). **A third** of people (31%) said the SDS was **not very relevant**,



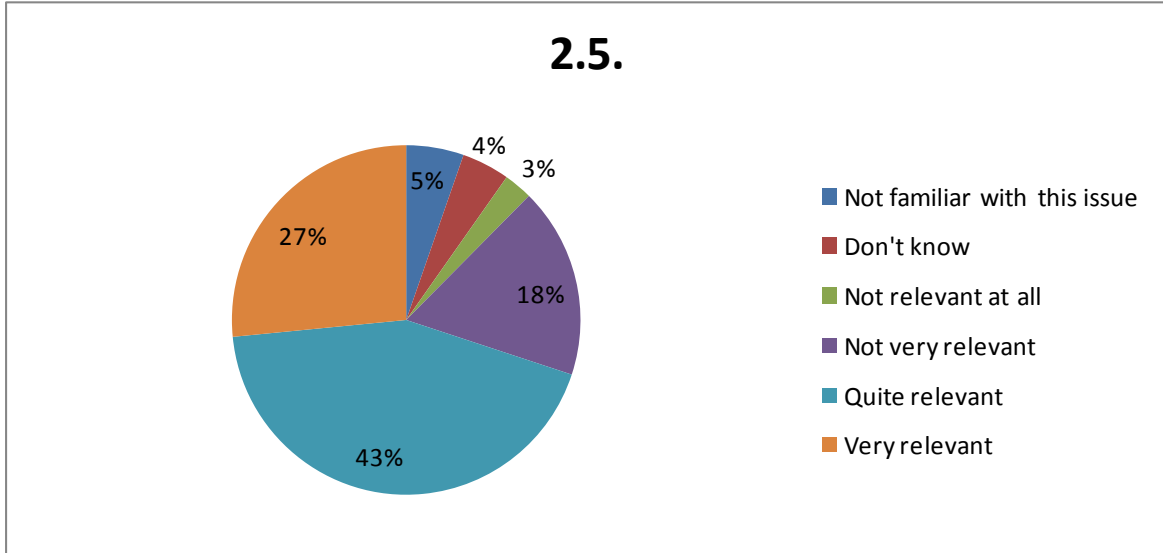
2.4: UN Framework Convention on Climate Change

A **large majority** (88%) found the UNFCCC to be **quite** (30%) or **very** (58%) relevant



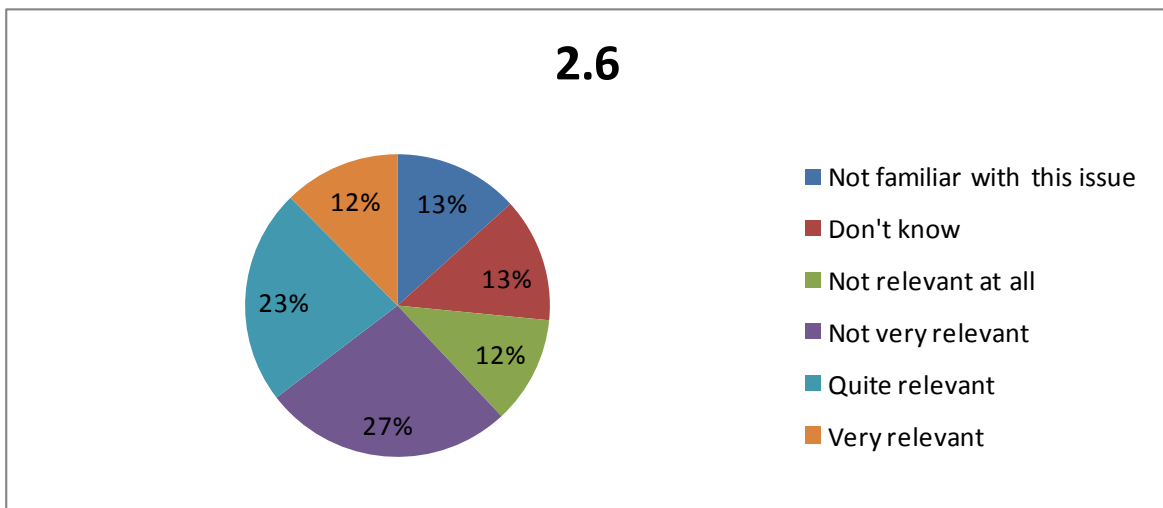
2.5: Convention on Biological Diversity

Most people (70%) found the Convention on Biological Diversity to be quite (43%) or very (27%) relevant



2.6: International Free Trade Agreements

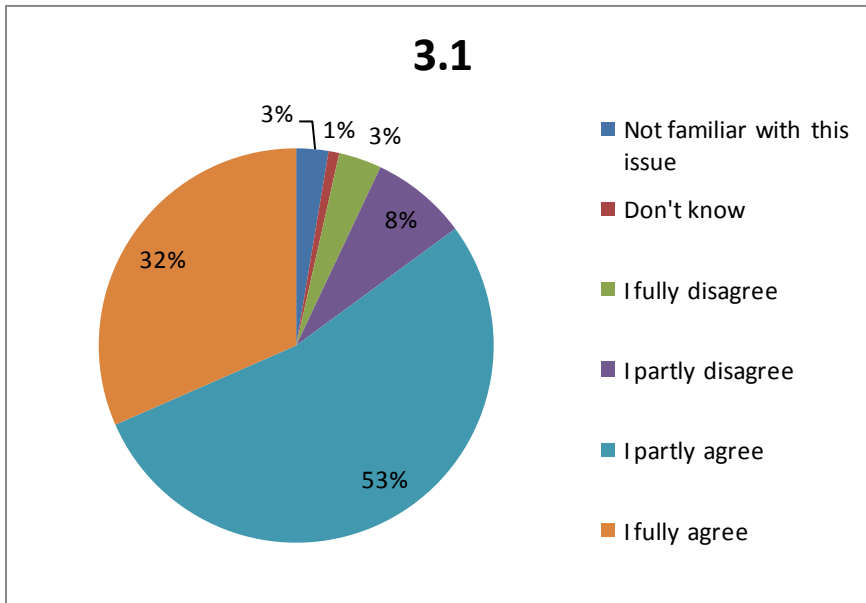
Opinions on the relevance of International Free Trade Agreements in influencing EU environmental policy were rather **equally divided**, ranging from those who thought it was very influential (12%) to those who thought it was not relevant at all (12%). However, a **quarter (26%)** said that **they either did not know or were not familiar with this issue.**



Question 3: The main environmental objectives of the 6EAP relate to the Programme’s four environmental priority areas: Climate Change, Environment and Health, Nature and Biodiversity, Natural Resources and Waste. Please indicate to which extent you agree with the following statements regarding the main environmental objectives of the 6EAP.

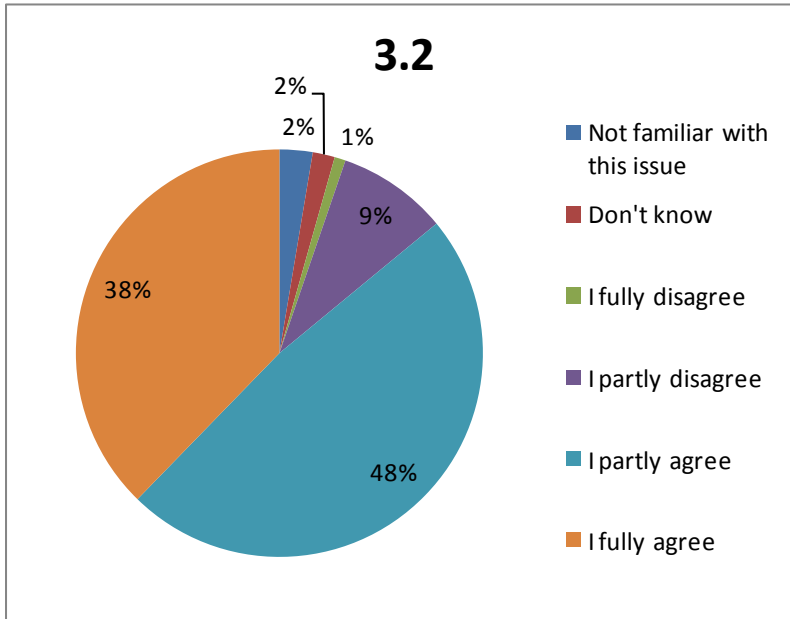
3.1: The objectives are clear

Most people.(85%) partly (53%) or fully (32%) **agreed** that the objectives are clear.



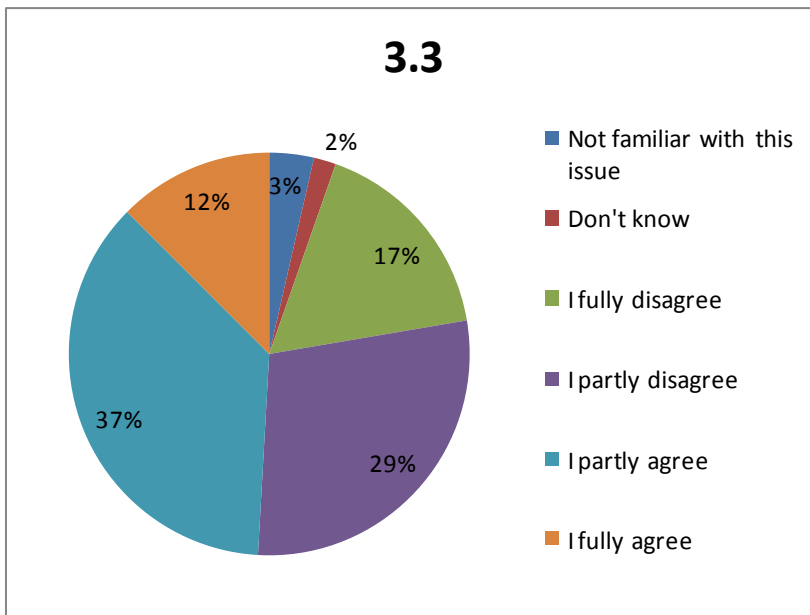
3.2: The objectives have a strategic character

A large majority (86%) fully (38%) or partly (48%) **agreed** that the objectives have a strategic character.



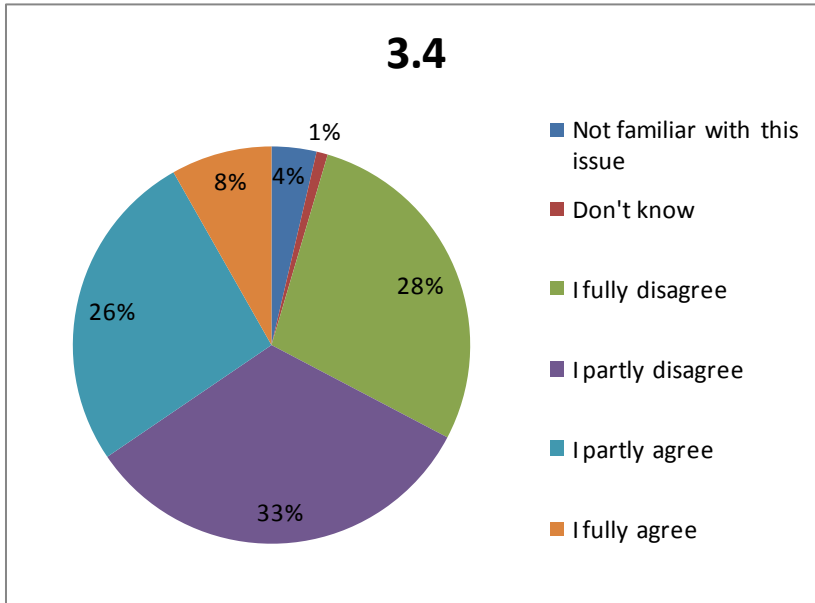
3.3: The objectives were too ambitious

No clear answer. Most answers fell in the middle, either partly agreeing (37%) or partly disagreeing. (29%)



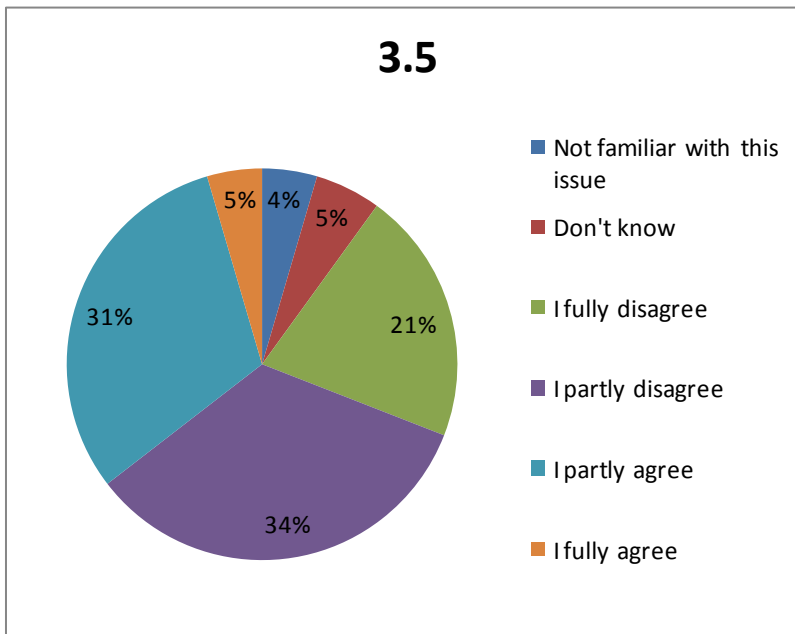
3.4: There were too many objectives

Weighted around the middle: 61% fully or partly disagreed, 26% partly agreed. Very few fully agreed. **In general it was not felt that there were too many objectives.**



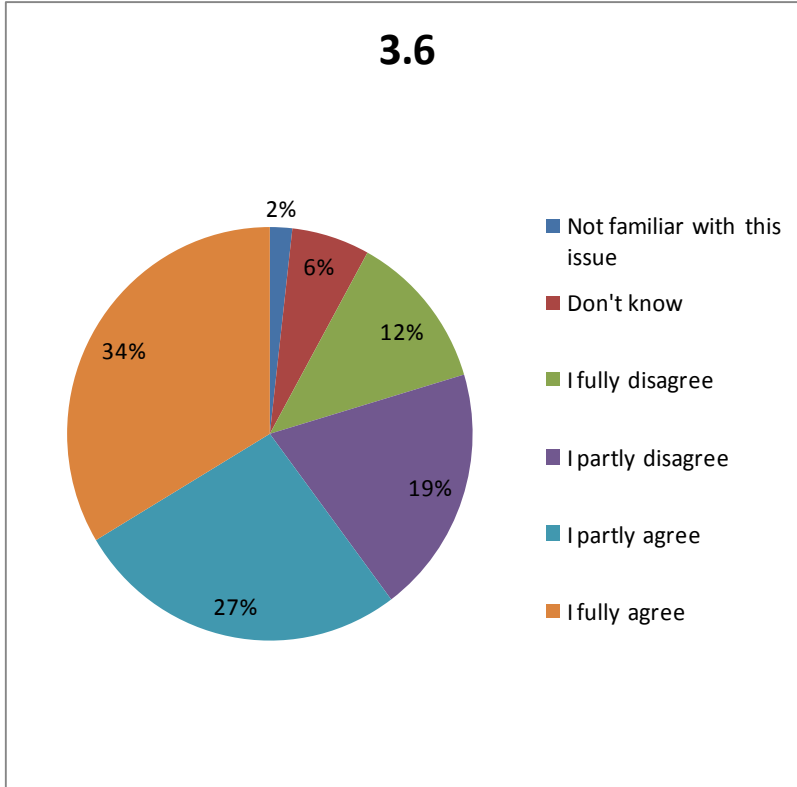
3.5: The objectives were inconsistent.

Weighted around the middle. 55% fully or partly disagreed, 31% partly agreed. **In general it was not felt that the objectives were inconsistent.**



3.6: More objectives should have been specified by quantitative targets

Just under two-thirds (61%) of participants either fully (34%) or partly (27%) agreed. Nearly one-third (31%) fully (12%) or partly (19%) disagreed. **In general it was felt that more objectives should have been specified by quantitative targets.**



3.7: Other

Other	Because
	The objectives are 'strategic' in the sense that they are rather loose and would require well designed back up from more specific policy measures . Simply specifying quantitative targets would not help at the level of the strategy, if no coherence is achieved across different policies
Need for quantitative targets and deadlines for some emissions	Need for quantitative targets and deadlines for some emissions, especially emissions of air pollutants and greenhouse gases. Such targets are needed both for attainment of interim environmental objectives and for ultimate objectives.
	There was no real integration at a strategic level
	The GHG emissions objectives are now fulfilled partly because of the economic crisis but progress had been made in the EU (not elsewhere) before 2008. The biodiversity conservation objectives are not fulfilled in Europe or anywhere else (partly because of misguided bio-fuel, agricultural and trade policies in the EU.

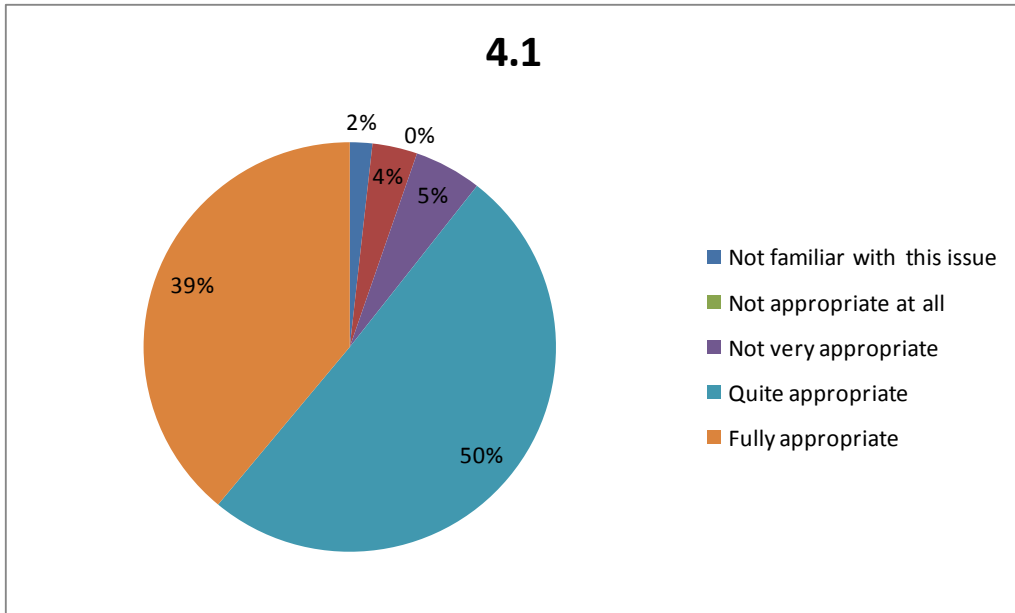
<p>The objectives should have been clearly defined in the Regulation</p>	<p>None of the identified priorities have definitions within Decision No 1600/2002/EC</p>
<p>More emphasis should have been on integrating environmental protection into other policies.</p>	
<p>Impacts of trade</p>	<p>There has not been enough emphasis of incorporating the precautionary principle into decisions impacting the trade of species, particularly as the EU is a major importer of wildlife and/or products.</p>
<p>Insufficient coverage of the inter-dependency among the different objectives</p>	<p>Insufficient coverage of the inter-dependency between different objectives poses high risk of inconsistency of policies (duplication of approaches, conflictive policy formulations, low efficiency of measures etc.) and leaves synergies unused.</p>
<p>Objectives were too broad, and therefore hard to quantify</p>	
<p>National disparities, policy differences were not considered and tackled</p>	<p>The gap between the EU and the MSs (and between the MSs) was broadening during the last years. Some countries did not take the 6EAP nor their national EAP seriously.</p>
<p>More specific objectives are needed</p>	<p>Example: Climate change or nature and biodiversity. Both objectives need specific actions that have to be implemented and those objectives need to be realistic and in a rural development context. Rural development is a key element that should be presented as a priority area. More integral policy is needed.</p>
	<p>The 6th Environmental Action Programme contains many principles, against which it is difficult to assess progress or success, for example increasing the role of market-based instruments to help meet environment policy goals. It would be useful to have clear aims against which to assess success in delivering the Programme.</p>

<p>Sustainable consumption should have been added to highlight the role of consumers</p>	
<p>1. The objectives were scientifically-based 2. The objectives have encompassed the Sustainable Development principles (I partly disagree)</p>	<p>1. A solid understanding and consensus on the scientific base is indispensable before possible policy initiatives are assessed.</p> <p>2. The definition of environmental objectives must encompass fully an integrated approach which gives equal weight to the three inter-linked 'pillars' of sustainability (economic, social and environmental).</p>
<p>Objectives should have been better linked to effective actions</p>	<p>Art 16 in preamble mentions the need for a multidimensional approach. Art 2.4 promotes the full integration of environmental protection into all policies and actions and vice versa. ETUC welcomed that but observes huge implementation gaps, and trends of env. policies towards soft law which is bad for social cohesion.</p>
<p>Based on science, sustainability and risk approach</p>	<p>Improving the definition of objectives (truly measurable and scientifically based) and targeting all components of society in a balance manner (housing, agriculture, industry, transport, etc)</p>
	<p>Objectives could perhaps have been SMARTer with key milestones</p>
<p>The objectives were scientifically-based</p>	<p>The precautionary principle and the prevention one could have used with a better balance. As a matter of fact, in application of the precautionary principle, the environmental objectives often were settled without a solid understanding and consensus on the scientific base, while it was better, in accordance to the prevention principle, to obtain this knowledge that is indispensable before possible policy initiatives are assessed.</p>
	<p>These comments relate only to the sustainable use and management of natural resources and waste</p>
	<p>the thematic strategies were prepared too late and the 'institution' of the implementation was weak</p>

Question 4: What do you think about the choice of the four environmental priority areas of the 6EAP? Please indicate to which extent, in your opinion, the choice of environmental priority areas was appropriate.

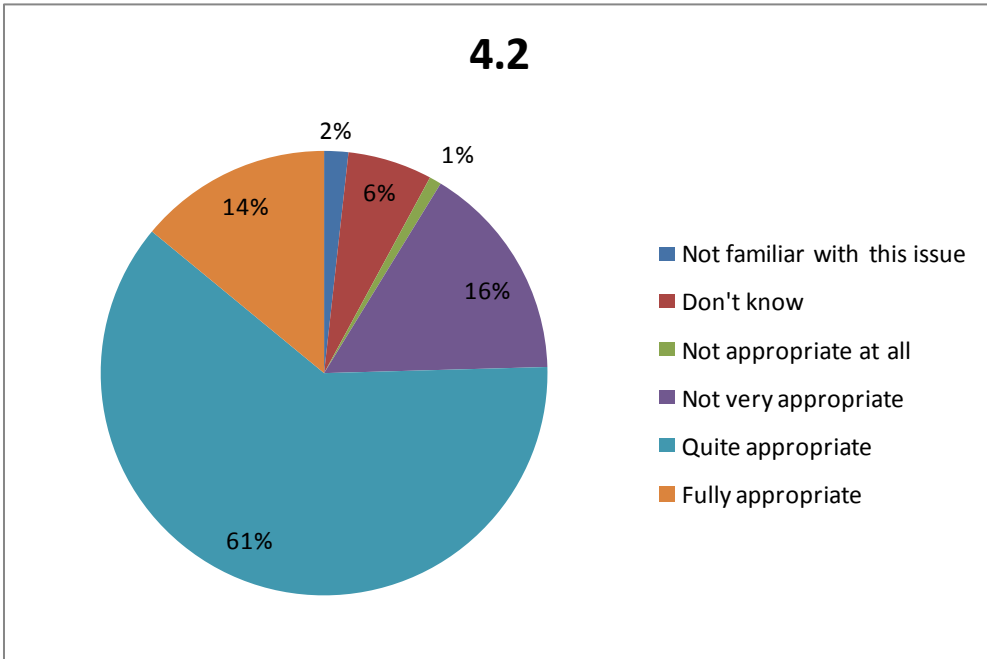
4.1: Choice of the four priority areas

A large majority (89%) thought that the choice of the four priority areas was either quite (50%) or fully (39%) appropriate.



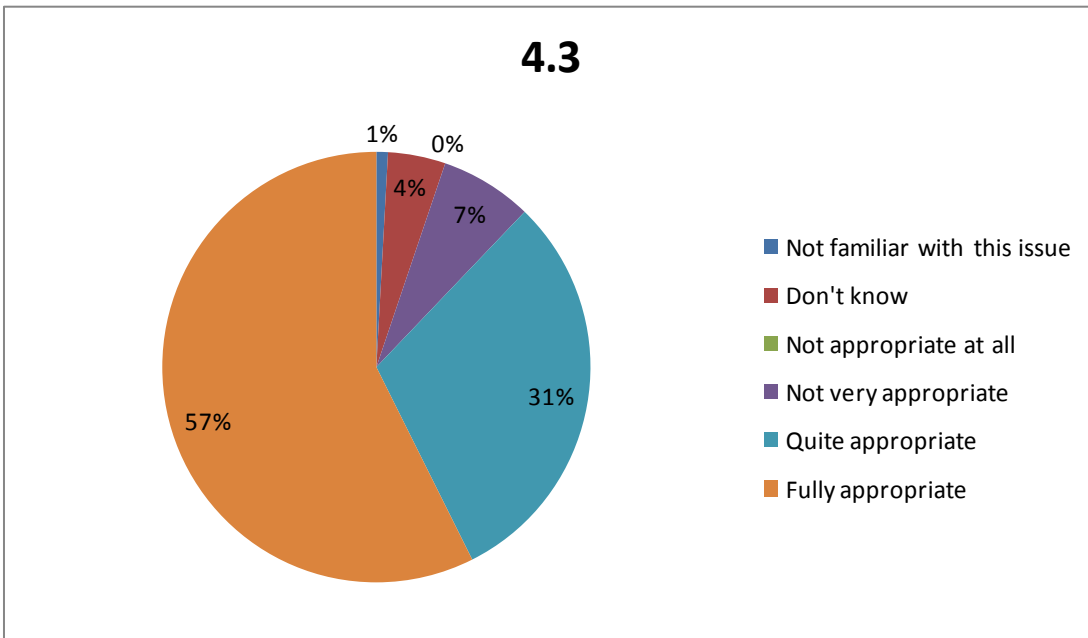
4.2: Overall balance of the four priority areas

Most people (61%) thought the overall balance of the four priority areas was **quite appropriate**. 16% found the overall balance to be **not very appropriate**. 16% found the overall balance to be **not very appropriate**. 16% found the overall balance to be **not very appropriate**. 16% found the overall balance to be **not very appropriate**. 16% found the overall balance to be **not very appropriate**.



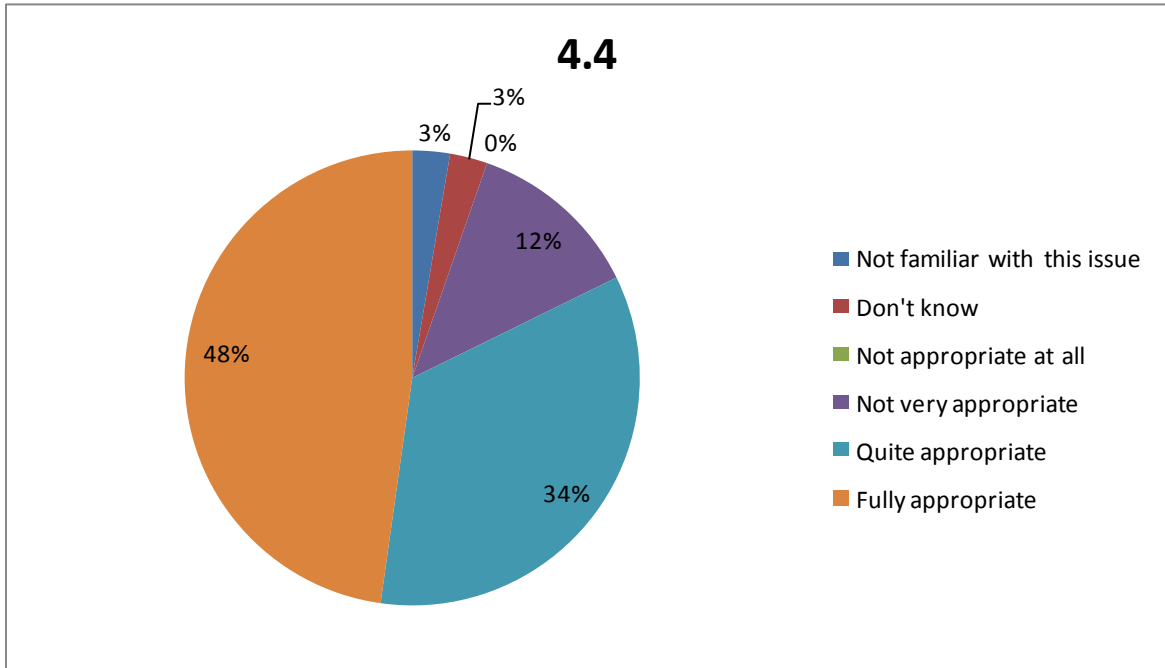
4.3: Choice of Climate Change priority area

A large majority (88%) thought the choice of Climate Change was fully (57%) or quite (31%) appropriate. **No respondents** thought this was **not appropriate at all**.



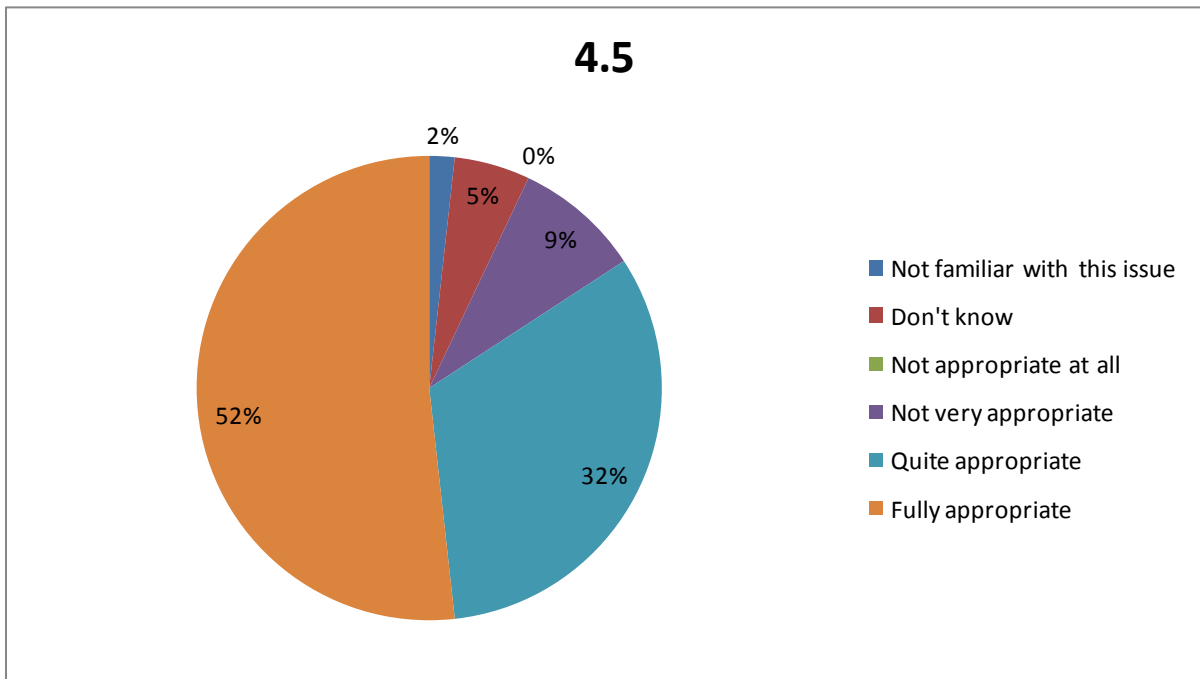
4.4: Choice of Environment and Health priority area

A large majority (82%) thought this was fully (49%) or quite (33%) appropriate. None thought this was not appropriate at all.



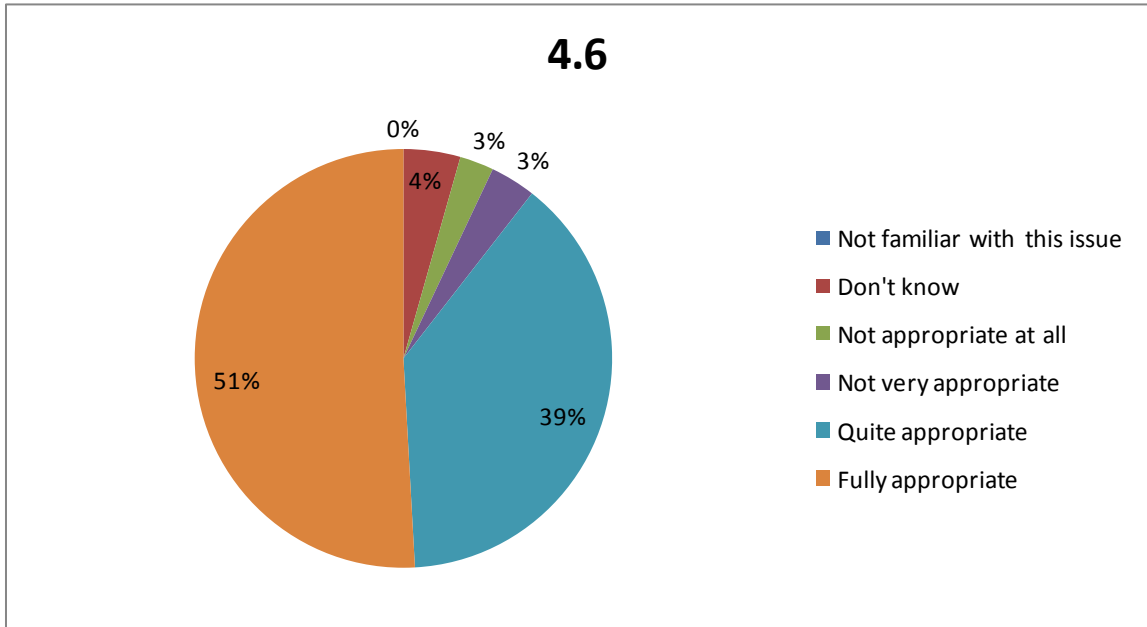
4.5: Choice of Nature and Biodiversity priority area

A large majority (84%) thought that this was either fully (51%) or quite (33%) appropriate. None thought this was not appropriate at all.



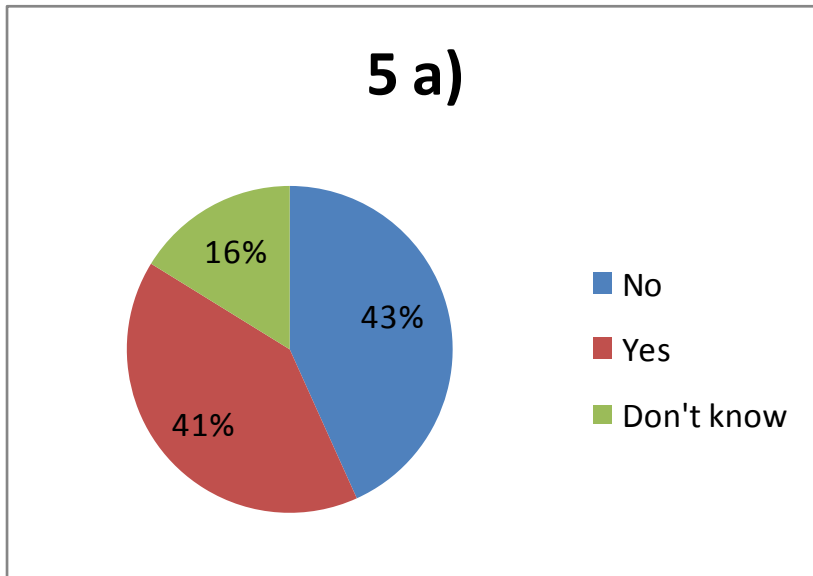
4.6: Choice of Natural Resources and Waste priority area

Almost all respondents (90%) thought this was **fully** (51%) or **quite** (39%) appropriate. A few (3%) thought this was **not appropriate at all**.



Question 5a: Do you think that important areas or issues are missing in the 6EAP?

Evenly split between Yes (41%) and No (43%).



Question 5b: If yes, please elaborate:

Better implementation of existing policies should have been afforded more emphasis.
Natural resources - could have been expanded to also cover sustainable production and sustainable land use
Eutrophication (nitrogen overload of terrestrial and coastal ecosystems) is underestimated as a problem. Health damage from air pollution is also under-prioritised.
Sustainable consumption and production issues. Green and sustainable consumerism. Green Growth and Green Economy
<p>The Commission has taken a strong position on some subjects that deserve an important place on the Agenda, such as:</p> <ul style="list-style-type: none"> - Water (and it should continue dealing with this vital matter). - Criminal law applied to environmental matters. - Civil responsibility for environmental damage. <p>BUT I consider that the Commission has ignored the full environmental implications of the negotiations of the International Free Trade Agreements.</p>
More work on valuing environmental benefits and costs for inclusion in policy and decision making
<p>'getting the prices right' in order to create incentives for change, should have been addressed.</p> <p>without this, the setting of targets is not effective.</p>
<p>More focus on cities and urban-rural relationship.</p> <p>More focus on transport aspects (climate change and air quality and noise)</p>
What is mainly missing is lack of consistency between 6EAP and other strategies on EU level
Consumption and production patterns should have been central, backed up with clear targets on reduction of resource
Land use planning
<p>a) A world perspective, rather than only European. This is mentioned but EU industrial and economic policies are still based on seeing the rests of the world as markets for exports and sources of cheap raw materials. Inconsistent with biodiversity objectives. b) Excessive reliance on eco-efficiency, not enough emphasis on 'rebound effects', failures of GDP as indicator of well being... In the 1970s, 1980s all this was discussed already. The EU has waited too long to go</p>

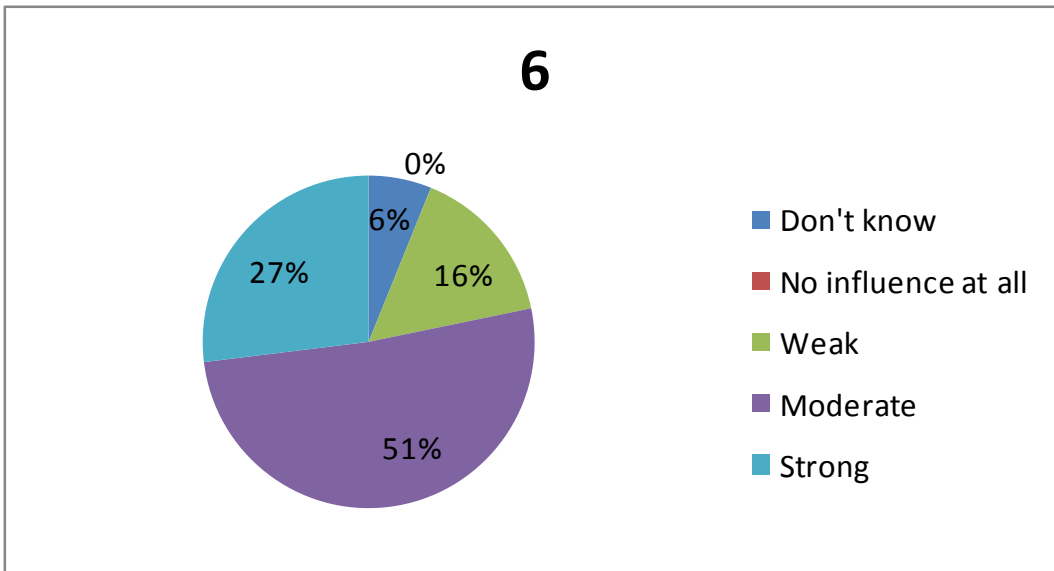
'beyond GDP'. Now it seems as sour grapes.
'cross media' effects
the economic questions, green growth e.g., too less relation to the EU sds
<p>The welfare of animals should have been fully integrated into the 6 EAP. The 6 EAP aims not only to conserve wild animals but also to protect them. The importance of animal welfare in relation to the environment is already recognised by the Community with regard to laboratory animals, trapping standards, zoo animals, trade in wild animals and rural development, but much remains to be done for a broad recognition of the link between the welfare of animals and environment protection. We believe that human health and quality of life is tightly related to animal health and welfare and that the programme's aims should have included the protection of animals.</p> <p>Enforcement of environment law must also be increased and there is an urgent need for an EU environmental inspectorate or a mechanism which would allow to monitor the way Member States control the enforcement of EU environmental legislation at national level.</p>
water, ecosystem services (new concept since 2002)
More emphasis needed on land use and soil protection, substitution of dangerous chemicals, and addressing the non-implementation or non-effective implementation in the Member States.
There should be greater emphasis on trade considerations that take into account sustainability and the precautionary principle.
Other new emerging areas need to be included.
Compliance and enforcement is missing!!
Explicit inter-links across the four priorities
<p>Area: Environmental inequalities/justice</p> <p>Issue: Better coordination of European environment and health research and public health agencies</p>
'water' is an important (crosscutting) element of all priority areas, and should be brought more to the foreground, ideally as a separate area, not just focusing on supply management, but also clearly on demand management, which was stated as a priority objective by the Commissioner for Environment.
<ol style="list-style-type: none"> 1) The lack of the links to global environmental objectives. 2) To tackle the imbalances between the political influence of the economy and the environmental interests.

<p>Not at the time that it was agreed. But the economic perspective and accounting tools have become more important over the lifetime of the 6thEAP.</p>
<p>Rural development. It is needed a much more integral vision of environment strategies.</p>
<p>greening the economy-better climate and biodiversity policies, new agriculture, transport and cohesion policies in an enlarged Europe</p>
<p>the importance of the consumer role in sustainable consumption not clearly spelled out</p>
<p>The 6EAP failed to include a cross-cutting chapter presenting the overarching principles for smart environmental policies (e.g. scientifically-based, cost-effectiveness, stakeholder consultation, consistency and predictability of legislation, etc.)</p>
<p>new emerging areas need to be included</p>
<p>to be added: decoupling growth in gdp and in transport; a responsible development of nanotechnologies; investments needed to implement the objectives and tools to be used (regulation; economic instruments, ways to raise funds, support...)for ex in new ind policies towards a low carbon economy.</p>
<p>Greater focus on water environment including general aquatic environment (inland and marine), drinking water, Urban waste water treatment</p>
<p>the issues of other natural resources such as mineral resources, ores etc</p> <p>the link between research and environmental issues</p>
<p>The inter-connected, global interdependencies of production/consumption, climate, resource state and well-being need to be treated holistically as well (not just in isolation of each other). This needs to be looked at therefore in a global context - particularly Sustainable Consumption Production - EU needs to take responsibility for its global dependencies and address them responsibly</p>
<p>The economic benefits (including innovation) of environmental protection could receive greater attention. Furthermore, products as a main source of environmental degradation could receive greater attention.</p>
<p>By definition, giving priority to certain themes, even if broad in scope, risks undervaluing attention to themes not given priority. Among these are environmental consequences of emerging technologies, e.g. nanotechnology, or cross-sectoral matters, such as the environmental consequences of spatial planning or energy liberalisation.</p>
<p>I think maybe connection between working place and environment is important too</p>
<p>Public participation in environmental decision making.</p>

Biodiversity cross sectoral approach
Better implementation of existing environmental policies was overlooked and should be a clear priority for any future strategy
environmental awareness raising, R+D+I
More emphasis on Water

Question 6: How strong an influence has the 6EAP had on environmental policy-making at EU level?

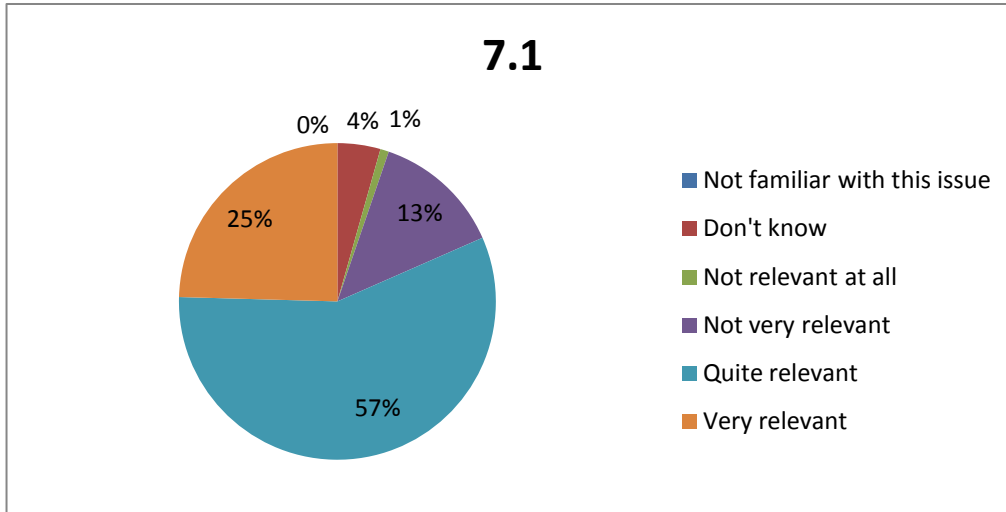
51% felt the 6EAP has had a moderate influence and 27% felt it has had a strong influence. **None answered that it had had no influence at all.**



Question 7: How did the 6EAP influence environmental policy-making in the EU? Please assess the relevance of the following statements.

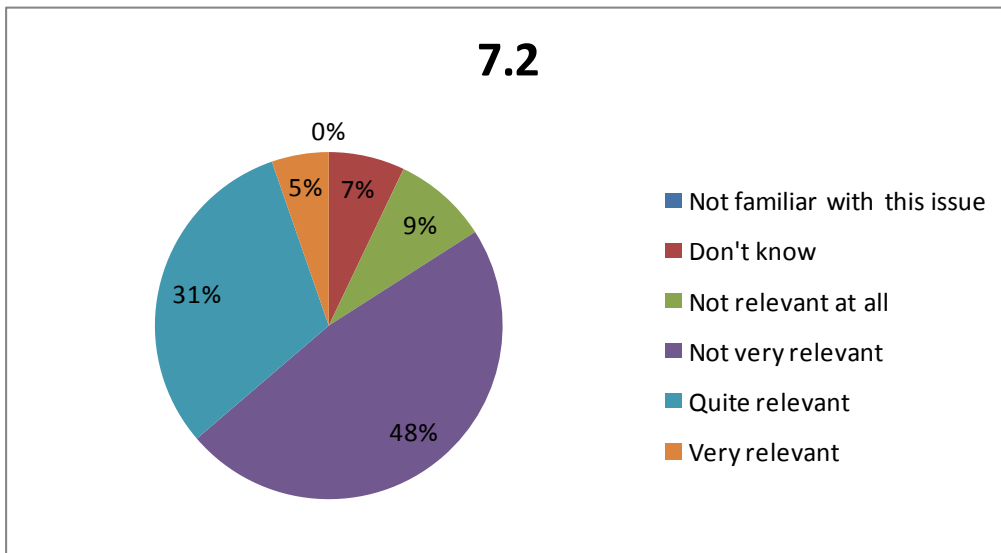
7.1: The 6EAP increased the legitimacy of environmental initiatives.

This statement was found to be quite (57%) to very (25%) relevant.



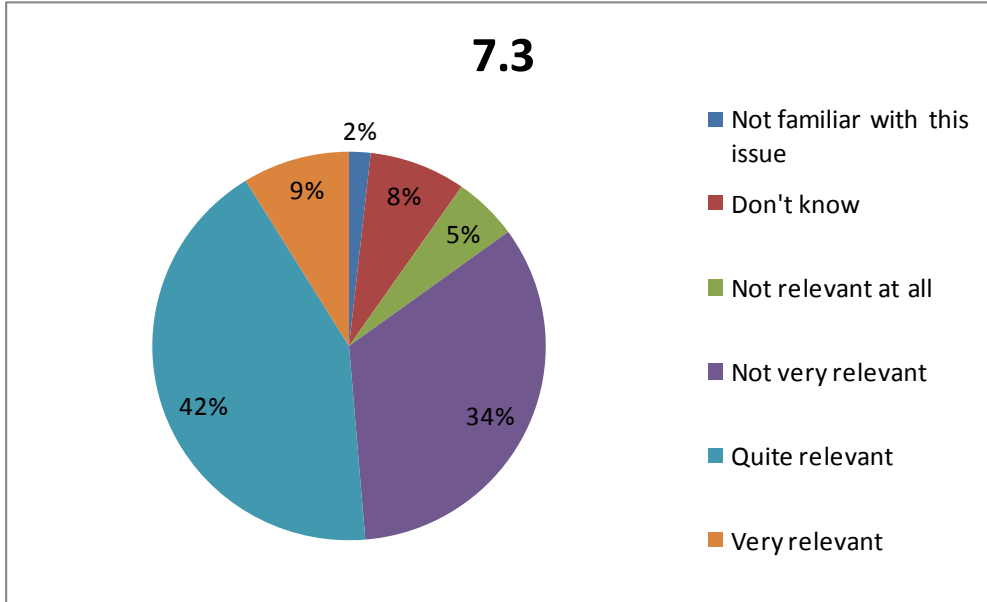
7.2: The 6EAP mobilised civil society and business.

This statement was found to be overall **not very relevant** (48%) or **quite relevant** (31%).



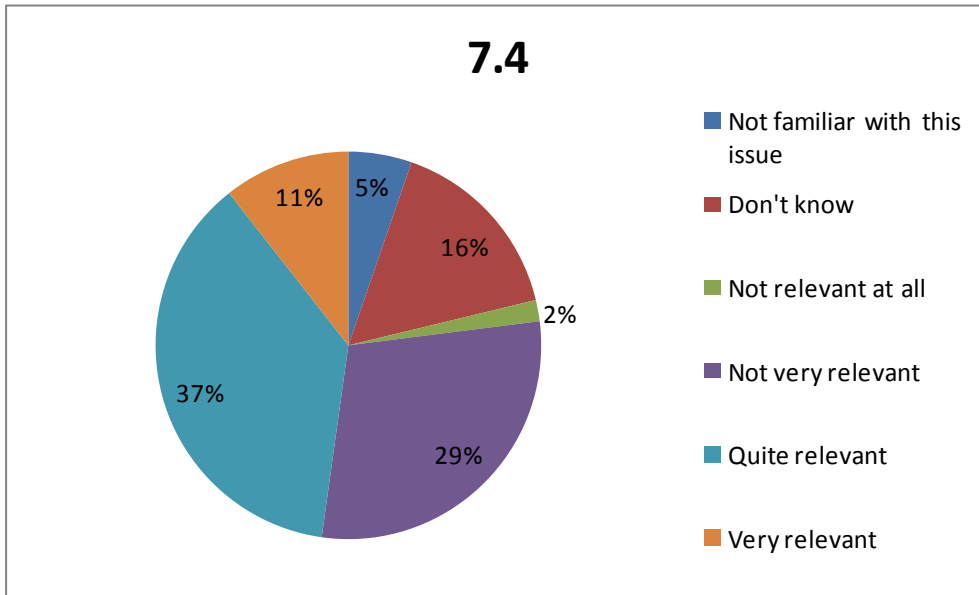
7.3: The 6EAP mobilised Member State representatives.

This statement had a **middling response**. It was **neither ‘very relevant’ nor ‘not relevant at all’**. Most respondents placed this statement in the two middle categories of **‘quite relevant’ (42%) or ‘not very relevant’ (34%)**.



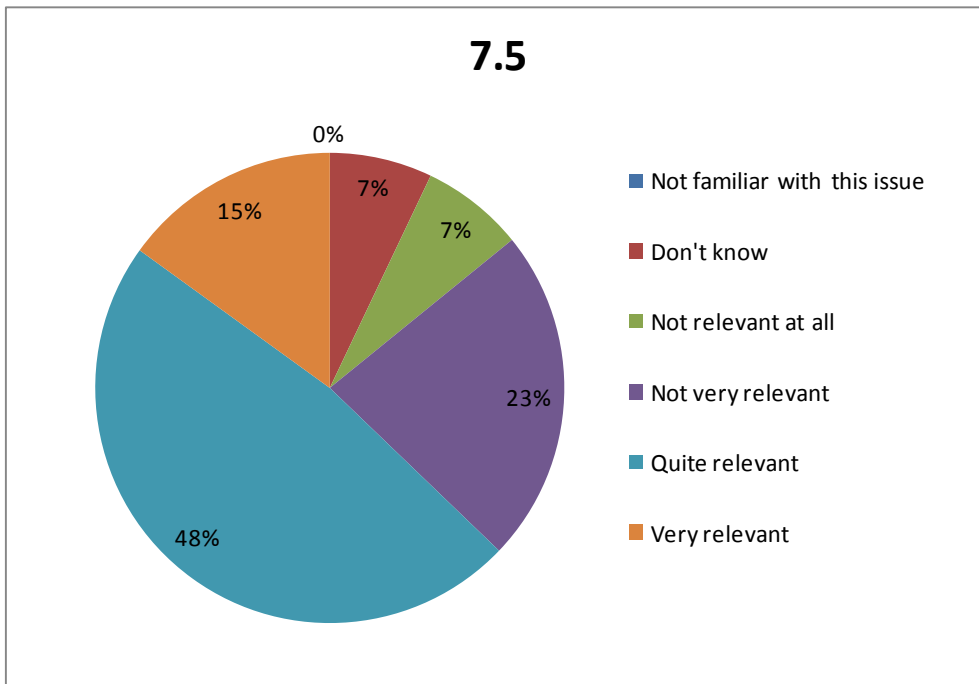
7.4: The 6EAP mobilised Members of the European Parliament.

This statement had a **middling response**. It was **neither ‘very relevant’ nor ‘not relevant at all’**. Most respondents placed this statement in the two middle categories of **‘quite relevant’ (37%) or ‘not very relevant’ (29%)**.



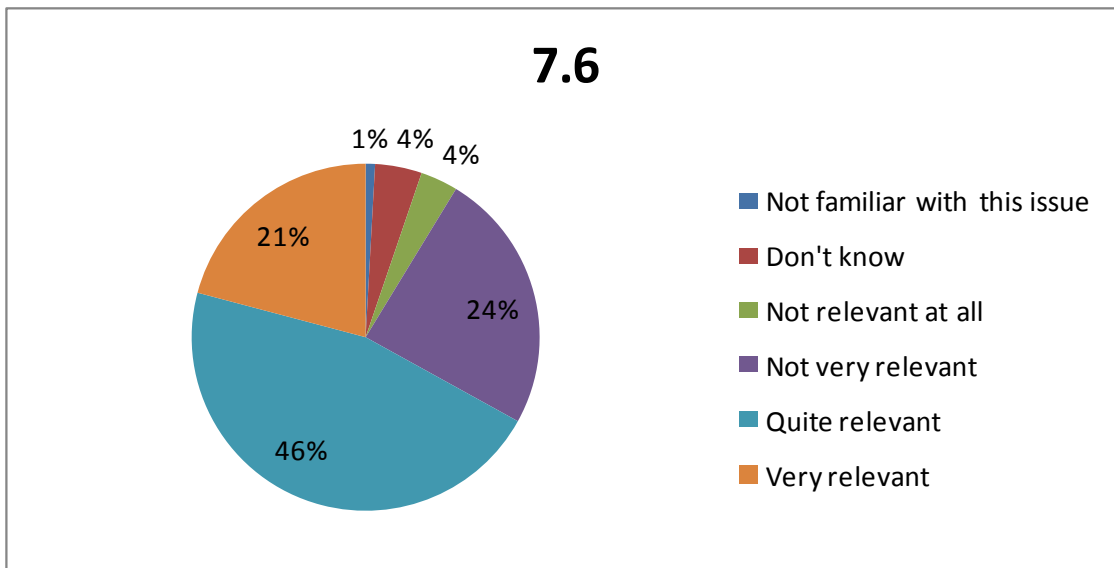
7.5: The 6EAP improved the predictability of EU environmental policy-making.

This statement was found to be **quite relevant** by 48%, **very relevant** by 15% and **not very relevant** by 23% of respondents.



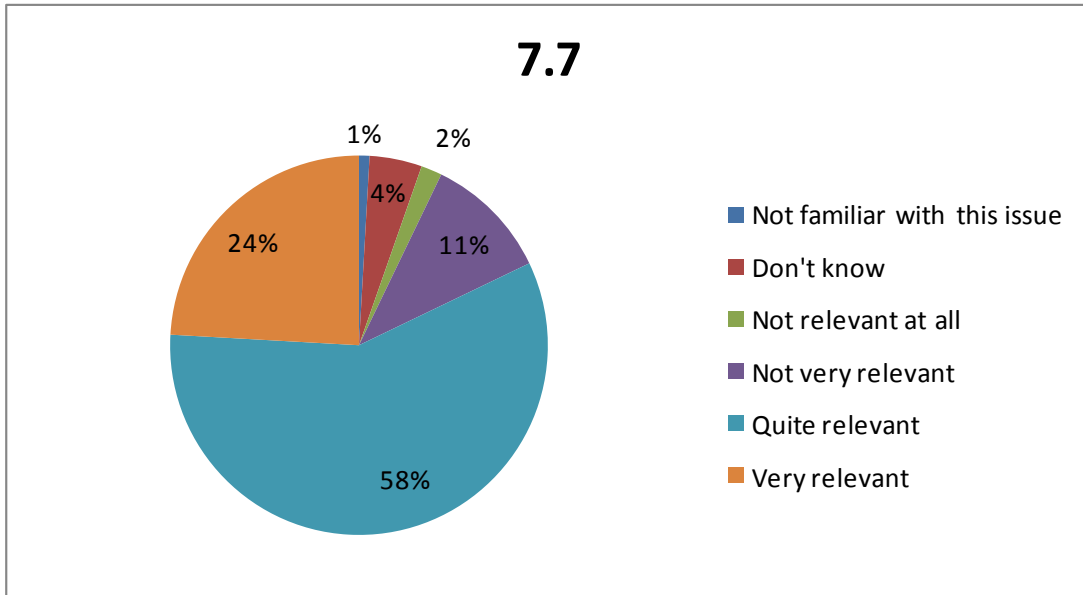
7.6: The 6EAP provided substantive environmental principles.

This statement was found to be **quite** (46%) **or very** (21%) **relevant** by 67% of respondents, while around **one quarter** (24%) found it to be **not very relevant**.



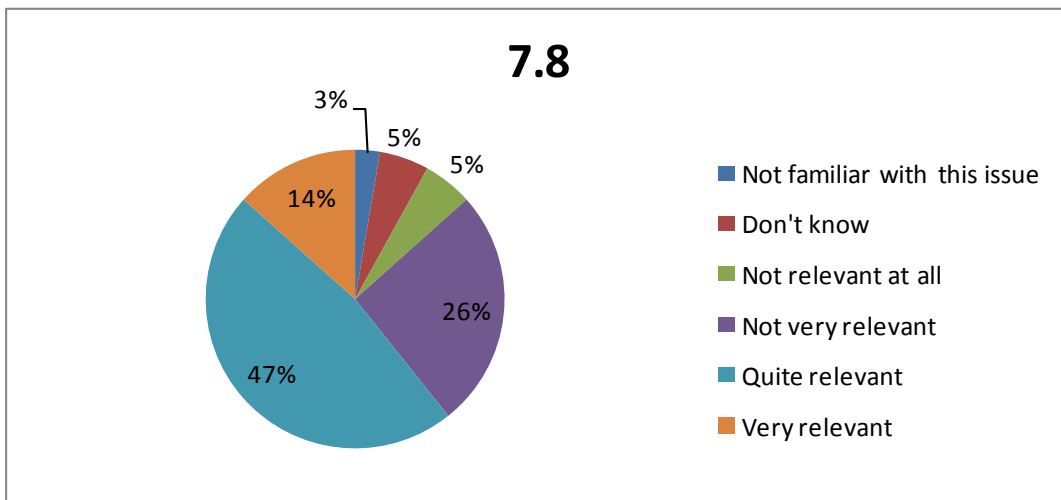
7.7: The 6EAP influenced environmental priorities in the EU.

This statement was found to be overall **quite** (58%) or **very** (24%) **relevant**.



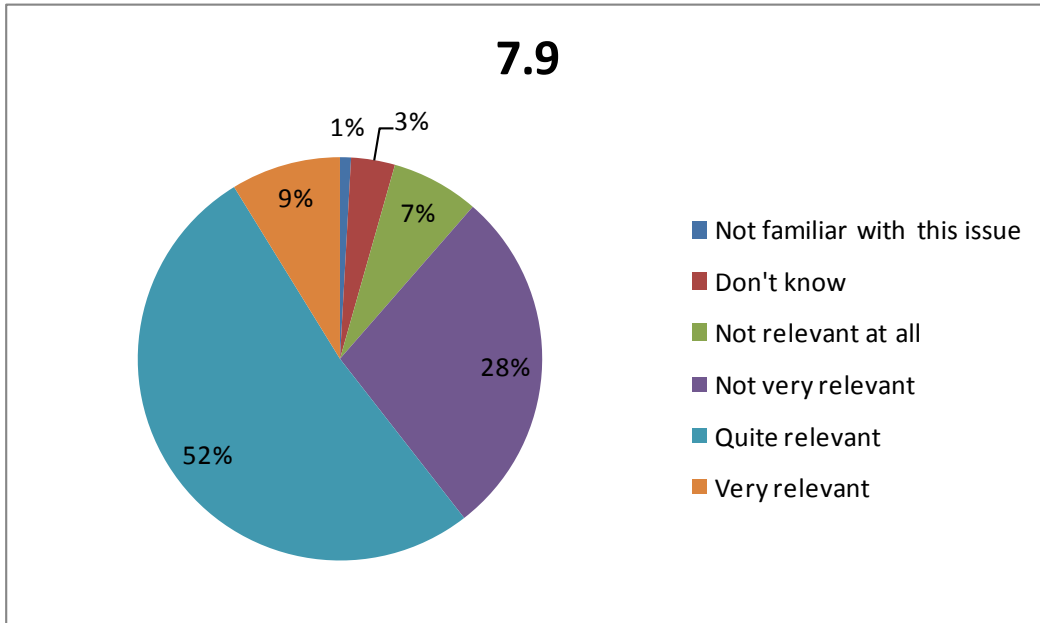
7.8: The 6EAP influenced the choice of regulatory instruments/approaches.

This statement was found by **most respondents** (73%) to be **quite** (47%) or **not very relevant** (26%). Roughly a **quarter** (24%) found it to be **very relevant**.



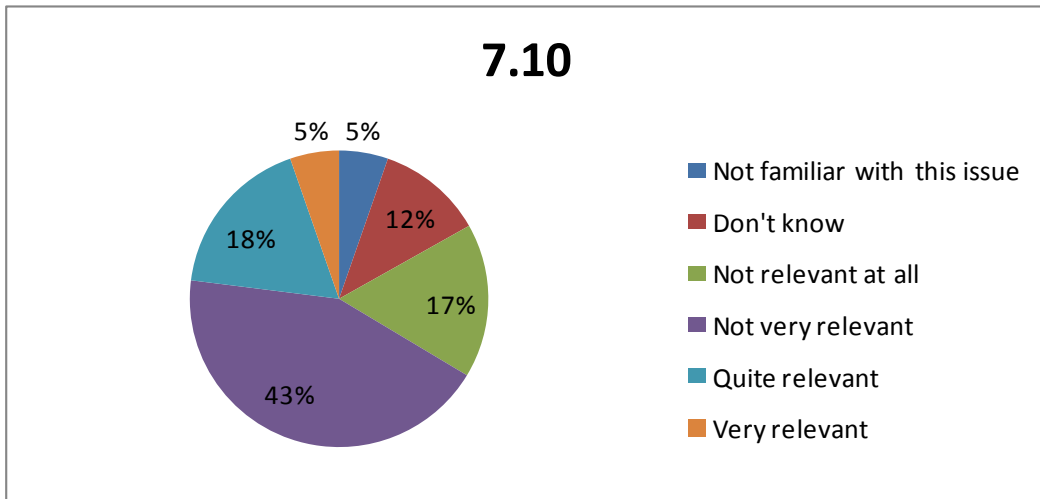
7.9: The 6EAP increased coherence among environmental policies.

This statement was found by **the majority of respondents (80%)** to be **quite (52%) or not very relevant (28%)**. Only a **small proportion 9%** found it to be **very relevant**.



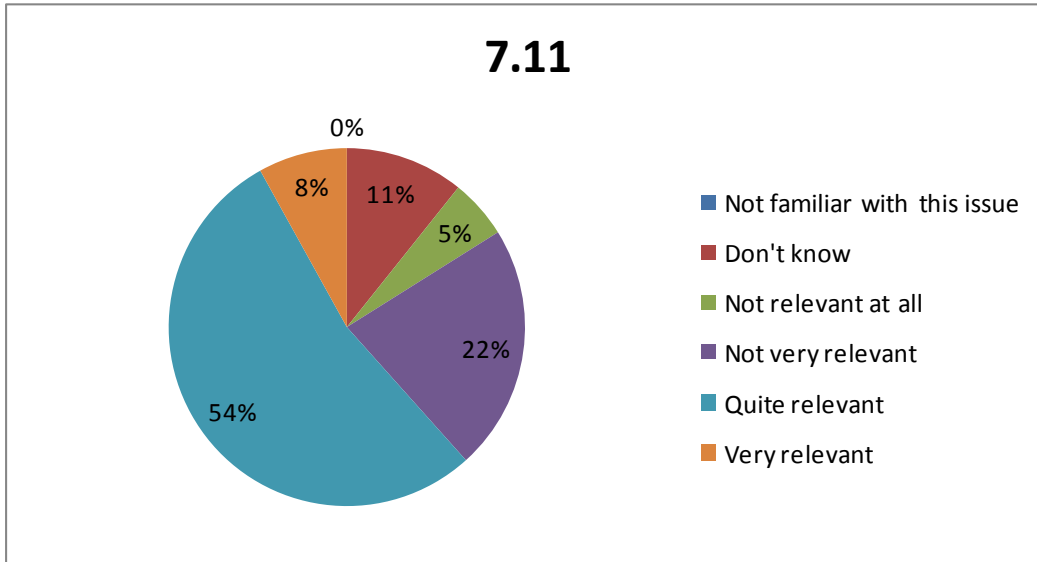
7.10: The 6EAP increased coherence with other, non-environmental policies.

This statement was found by **most respondents (60%)** to be **not very relevant (43%) or not very relevant at all (17%)**. Only a **small proportion 5%** found it to be **very relevant**.



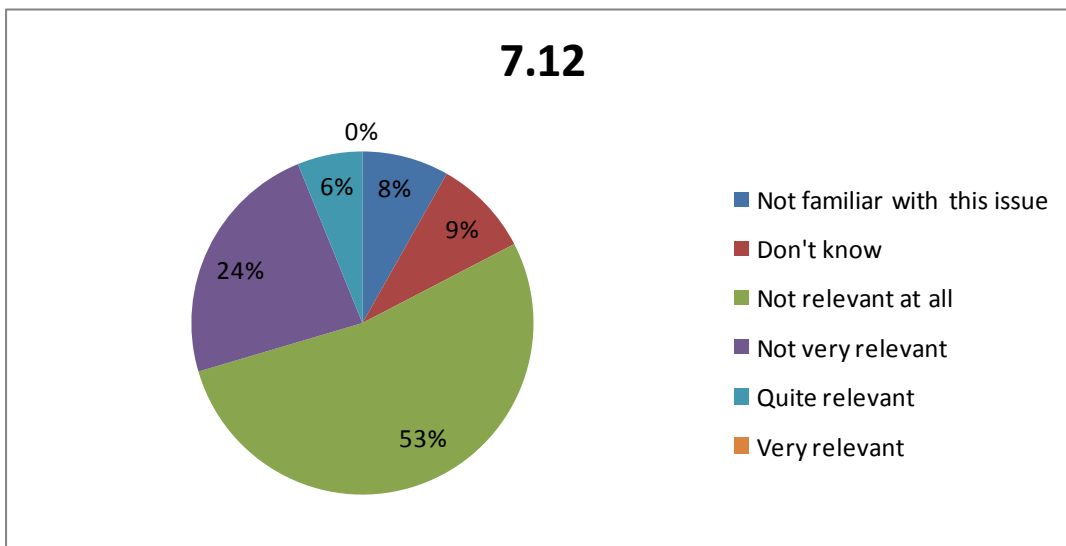
7.11: The 6EAP influenced the coherence of EU environmental policy over time.

This statement was found to be **quite relevant by just over half of respondents (54%)** with **just over a quarter (27%)** saying that it was either **not very relevant (22%)** or **not relevant at all (5%)**. 11% answered that they **did not know**. 8% answered that they **did not know**. 0% answered that they **did not know**.



7.12: The 6EAP has had no influence at all.

This statement was found to be **not relevant by a quarter (24%)** and **not relevant at all by over half of participants (53%)**. **No respondents found this statement to be very relevant.**



Other important factors and/or explanation (please specify):

The objectives and priorities of the 6EAP were highly debated at the time of its development but subsequently overtaken by a new round of debate on the thematic strategies (which should have been constrained by what had been decided in the 6EAP but was not) and the influence of the Lisbon Strategy.

The 6EAP has raised the quality of member state legislation - even in countries thinking themselves to be quite advanced. The EU legislation provides for an environmental safety net, when national government would otherwise suddenly change and make populist changes not based on best available information

There was no real integration at a strategic level, so coherence of policies was not really achieved.

For instance, the thematic strategy on natural resources was of a very different level of abstraction and potential influence than the TS on waste or pesticides but this was not reflected in strategic choices. A lot of energy went into the latter two, the first was more or less ignored. It should have been the other way round.

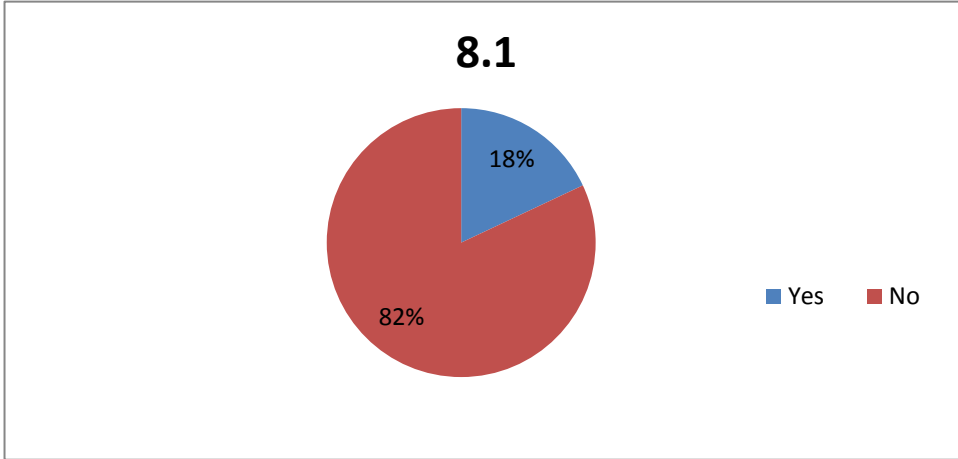
the 6EAP influenced the consistent implementation of environmental policies across EU Member States - this is not very relevant. Although there have been some improvements (e.g revised EU ETS), there are examples of distortion of competition within the EU due to differences in the implementation of European legislation. Evolving towards more harmonized implementation and effective enforcement of European legislation while preserving an adequate degree of flexibility to take account of specific national, regional or local requirements remain a major challenge for the years ahead

the 6eap has not provided for the integration of env policies into employment and social cohesion policies and vice versa. There is a need to better anticipate and manage the social aspects of env policies (for ex. the need for education and training, new skills and jobs...)through social change.

While the 6EAP may have aspired to increase coherence among environmental policies (within the traditional remit of DG ENV), I am not aware that this aspiration was effectively realised. Coherence with non-environmental policies, or to put it another way, implementation of Treaty article 6's integration imperative, was also far less effective than desirable.

Question 8: Do you think the main environmental objectives of the 6EAP have been achieved?

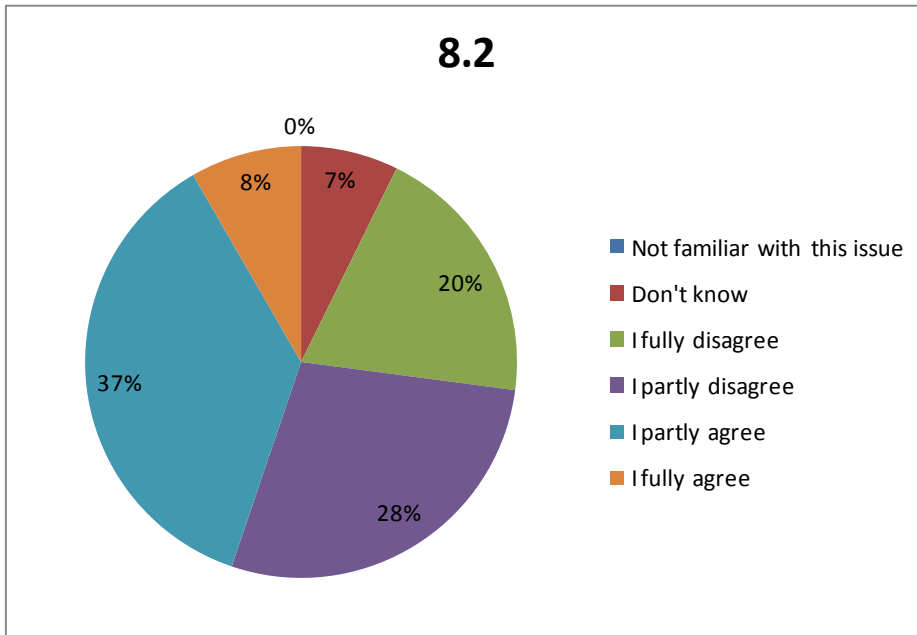
A large majority (82%) said **No**, the main environmental objectives of the 6EAP had been achieved.



If not, which of the following issues hindered the achievement of the objectives?

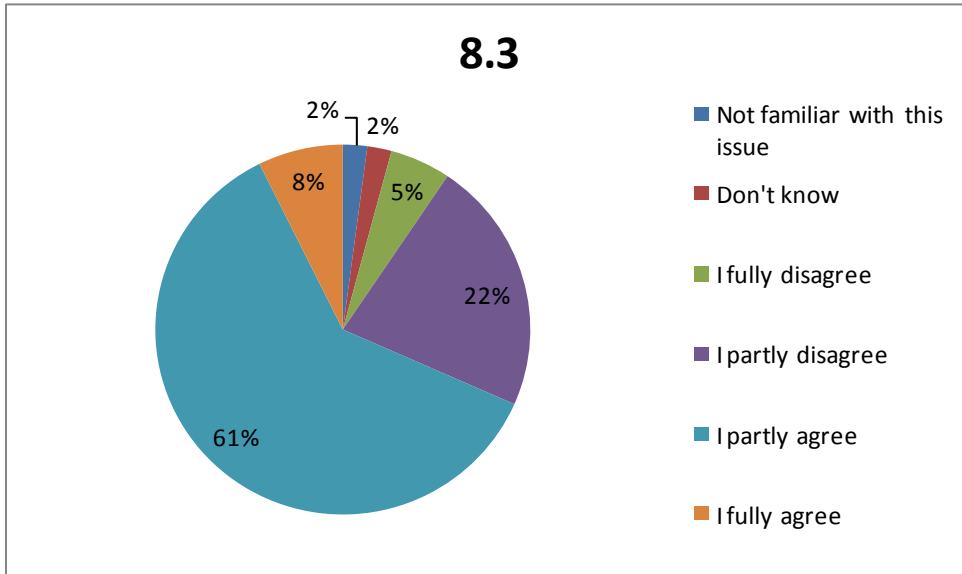
8.2: Level of ambition of the measures relevant for 6EAP was too low.

Responses were split. 48% either fully or partly disagreed, while 45% either fully or partly agreed.



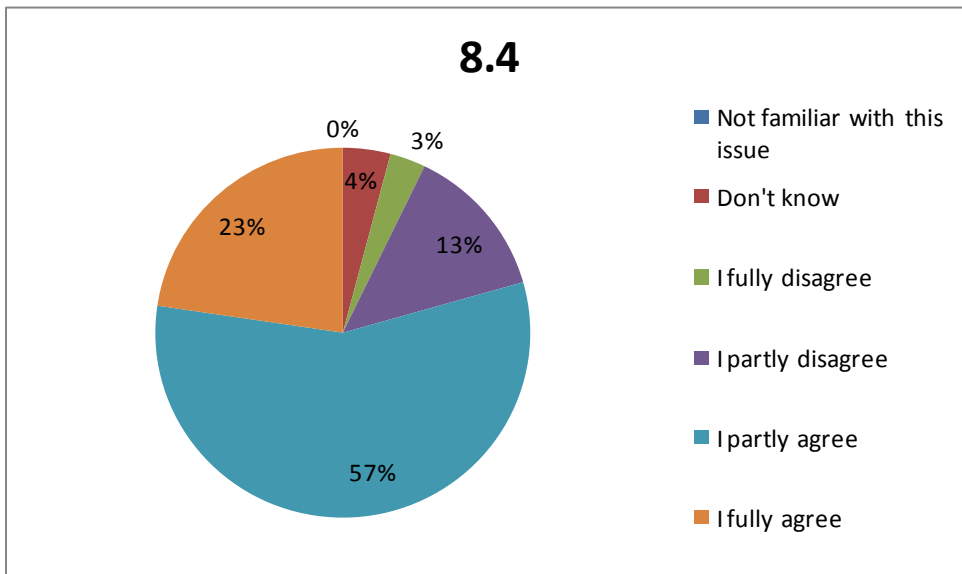
8.3: Poor design of measures relevant for 6EAP.

The majority of respondents (69%) either partly (61%) or fully (8%) agreed. 22% partly disagreed.



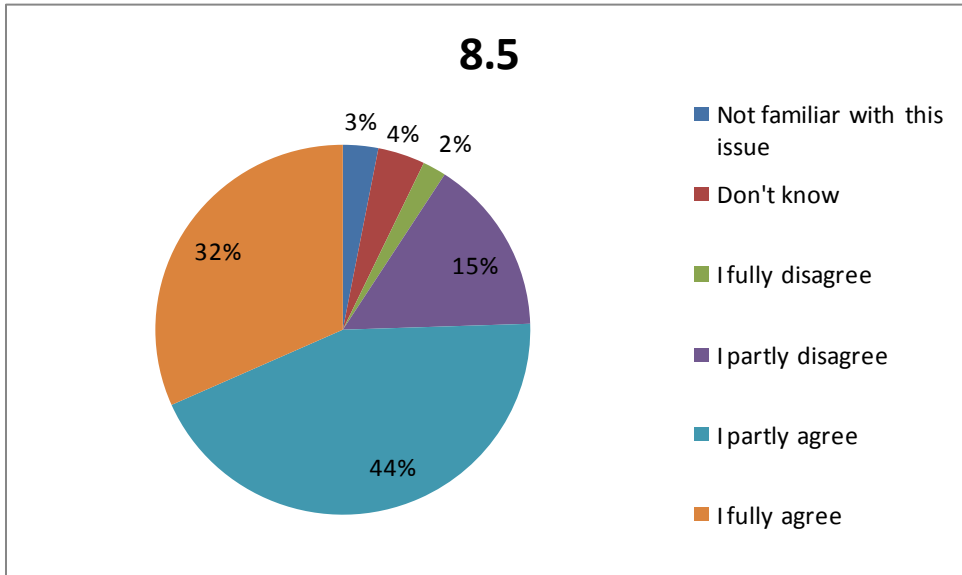
8.4: Implementation of EU measures relevant for 6EAP was poor

The majority (80%) agreed: 57% partly agreed, whilst 23% fully agreed.



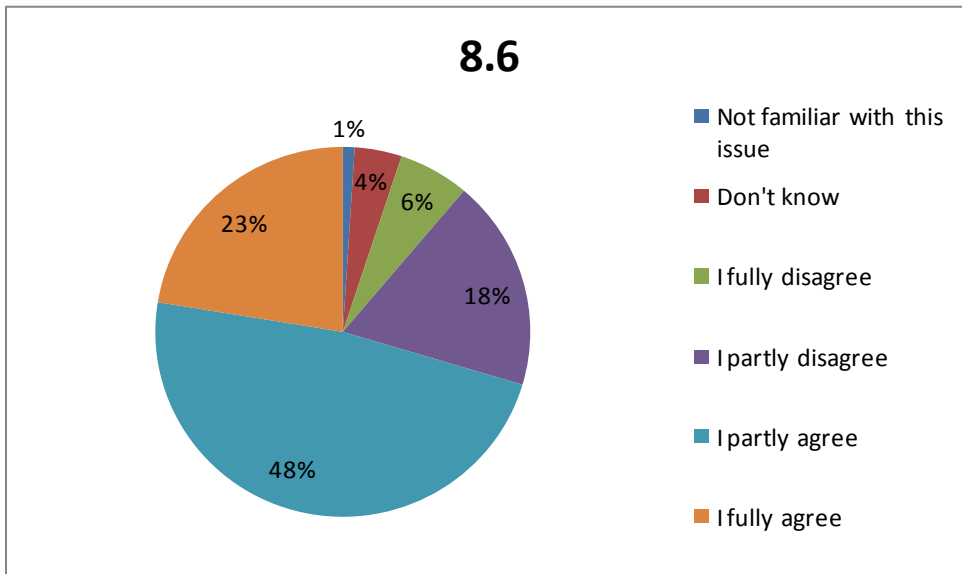
8.5: EU funding to support implementation was inadequate.

The majority (76%) either **partly** (44%) or **fully** (32%) **agreed**.



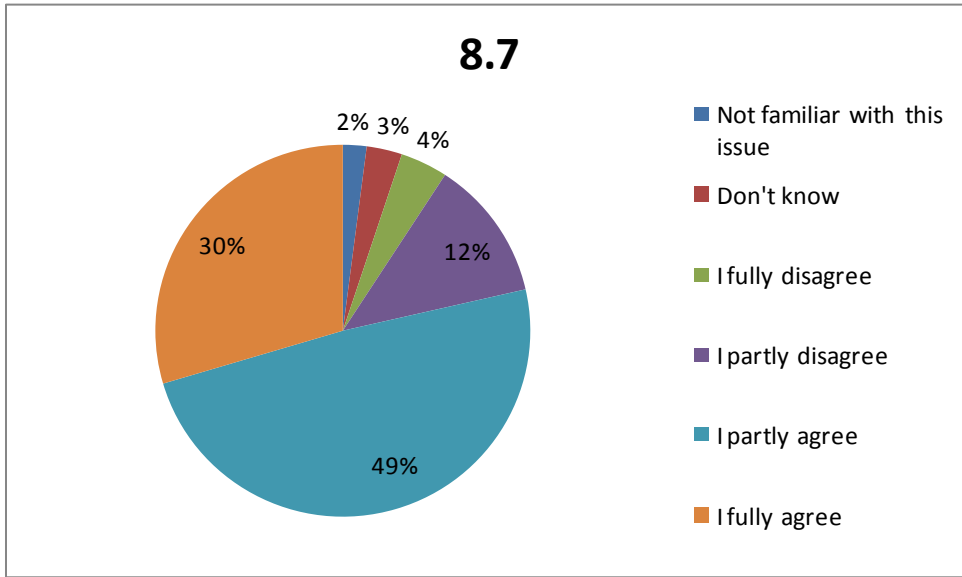
8.6: Decision-making at EU level was too complicated.

The majority (71%) **partly** (48%) or **fully** (23%) **agreed**.



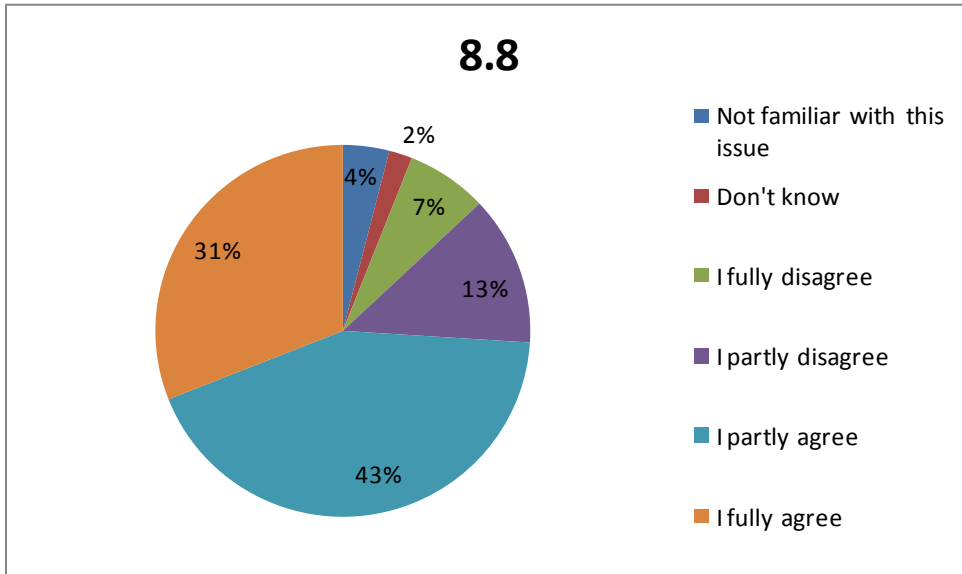
8.7: Decision-making at EU level took too long.

The **majority** (79%) either **partly** (49%) or **fully** (30%) agreed.



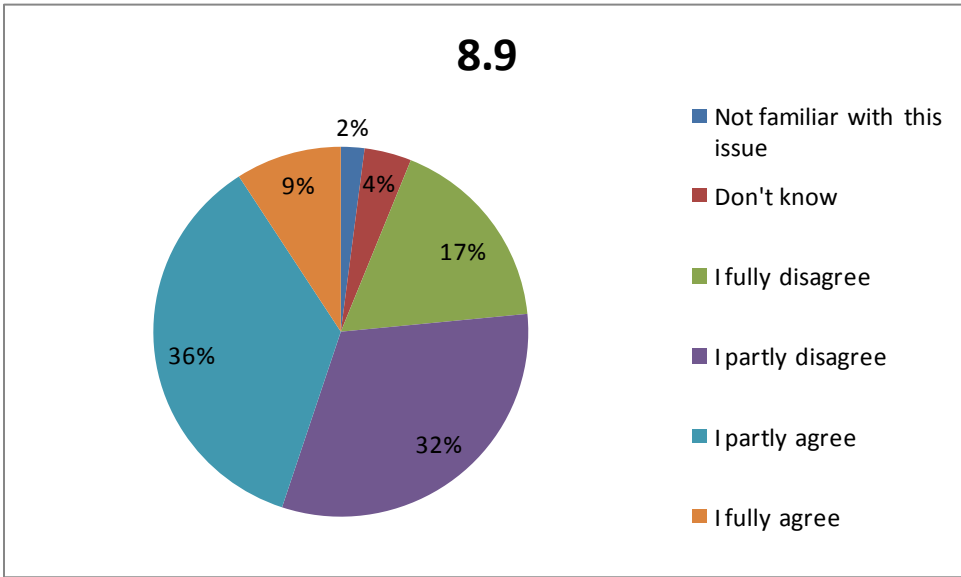
8.8: There were other more important EU priorities.

The **majority** (74%) either **partly** (43%) or **fully** (31%) agreed.



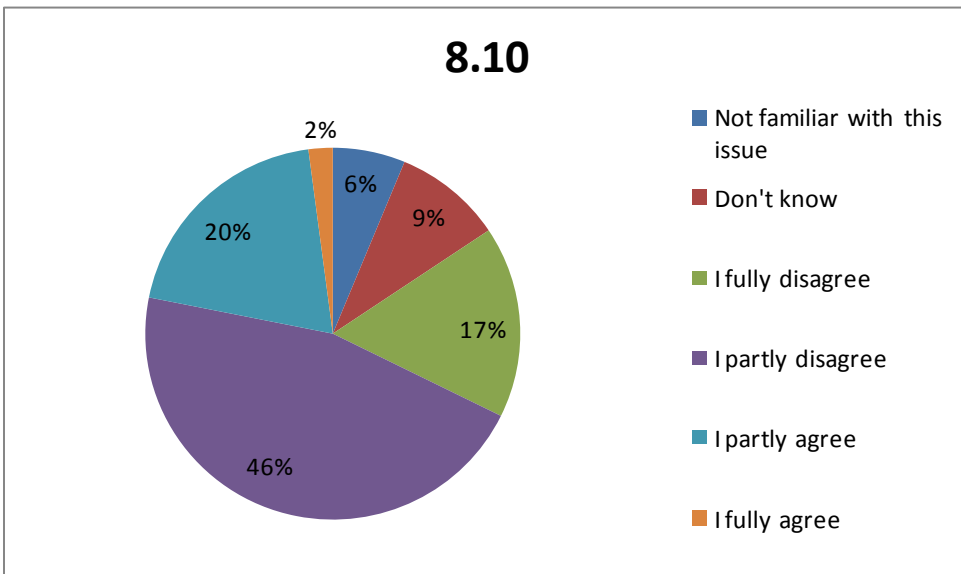
8.9: There was a lack of environmental data and/or scientific knowledge.

Responses were split. 49% partly or fully disagreed, 45% partly or fully agreed.



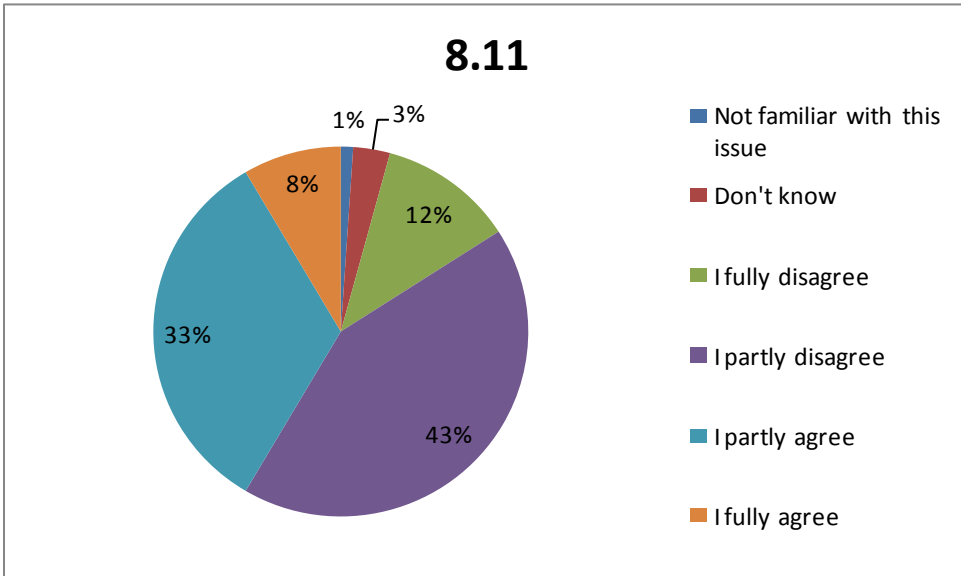
8.10: Public opinion was unfavourable

A small majority of 63% either partly (46%) or fully (17%) disagreed. 20% partly agreed. 9% did not know.



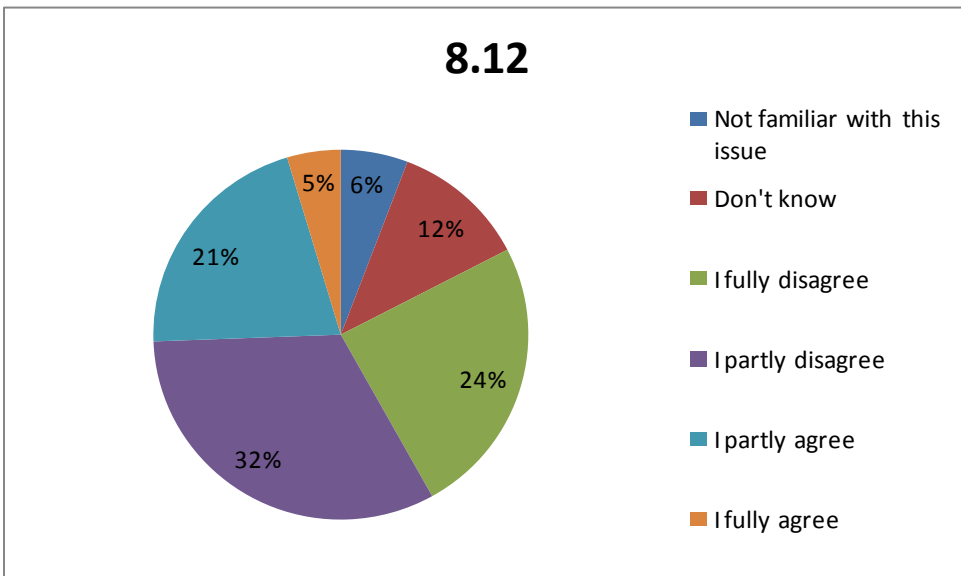
8.11: Level of ambition unrealistic.

Responses were split but tended towards disagreement (55%). 12% fully disagreed, 43% partly disagreed, 33% partly agreed and 8% fully agreed.



8.12: It is too early to say.

Responses were fairly equally distributed, but **tended towards disagreement** (56%).

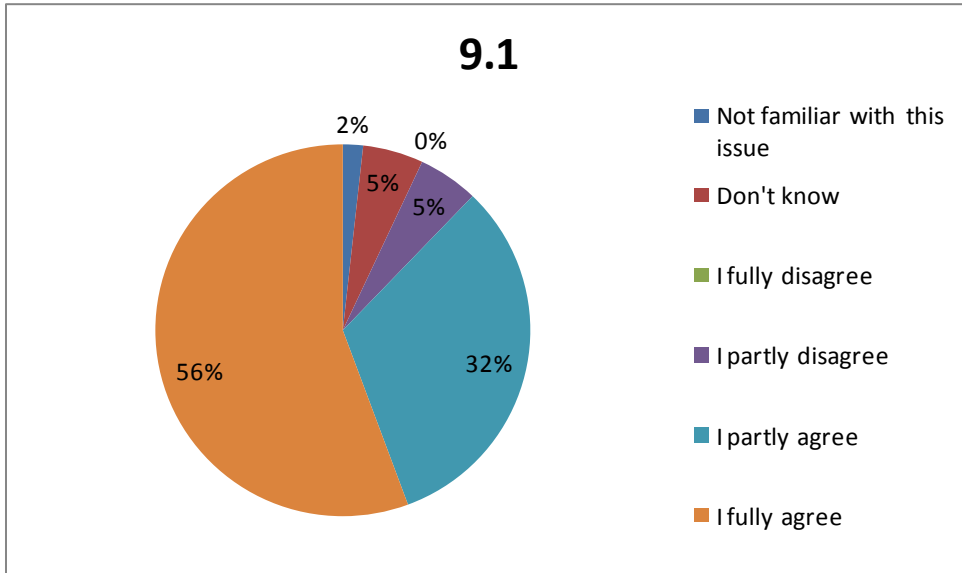


Other
Individual member states did not show sufficient commitment in the Council or in the Committee of the Regions
Short-term economic objectives were considered more urgent by all players at the political level of Cion as well as MS
The idea of thematic strategies is questionable, I prefer proper legislation
lack of political will
For all its flaws, the 6EAP was a good attempt, but it was marginalised by the high-level focus on the Lisbon Agenda.
Environmental interest has not been a strong priority in the decisions (more a lip service)
The goals of the Environmental Action Programme were not sufficiently described at the beginning of the process to measure achievements.
Integration of business perspectives was too low.
lack of bipartite of tripartite social dialogue
The evaluation of the policies and the objectives were focused on the environmental effect, while the social and, most of all, t [incomplete submission]
level of ambition was unrealistically low.
Business perspective was not implemented enough.
Without 6EAP the state of the environment would have been deteriorated

Question 9: The 6EAP was the first Community EAP to be adopted as a joint decision of the European Parliament and the Council through the formal legislative co-decision procedure. Please indicate whether you agree with the following statements.

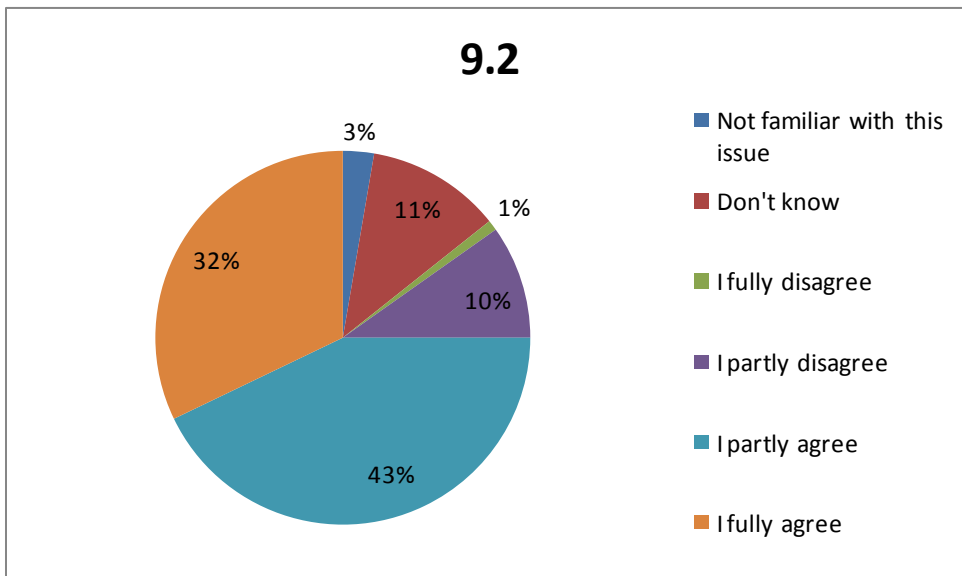
9.1: The involvement of the EP and the Council has added legitimacy to the 6EAP.

Almost all respondents (88%) either fully (56%) or partly (32%) agree.



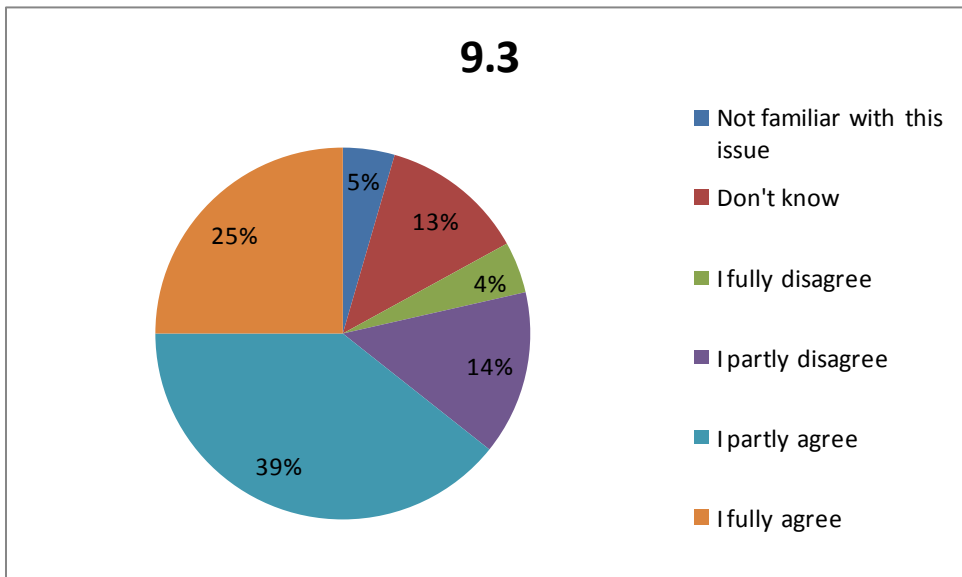
9.2: The involvement of the EP and the Council has led to increased awareness of the 6EAP in the EU institutions.

The majority (75%) of participants agreed: (43%) partly agree, and one third (32%) fully agrees.



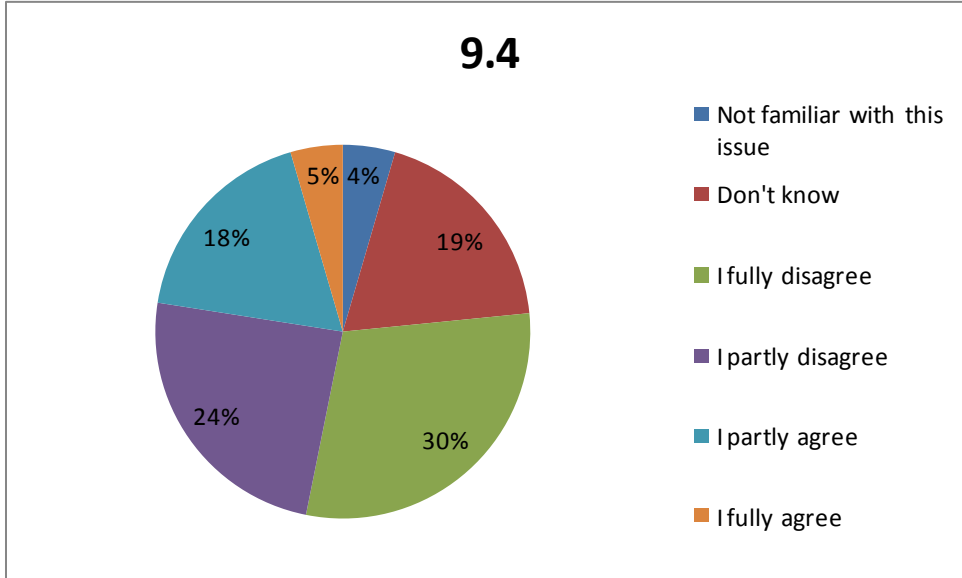
9.3: The involvement of the EP and the Council helped to improve the contents of the adopted programme.

Generally most participants (64%) agreed: 39% partly agree, 25% fully agree.



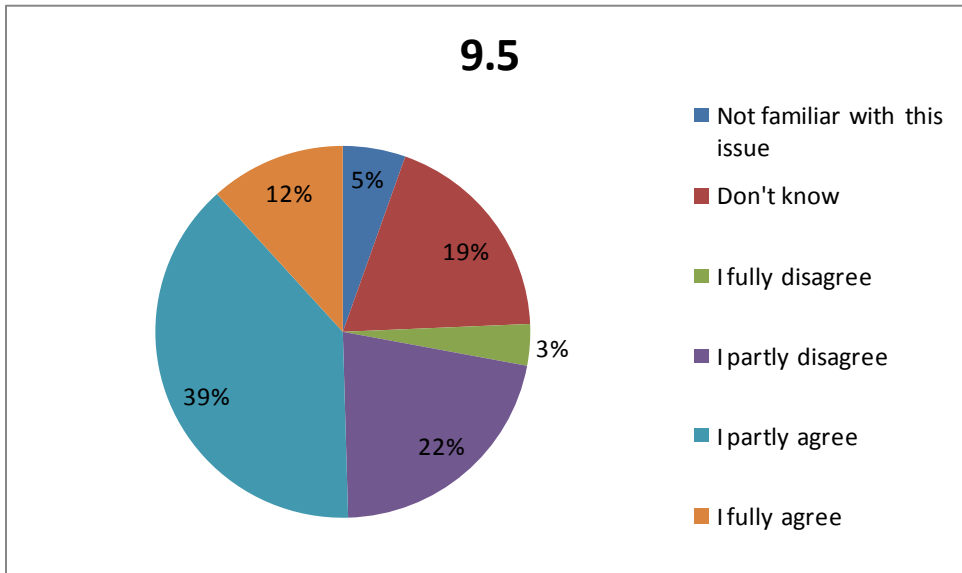
9.4: The involvement of the EP and the Council had a negative effect on the clarity and coherence of the 6EAP.

Generally participants were split but tended towards a negative response: 19% did not know, 54% either partly or fully disagreed, 18% partly agreed. Therefore, most people could be said to agree that the EP and the Council **did not have a negative effect on the clarity and coherence of the 6EAP.**



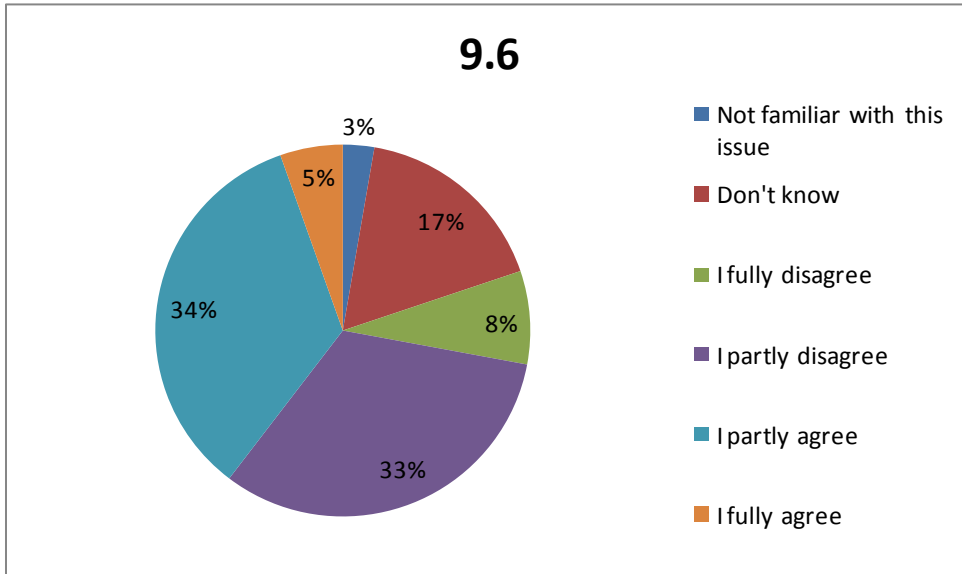
9.5: The involvement of the EP and the Council increased the level of ambition of the 6EAP.

19% did not know, 22% partly disagreed, and the **largest group (39%) partly agreed.**



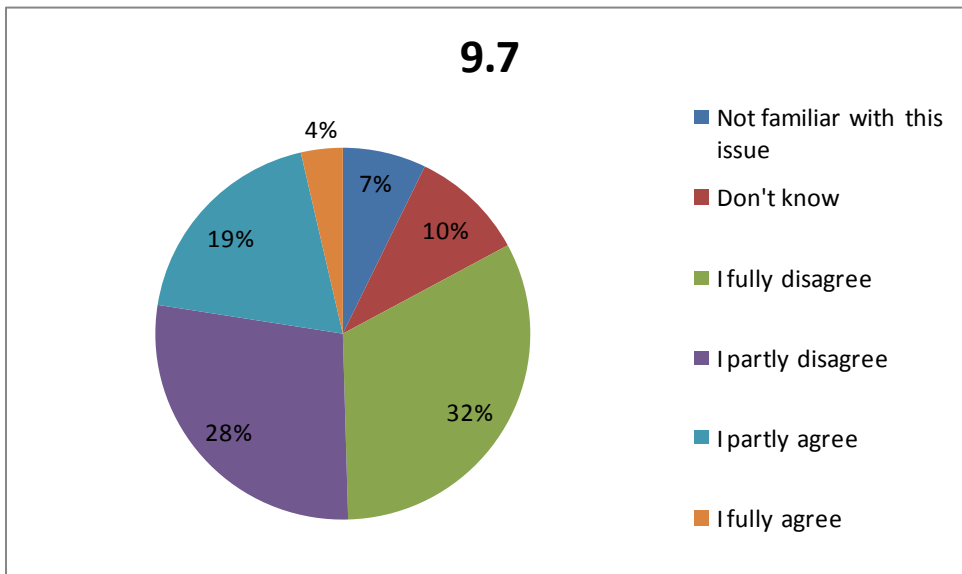
9.6: The involvement of the EP and the Council increased the effectiveness of the 6EAP.

No strong opinions: 34% partly agreed, 33% partly disagreed. 17% did not know.



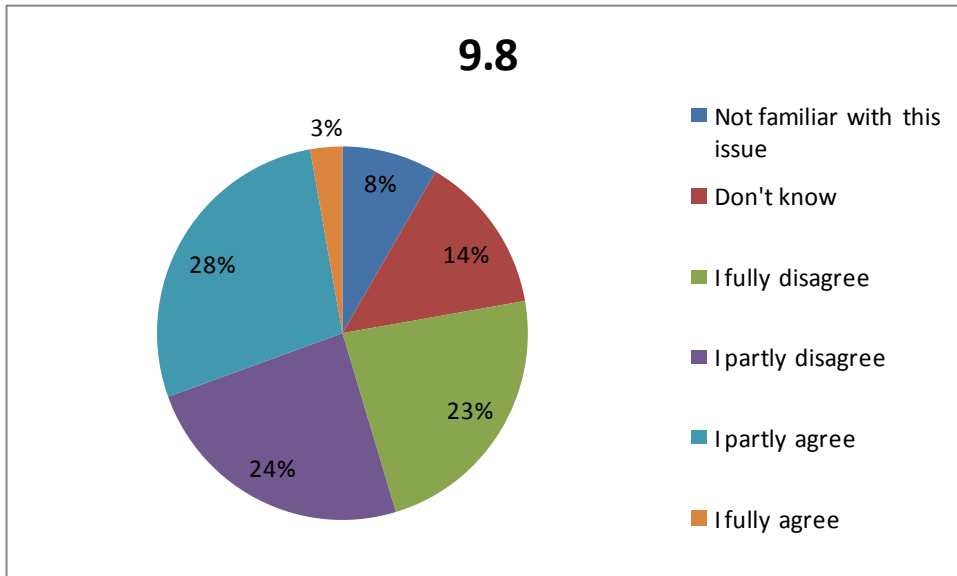
9.7: The involvement of the EP and the Council made no difference because the 6EAP remains legally non-binding.

The majority 60% partly (28%) or fully (32%) disagreed.



9.8: The involvement of the EP and the Council made no difference because the political priorities in the EP and the Council have changed since 2002.

No strong opinions - 28% partly agreed, 24% partly disagreed, 23% fully disagreed.



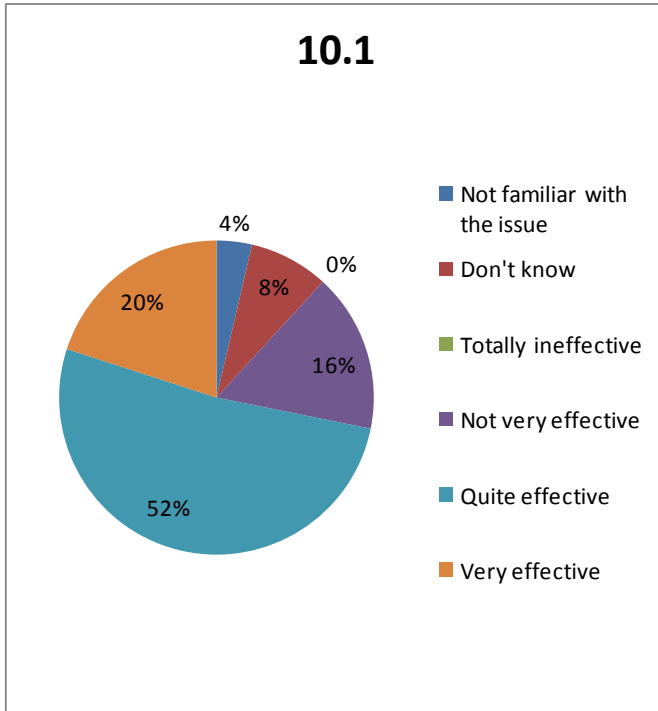
6.1.2

Other (please specify below)
EP has generally shown itself more progressive than the council
There was more and more emphasis on economic competitiveness in EU policy, until 2008 and less of Biodiversity objectives e.g.
If there is co-decision for legislation we also need co-decision for programs
EP helps, Council does not.
Involvement of the EP tended to strengthen 6EAP whereas Council involvement, in my recollection, did not. Awareness of 6EAP [incomplete submission]

Question 10: How do you value the effectiveness of certain policy instruments and regulatory approaches proposed in the 6EAP with regard to achieving the 6EAP’s main environmental objectives? Please indicate your assessment of the following instruments.

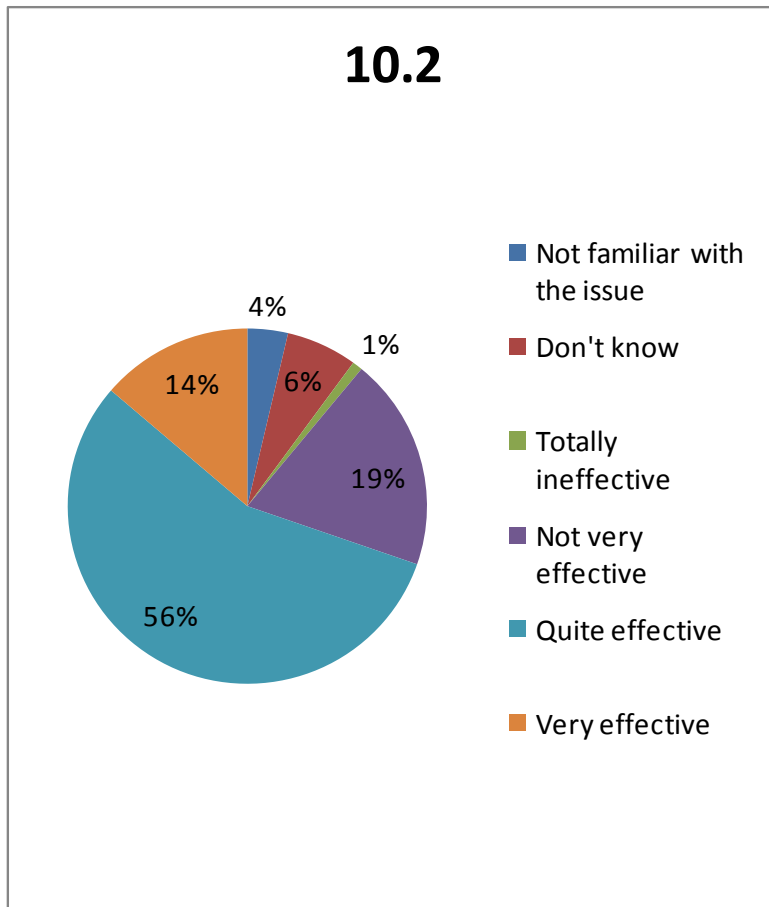
10.1: Development of new Community legislation

Most participants (72%) found it to be either **quite** (52%) or **very** (20%) effective.



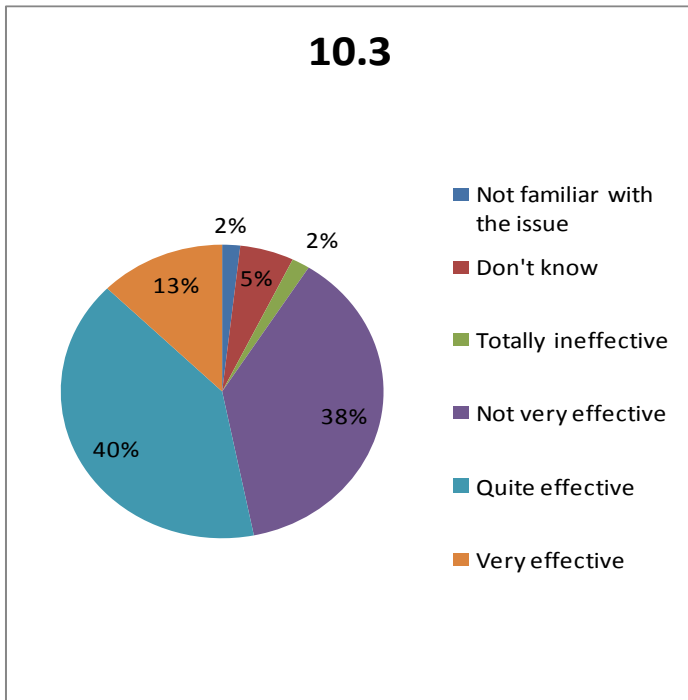
10.2: Revision/amendment of existing legislation

Most participants (70%) found it to be either **quite** (56%) or **very** (14%) **effective**.



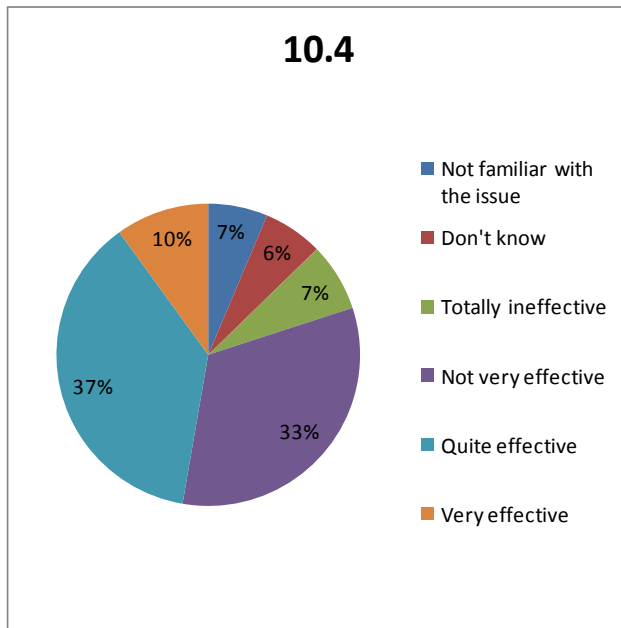
10.3: Further efforts to integrate environment into non-environmental sectors

Split with no strong opinions: 40% found this to be quite effective, 38% not very effective



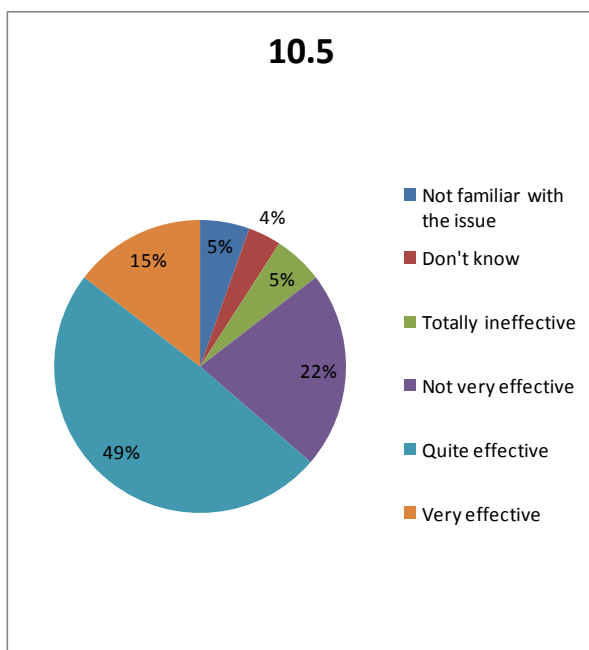
10.4: Improving collaboration and partnership with enterprises

No clear opinion 37% found this to be **quite effective**, 33% **not very effective**, 7% thought it was **totally ineffective**.



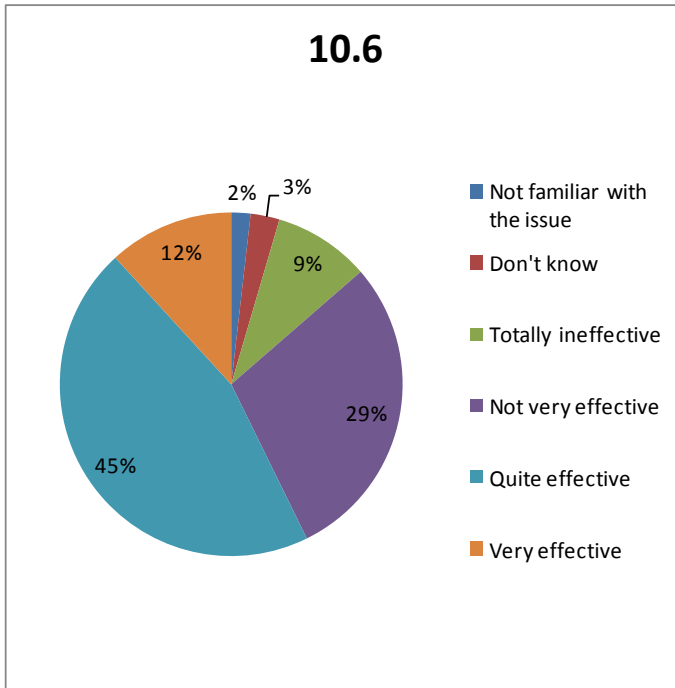
10.5: Providing better information about the processes and products in terms of their environmental impact.

This was found to be **quite effective** by 49% of respondents. 22% found it **not very effective** and 5% **totally ineffective**.



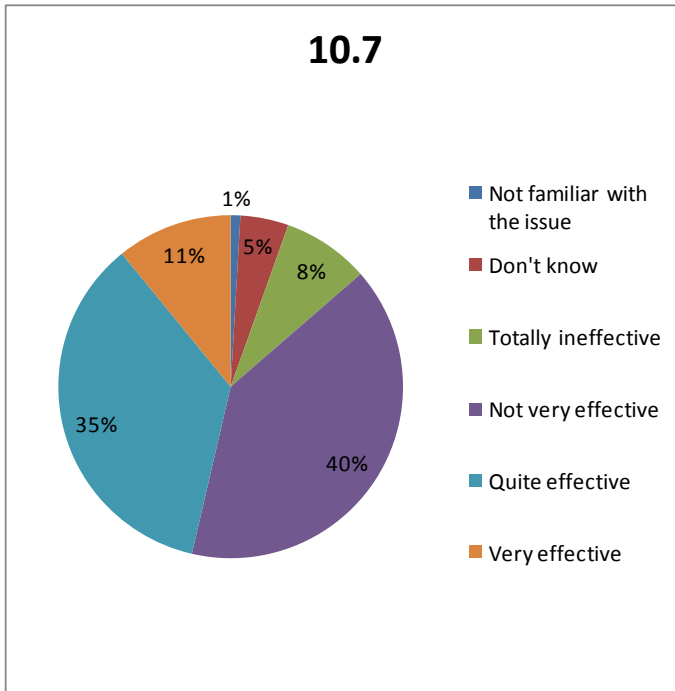
10.6: Awareness raising among stakeholders and the general public.

Overall, 67% found this to be either **quite effective** (45%) or **very effective** (12%). 29% **not very effective**, 9% **totally ineffective**, 9% **totally ineffective**, 2% **not familiar with the issue**, 3% **don't know**.



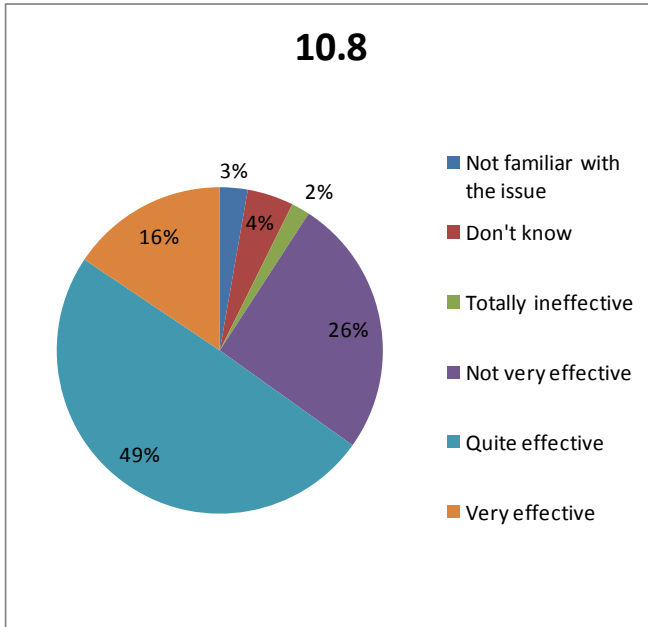
10.7: Improving public participation.

Split with no clear answer 40% not very effective, 35% quite effective, 8% totally ineffective



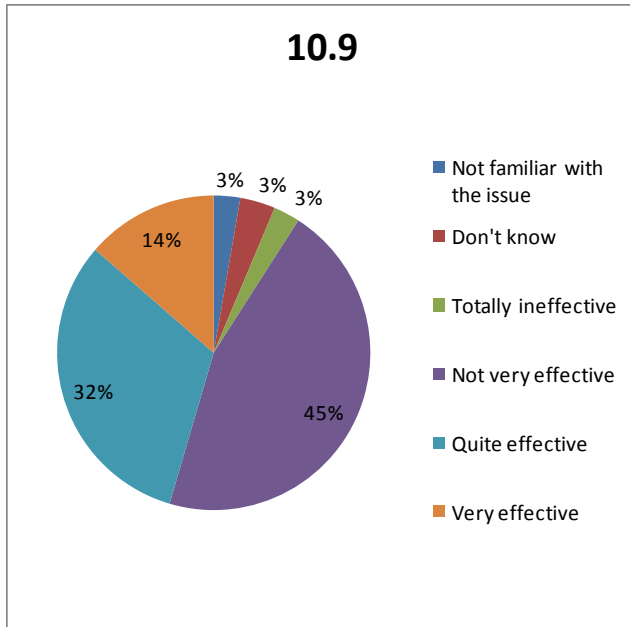
10.8: Improving the knowledge base for environmental decision-making.

Mixed response. Majority (65%) thought it had been **quite (49%) or very (16%) effective**. However, a **quarter (26%)** found it had **not been very effective**.



10.9: Encouraging more effective implementation.

No clear swing. 48% found it had been either not very effective (45%) or totally ineffective (3%) while 46% found it had been either quite (32%) or very (14%) effective.



In general, answers to question 10 did not have a clear opinion one way or another. Of note was the increased number of respondents who thought that certain policy instruments had been 'totally ineffective'.

Other (please specify below)

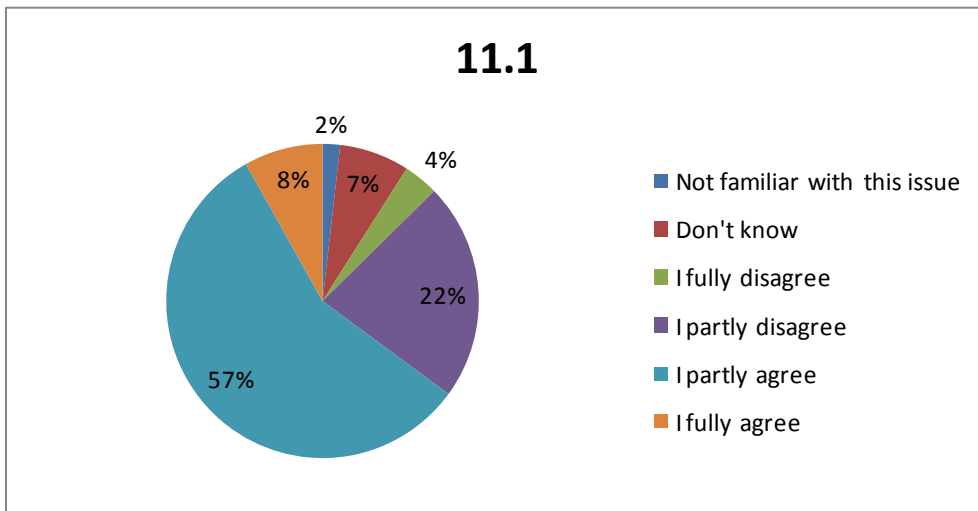
Other	Because
<p>Impact assessment studies: not very effective</p>	<p>In a number of cases, the impact Assessment failed to properly measures and presents the impacts on costs (e.g. climate change of renewable energy proposals). In addition, in many cases, impact assessments were missing on substantive amendments by the European Parliament and Council to Commission proposal.</p>
<p>More emphasis on compliance and enforcement is needed!</p>	<p>Compliance and enforcement is often the weakest part in the regulatory chain!</p>
	<p>This question is poorly drafted. I have given my opinion on how these instruments actually performed in my opinion, rather than how they could theoretically have performed (score would have been higher in the latter case).</p> <p>Why did you leave out market based instruments?</p>
	<p>Not sufficient integration of social aspects</p> <p>no sufficient implication of workers and workers representatives.</p> <p>Workers organisations, social NGOs are not represented in the large number of working groups set up to develop the thematic strategies...</p>
<p>Full consideration and more workable approaches to lifecycle assessment.</p>	
	<p>There remains a lack of common headline environmental indicators and integration indicators to inform policy and decision makers and to support evaluation of the 6EAP. Such indicators had been identified as key actions in section 8 of the 6EAP.</p>

<p>Impact Assessment studies</p>	<p>Generally, The impact assessment studies provided a framework of the issue, but there was a lack of effective and suitable measures. Furthermore, it was easy to understand mostly the assessment concerning the costs, while there were some problems about the evaluation of the benefits. In addition, sometimes, it seemed to be lack of coordination between European institutions to draw up these analysis.</p>
	<p>Comment to Question 9 continued: within EU institutions diminished after adoption. Stronger DG ENV follow-up would have strengthened awareness over time period covered by 6EAP.</p>
<p>Clean technologies</p>	

Question 11: What do you think about the effectiveness of the approach of the 6EAP’s 7 Thematic Strategies? Please indicate whether you agree with the following statements:

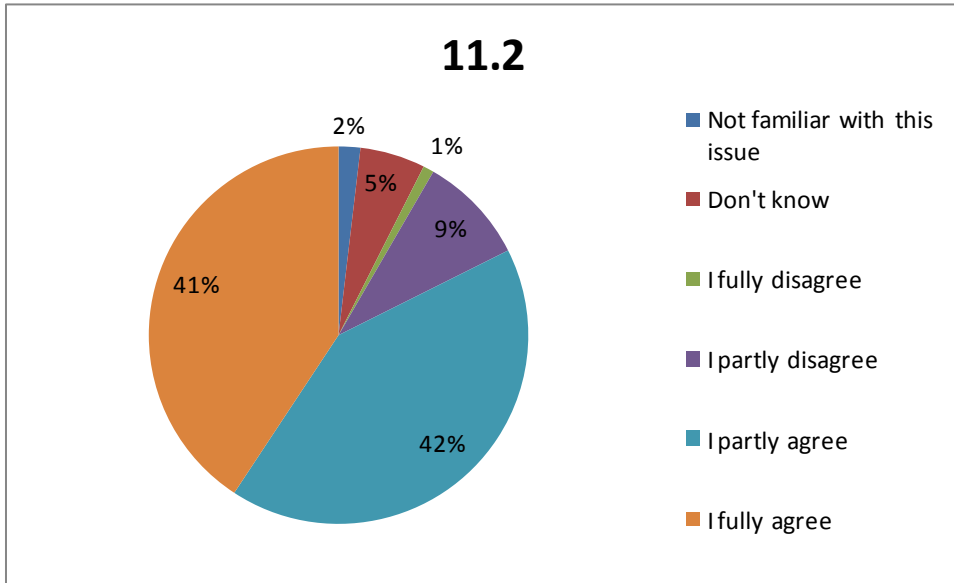
11.1: The Thematic Strategies were/are effective

The majority (65%) agree: 57% partly agree and 8% fully agree while 22% partly disagree and 4% fully disagree.



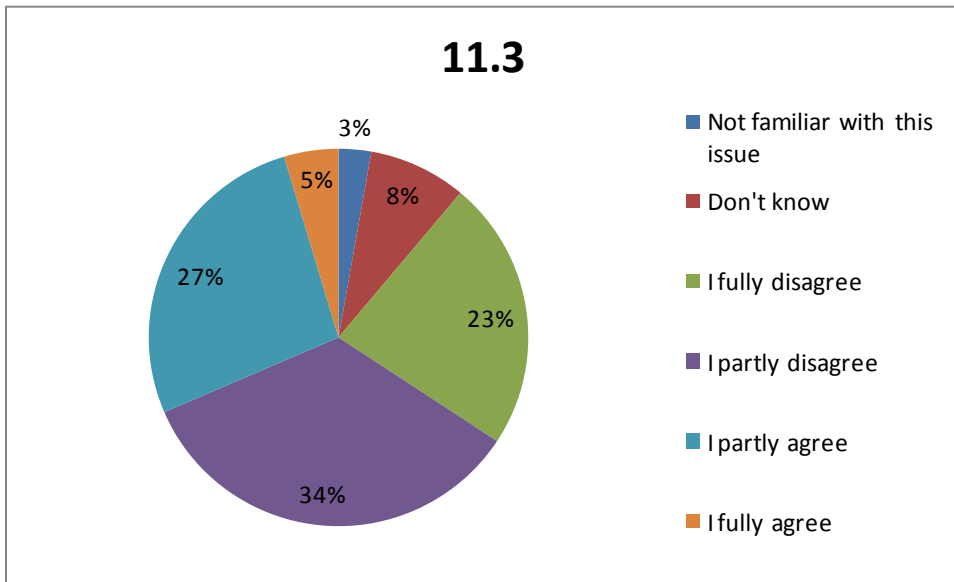
11.2: The effectiveness of the Thematic Strategies depends on the issue/area being addressed

Major agreement: 41% fully agree and 42% partly agree.



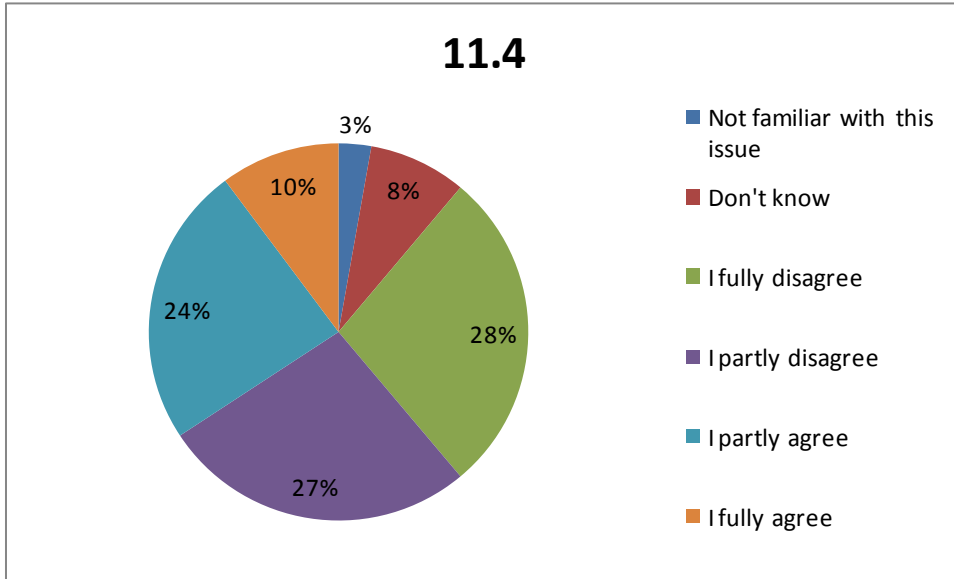
11.3: The Thematic Strategies are not the right instrument

Mixed picture with majority for disagreement – 34% partly disagree and 23% fully disagree while 27% partly agree.



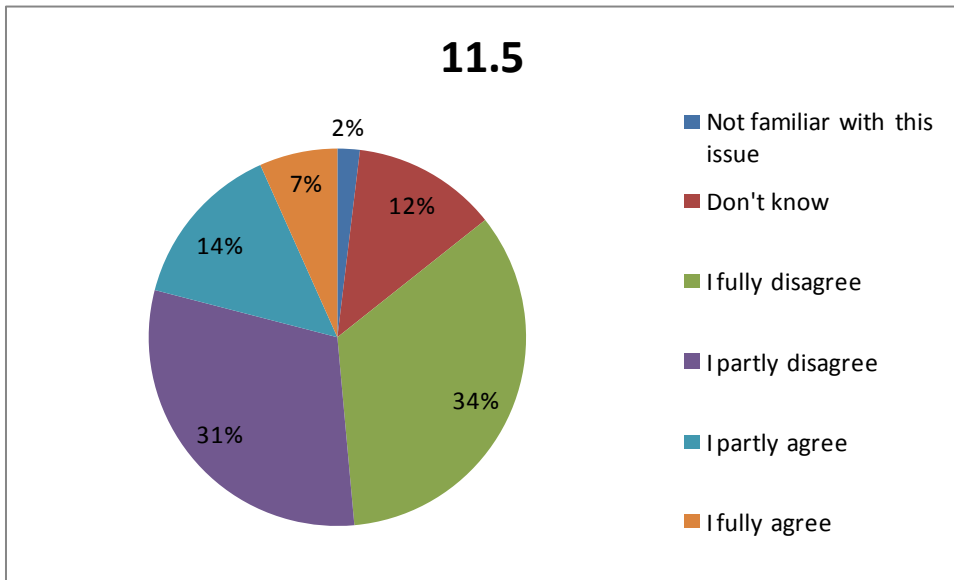
11.4: There are too many Thematic Strategies

Mixed picture with majority for disagreement – 27% partly disagree and 28% fully disagree while 24% partly agree.



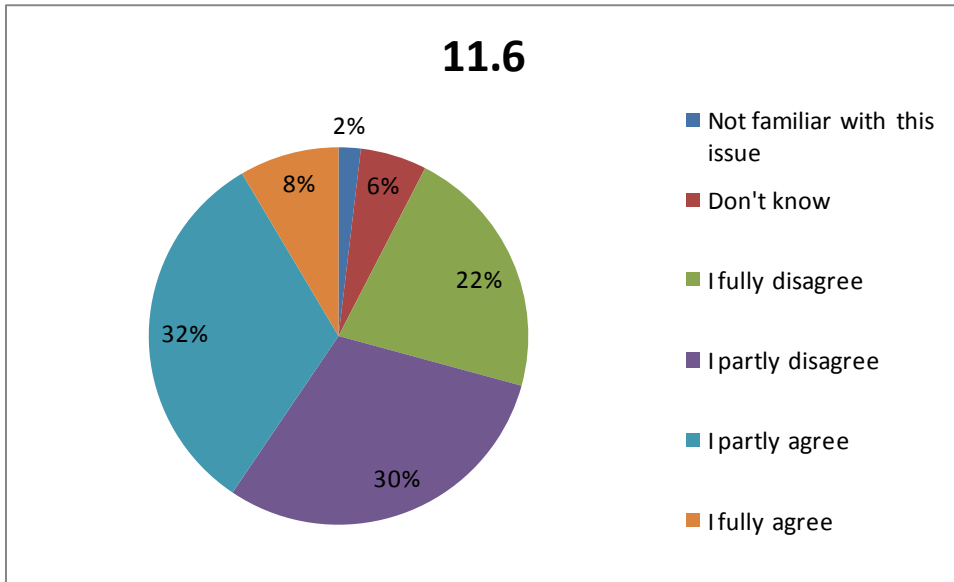
11.5: There should have been more Thematic Strategies

The majority disagrees: 34% fully disagree and another 31% partly disagree.



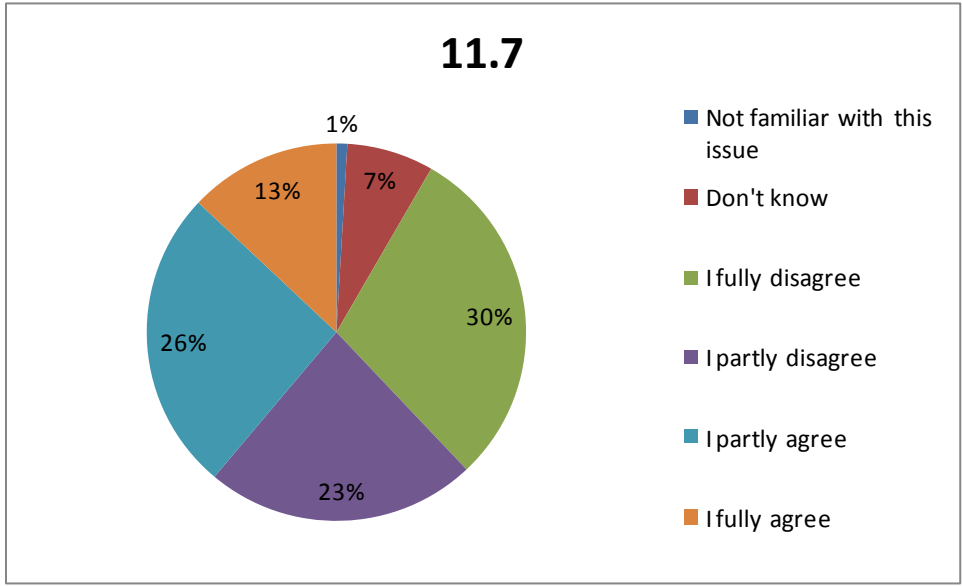
11.6: The Thematic Strategies are not specific enough

Mixed picture with majority for disagreement – 30% partly disagree and 22% fully disagree while 32% partly agree.



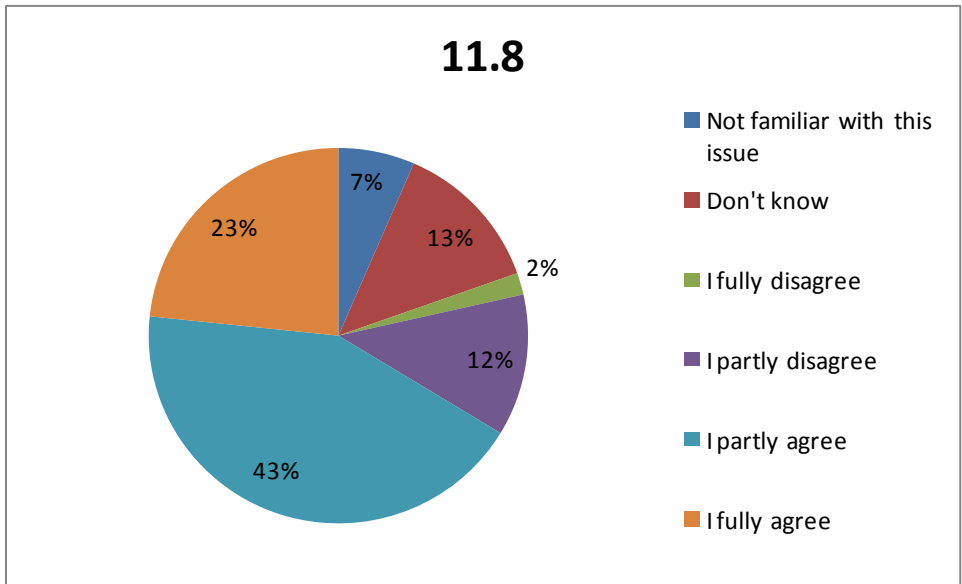
11.7: The Thematic Strategies should be legally binding

Mixed picture with majority for disagreement – 30% fully disagree and 23% partly disagree while 26% partly agree and 13% fully agree.



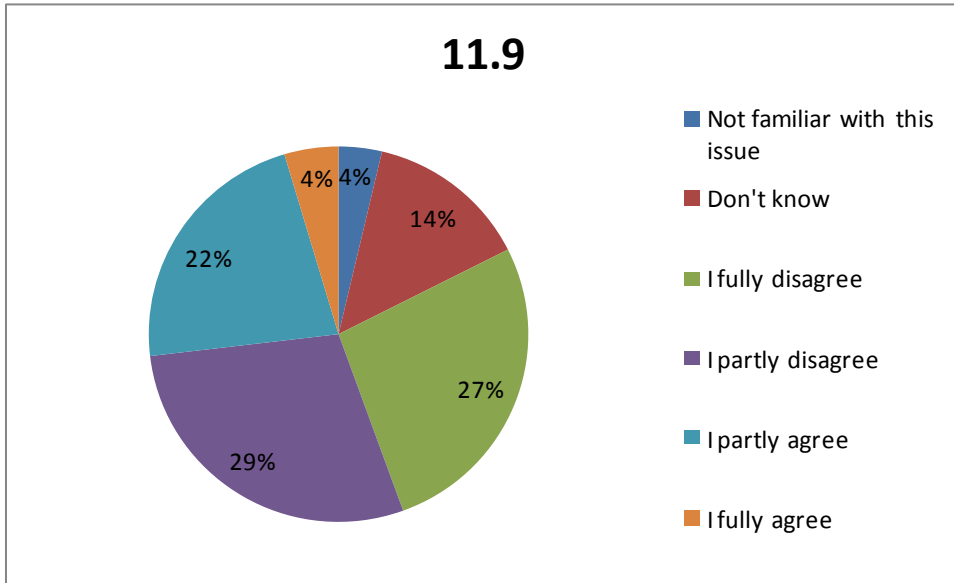
11.8: The process to develop the Thematic Strategies was useful

The majority agrees: 43% partly agree and another 23% fully agree.



11.9: The Thematic Strategies distract from the adoption of effective measures

Mixed picture with majority for disagreement – 29% partly disagree and 27% fully disagree while 22% partly agree.



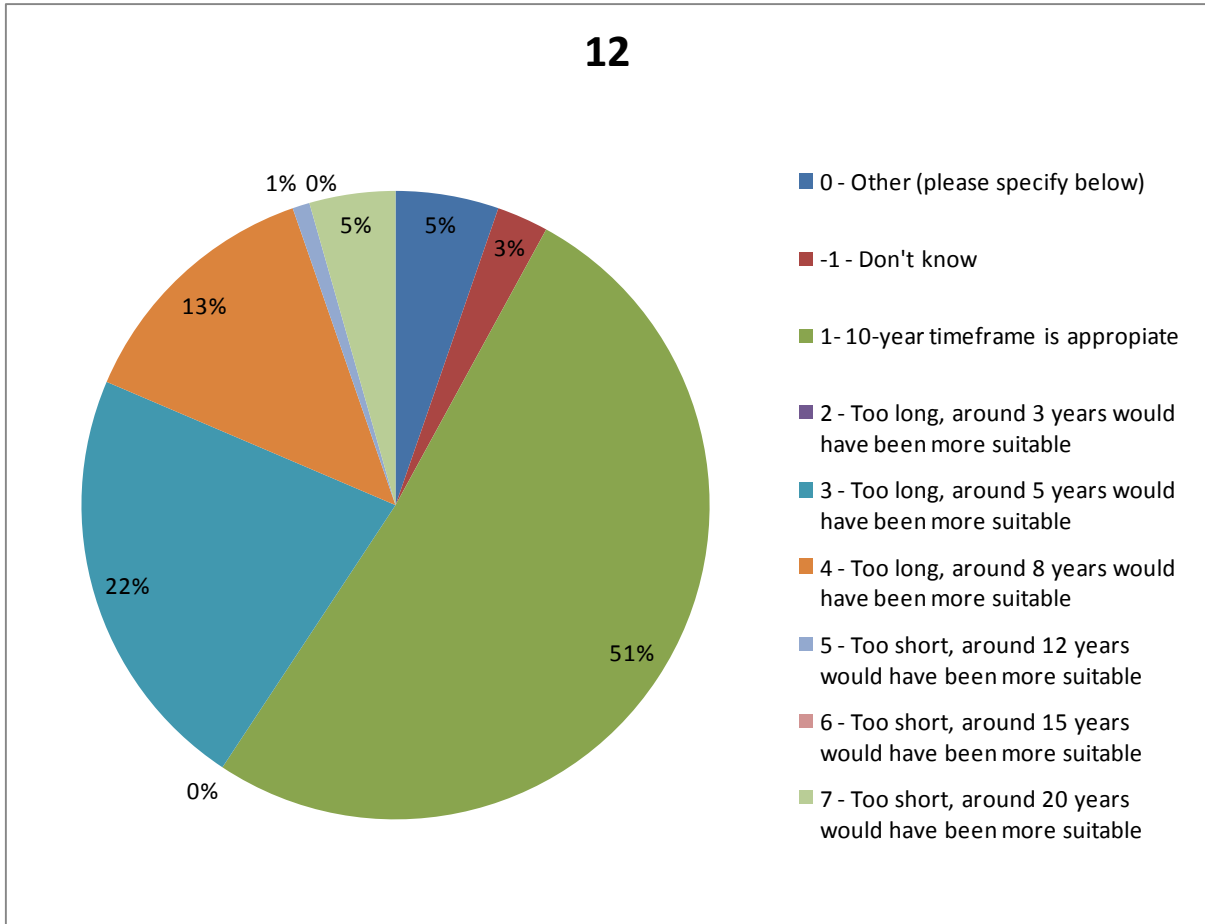
Other	Please elaborate
	The process should have been organised differently . First, a political agreement on the Strategy (analysis, strategic goals, objectives) and then development of the tools & legislation to achieve these.
	Thematic strategies cannot be legally binding, they are not specific enough , I would go for legislation instead of strategies
6EAP and 7 Thematic Strategies are not coherent	When adopting the 6EAP, the quantitative objectives were taken out under the understanding that they would be part of the upcoming Thematic Strategies. The understanding that the well balanced composition of the first comprehensive Commission proposal should not fall apart in 7 ‘families’ has not been met successfully . Also the link with the Sustainability Strategy could have been more clear.
Substantive reduction of energy and resource use; nanotechnology and green chemistry	The two key challenges above should reduce the EU's ecological footprint.

	The potential of investment in clean tech and other public environmental goods for job creation is not fully exploited. This means that the gap between poor people and rich people regarding access to environmental goods is higher than it would be with proper implementation of environmental legislation; process without TU =>lack of social aspects.
	The effectiveness of the thematic strategy can be useful but can also be disconnected from the process of developing the legislative instrument - for example the soils thematic strategy and proposed soil framework directive.
	The 6EAP introduced the notion of Thematic Strategies, an approach not taken by the 5th EAP. Thematic Strategies were an additional, non-binding layer of paperwork, often produced long after the 6EAP itself was adopted. If there was a benefit to the overall success of the 6EAP as a result of the TS, I haven't noticed it.

If you think there should have been more Thematic Strategies, please elaborate
There should have been one on nitrogen.
There's room for more Thematic Strategies e.g. on Governance, Health - Quality of Life
e.g. governance, Quality of Life
<ul style="list-style-type: none"> - responsible development of nano-technologies - identification and quantification of investments required to reach the objectives and procedures foreseen for financing them, - synergies between employment and environmental policies
e.g. inland waters
forest and biodiversity protection and management
connection between workplace and environment
Chemical Safety

Question 12: Do you think that the 10-year timeframe of the 6EAP was appropriate in relation to the stated objectives?

51% think that the 10-year timeframe was appropriate while 35% found it to be too long - 22% think that around 5 years would have been more suitable and another 13% thinking that around 8 years would have been more suitable.

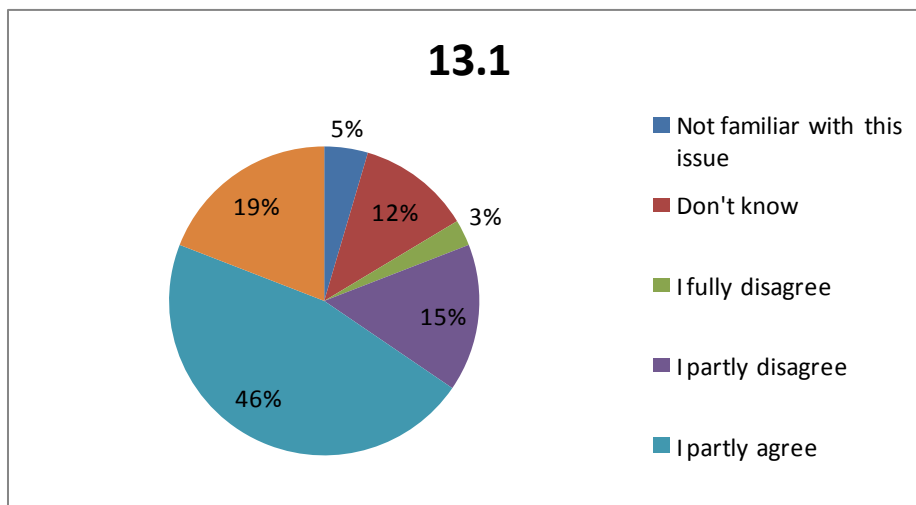


Other
Mid-term review should be taken seriously and lead to adaptation or intensification.
10 years with an update option after 5 years
Until the end, the failure of the Biodiversity objective (halting biodiversity loss) was not openly stated though it was obvious
Investment cycles must be taken into account by providing long-term framework of policies to avoid the risk of stranded assets.
Short term and long term goals / activities time frame should follow the implementation of an integrated legislation framework
6EAP as well as subsequent policy and legislative initiatives must give full respect to industrial investment cycles by providing
Timeframe not unsuitable to the objectives but not suitable to political horizon of a Commission which serves 5 years.

Question 13: What is your opinion on the advantages and disadvantages of the 10-year timeframe of the 6EAP? Please indicate to which extent you agree with the following statements.

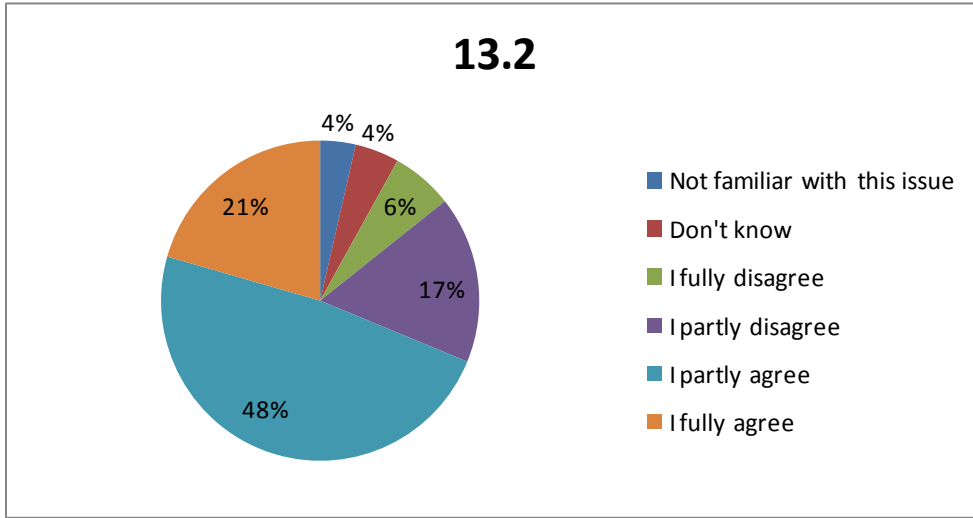
13.1: The 10-year timeframe broadly corresponds to the timeframe of other important EU strategies such as the Lisbon Strategy.

The majority agrees – 46% partly agree and 19% fully agree.



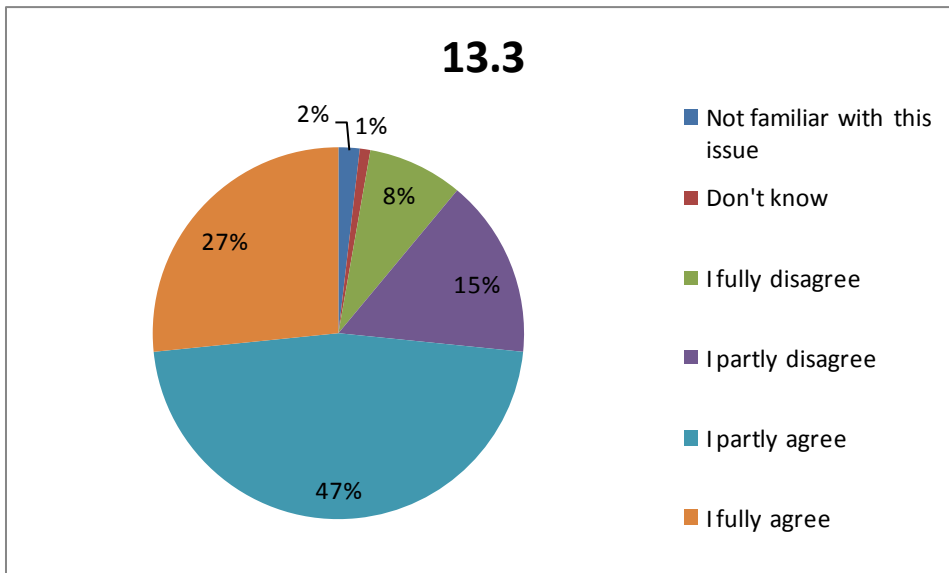
13.2: The 10-year timeframe provides continuity in terms of bridging election periods of the EP and Commission terms.

The majority agrees – 48% partly agree and 21% fully agree.



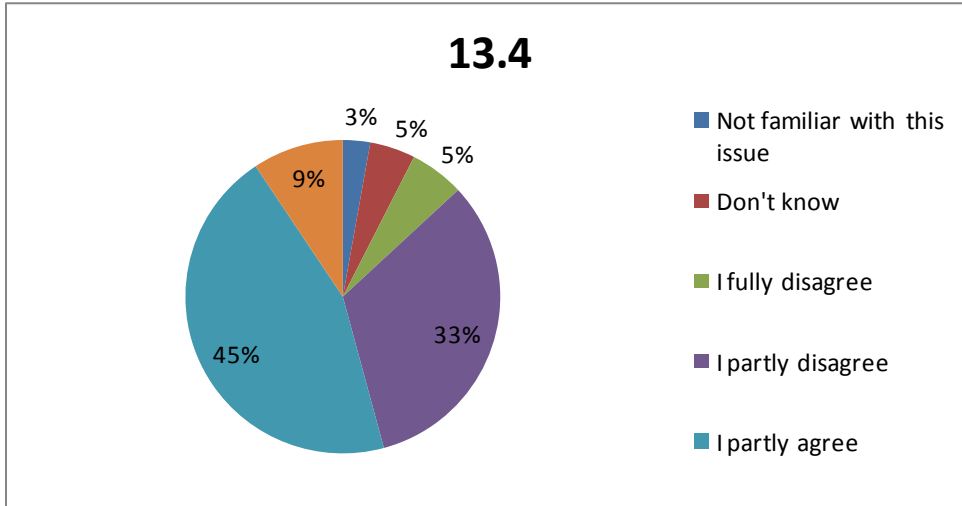
13.3: The 10 year time frame provides an appropriate planning horizon for complex environmental challenges.

The majority agrees – 47% partly agree and 27% fully agree.



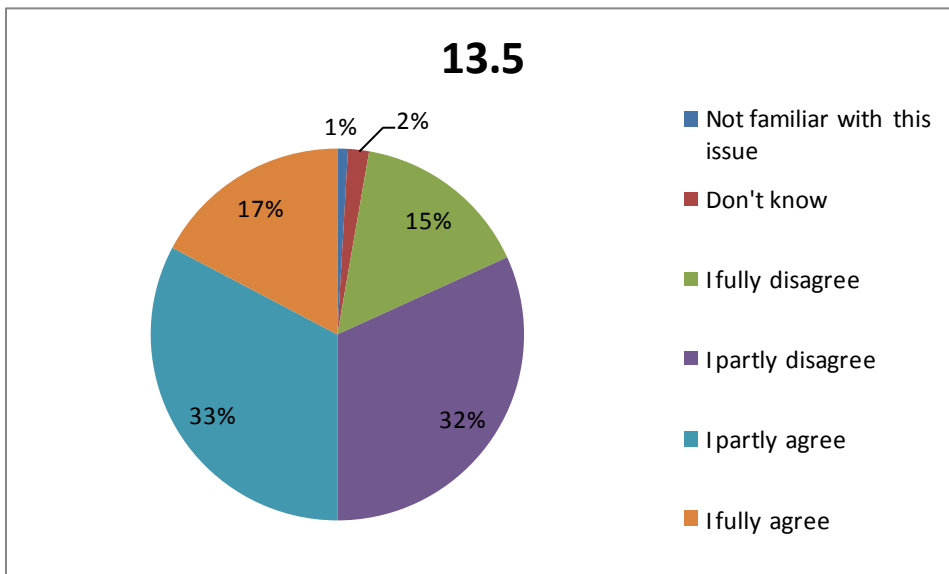
13.4: Newly elected EP or Commission are not likely to share the programme's priorities, thus weakening political commitment to previously agreed priorities.

Mixed results – 45% partly agree and 9% fully agree while 33% partly disagree and 6% fully disagree.



13.5: The 10-year timeframe allows too little flexibility to react to new environmental challenges.

Mixed results – 33% partly agree and 17% fully agree while 32% partly disagree and 16% fully disagree.



Other

The legislative process is so long that 10 years are needed

Not really relevant

Environment, economy and society changing more rapidly than captured in a 10-year strategy

6.1.3 Part B: Questions on specific 6EAP areas (14-20) optional

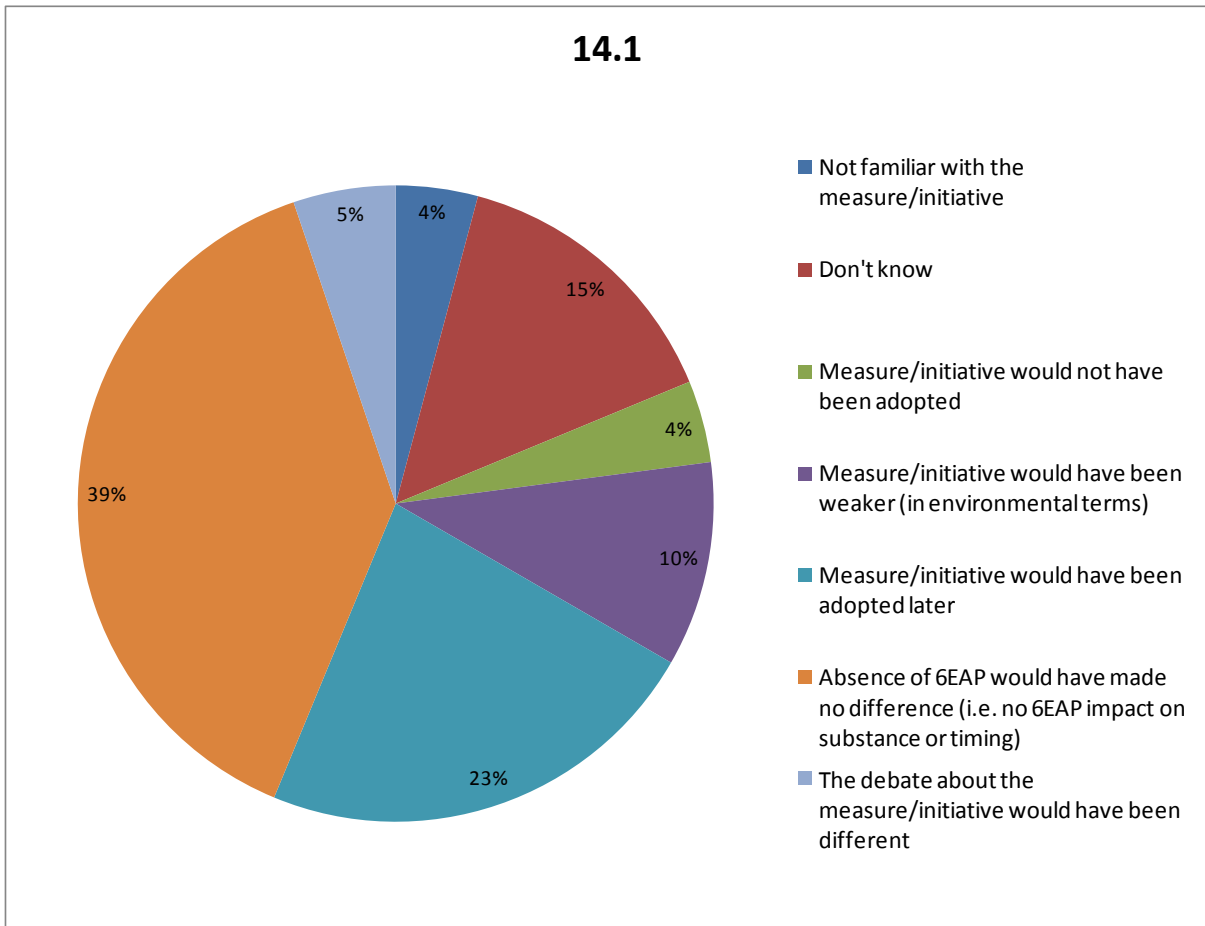
6.1.3.1 Climate change

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 14: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

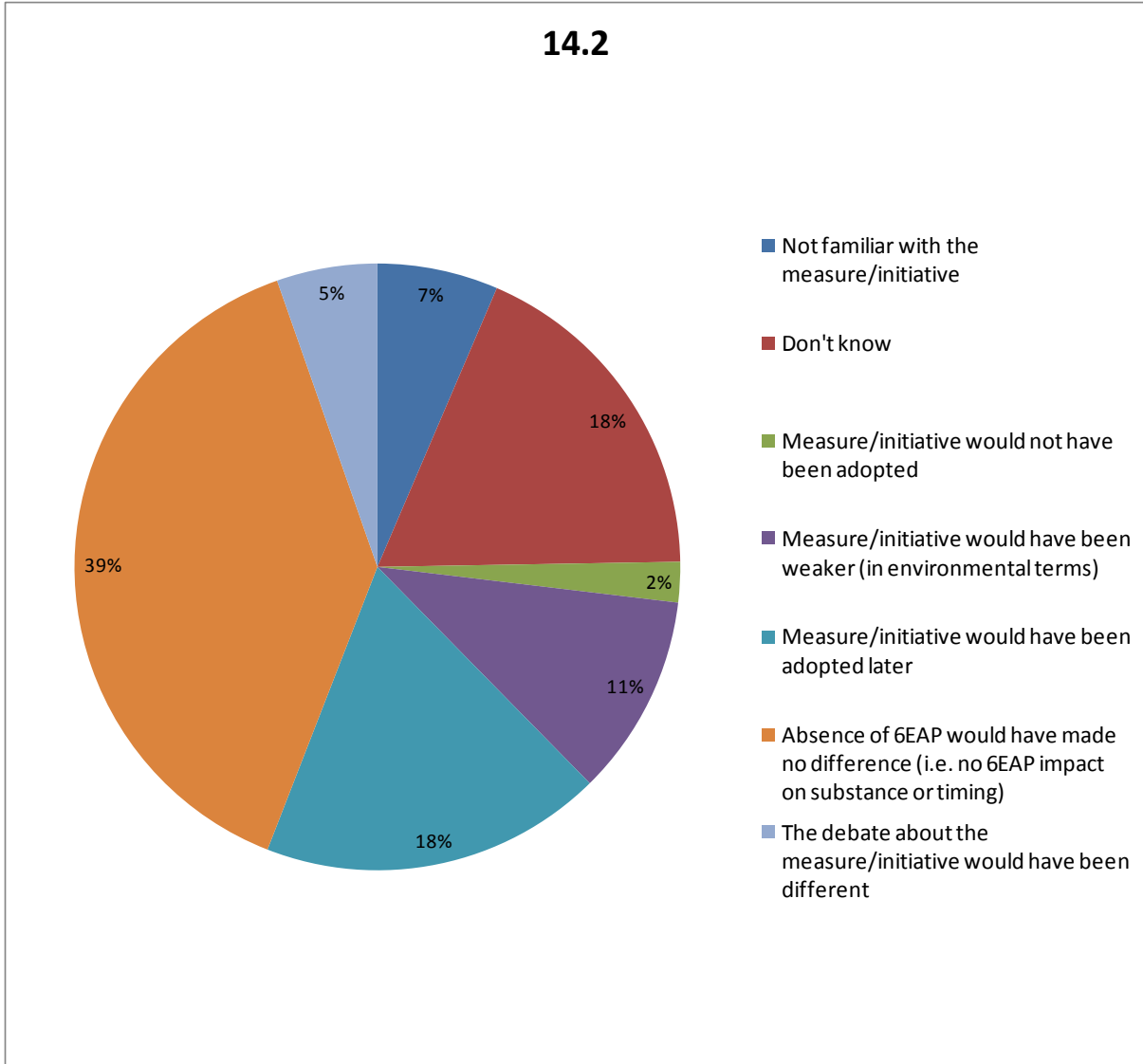
14.1: The EU's Emission Trading System (ETS) (Directive 2003/87/EC)

Mixed results – 39% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) while 23% think that the measure/initiative would have been adopted later.



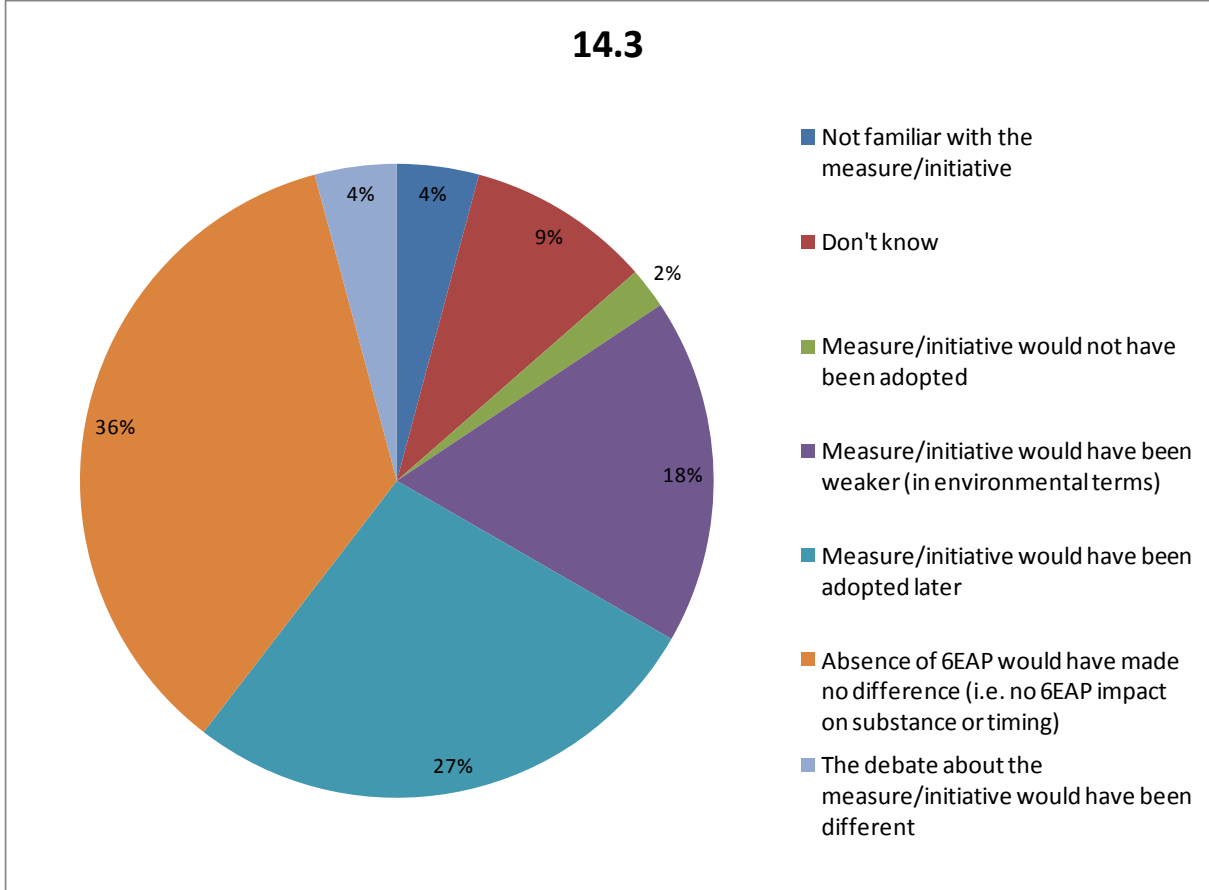
14.2: Revised 'centralised' EU Emission Trading from 2013 on: The EU's revised Emission Trading System (ETS) (Directive 2009/29/EC)

Mixed results – 39% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) while 18% think that the measure/initiative would have been adopted later.



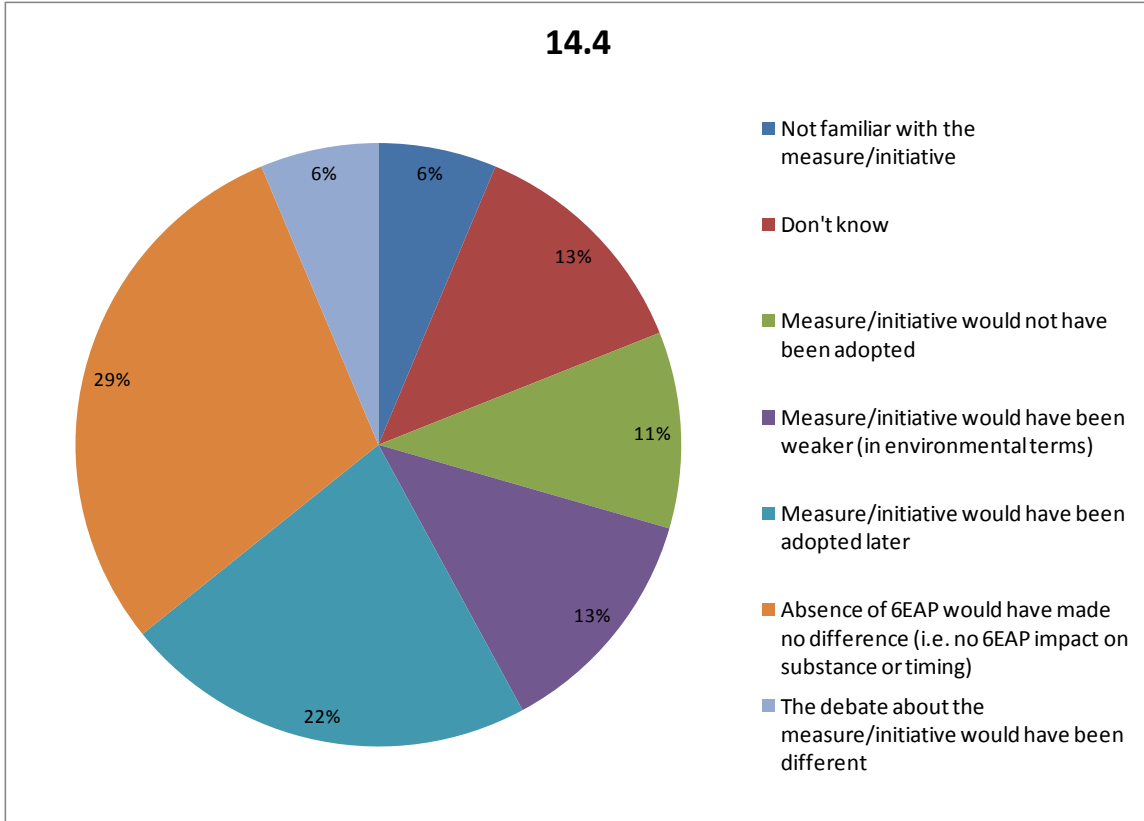
14.3: Binding renewable energy targets 2020: Promotion of Renewable Energy: Renewable energy Directive (2009/28/EC)

Mixed results – 36% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) while 27% think that the measure/initiative would have been adopted later.



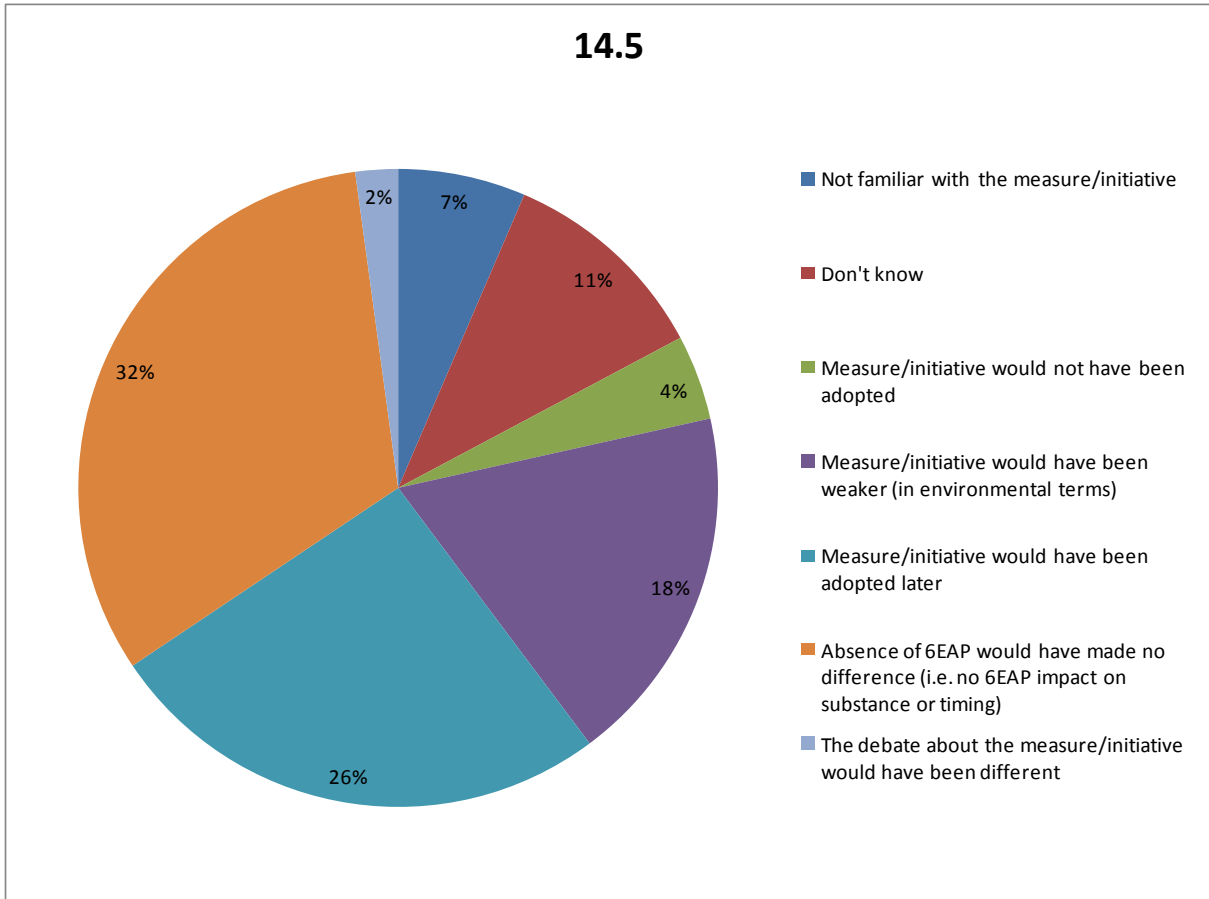
14.4: Limiting CO2 emissions from new passenger cars: Regulation on CO2 limit values for new passenger cars (EC 443/2009)

Mixed results – 29% think that the absence of the 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) while 22% think that the measure/initiative would have been adopted later.



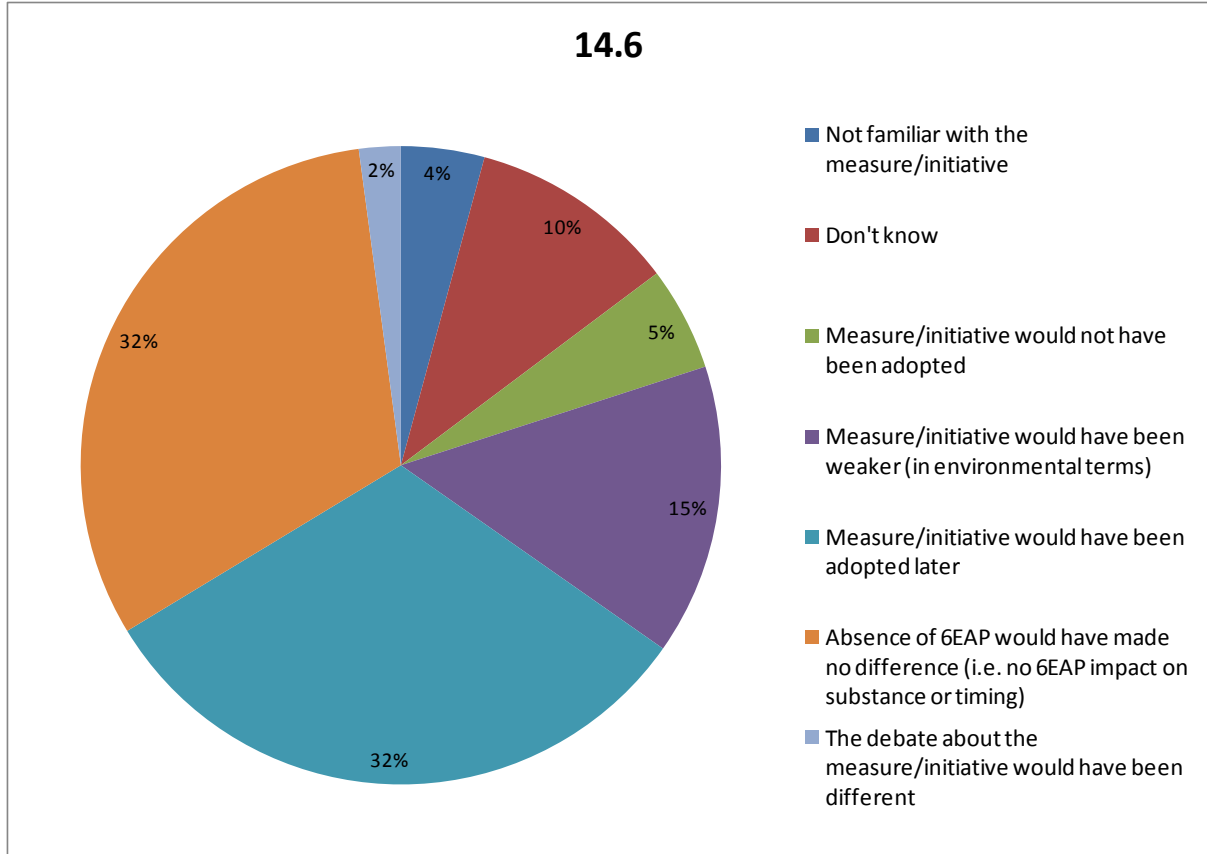
14.5: Effort sharing decision: Decision on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (No 406/2009/EC)

Mixed results – 32% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) while 26% think that the measure/initiative would have been adopted later.



14.6: Adaptation to Climate Change: White Paper on adaptation to climate change (COM(2009)147)

Mixed results – 32% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing) and another 32% think that the measure/initiative would have been adopted later.



The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 15: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘Climate change’? If so, please elaborate and give one or more examples.

Answer
No, not really
Certainly, it has affected this choice.
No
No. The Commission proposed the required measures, what is needed is stronger implementation.
New regulatory approach on application of market-based instrument, review, reporting in the ETS reduction of GHG emission
The 6EAP has given good support to the wider use of market-based instruments, and has been successful in encouraging wider use of these measures.
Cap and trade for industries for GHG, a world novelty. It influences energy use etc. Good example. Bad example, the EU misguided biofuel policy, lack of integrated assessment. Even the EEA was against it.
Maybe, the most important decision for energy and climate was taken by the heads of state - climate was an environmental issue ten years ago, now it is much more horizontal,
I doubt it.
Too much focus on soft or voluntary approaches; participation of business in the regulatory process weakened and delayed measures , and frustrated progress in some areas, such as substitution of dangerous chemicals.
There have been interactions among 6EAP ‘Climate change’ and regulatory approaches, instruments. However the choices of regulatory approaches and other instruments (eg ETS, binding RES targets, emission of passenger cars) have not been quite appropriate.
Little. The main driving force was UNFCCC and responding to the international process.

<p>At least, collaboration and partnership with business and civil society has been improved; application of market-based instruments was good enough, but it must be high on the list of general tools such as environmental fiscal reform, green procurement and effective emission standards.</p>
<p>Yes, from outside the Commission it appears to have had an impact. It allows the relevant DG, in this case Environment, to defend its choice of regulatory instrument at high levels within the Commission. However, strict regulatory targets have been particularly damaging when not based on science: the case in point is the adoption of a 10% biofuels target under the Renewable Energy Directive. The converse is the lack of measurable targets under the biodiversity aquis even though the science is available.</p>
<p>The Climate Change agenda exists with or without the 6th Environmental Action Programme due to the commitments of EU Member States and EU at an international level. The Kyoto Protocol sets the framework and requires action, which is delivered through the thematic strategy and other initiatives. This would occur with or without the 6th Environmental Action Programme</p>
<p>Not always. Some decisions have been taken considering other priorities. Example: auctioning as a system to allocate emission rights.</p>
<p>Yes</p>
<p>No</p>
<p>e.g. emission trading (see above)</p>
<p>In the area 'Climate Change', the 6EAP failed to influence positively the regulatory approaches in terms of:</p> <ul style="list-style-type: none"> - Lack of consistent approach (i.e. climate change with social and economic benefits). -Effective consultation of business - Competition issues facing international engagements
<ul style="list-style-type: none"> - absence of multidisciplinary approach has weakened some objectives such as the energy efficiency objective while it has the potential to create jobs, to fight poverty by reducing households energy bills - favoured too much 'soft law' approach
<p>It is more that it provided the policy framework for these instruments. A key underpinning action was the ratification of the Kyoto protocol.</p>
<p>In my opinion, Climate Change has evolved as a policy area of its own with little reference to other strategies including 6. EAP</p>

ETS is supported by 6EAP's approach to application of market-based instruments but would likely have been adopted anyway.

No effect

The regulatory choices and approaches would have been much on the table anyway as single issues. The 6EAP maybe

forged a more package like setting to integrate the above mentioned and made for a speedy implementation of the 20/20/20 directive

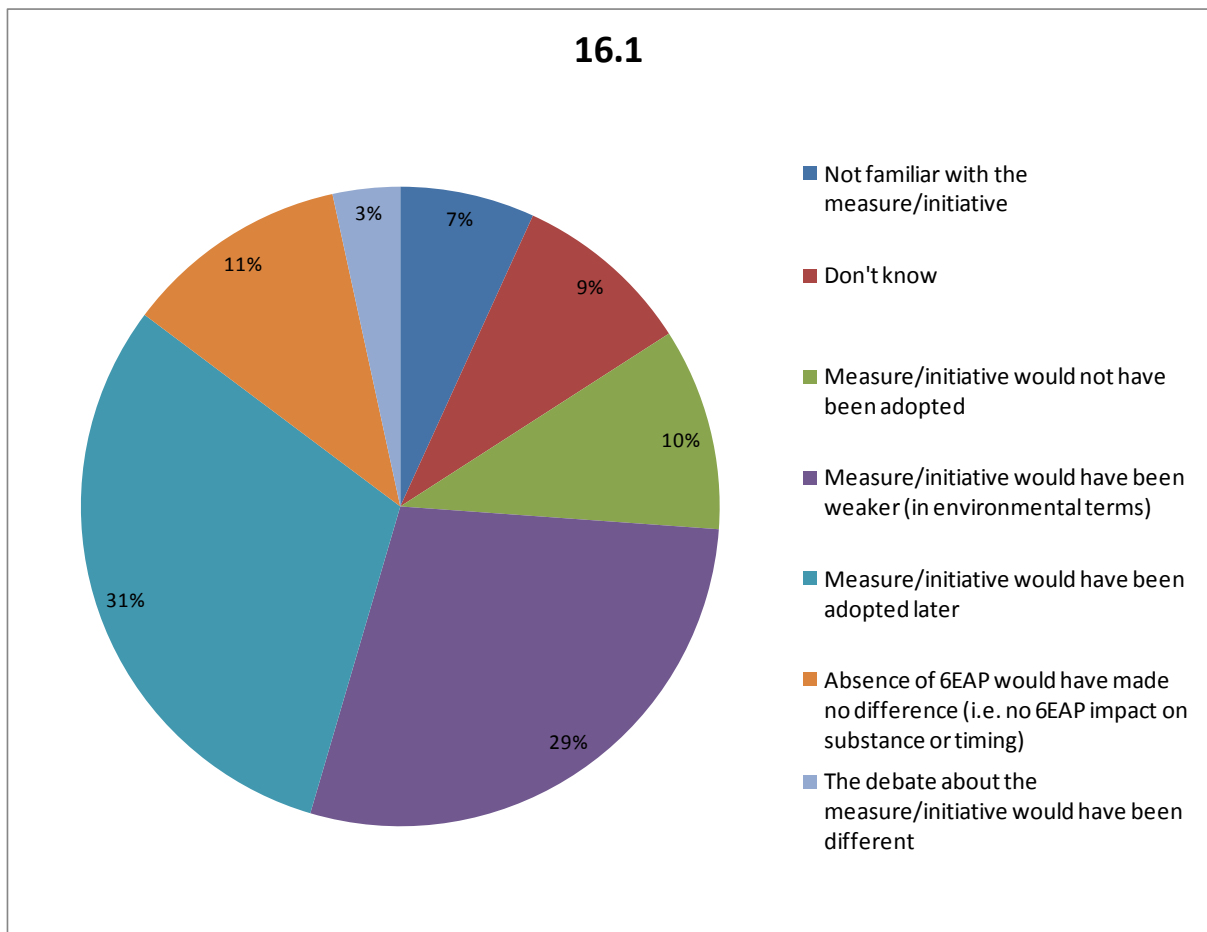
6.1.3.2 Nature and biodiversity

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 16: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

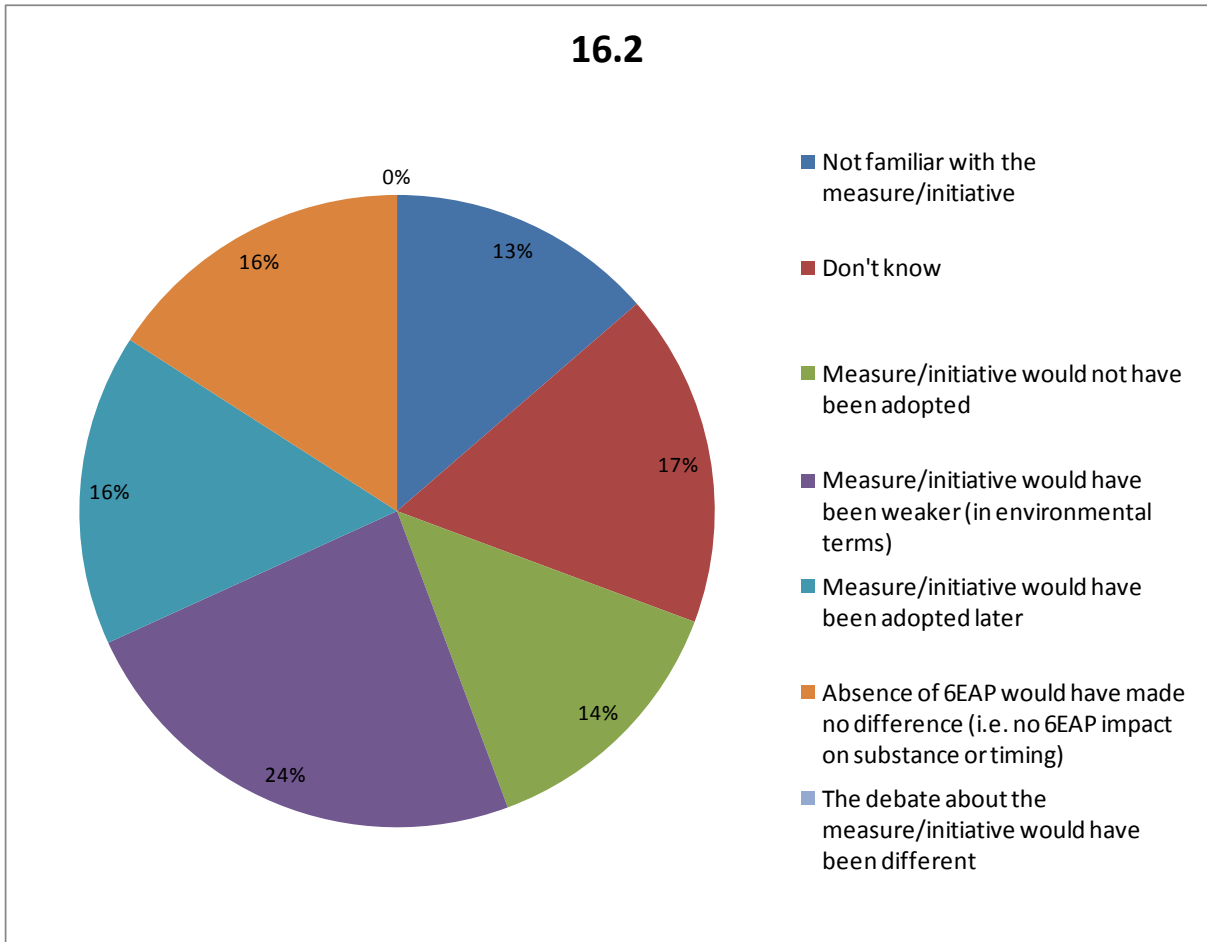
16.1: EU Biodiversity Action Plan to 2010 and beyond (COM(2006)216)

31% think that the measure/initiative would have been adopted later, 29% think that the measure/initiative would have been weaker (in environmental terms).



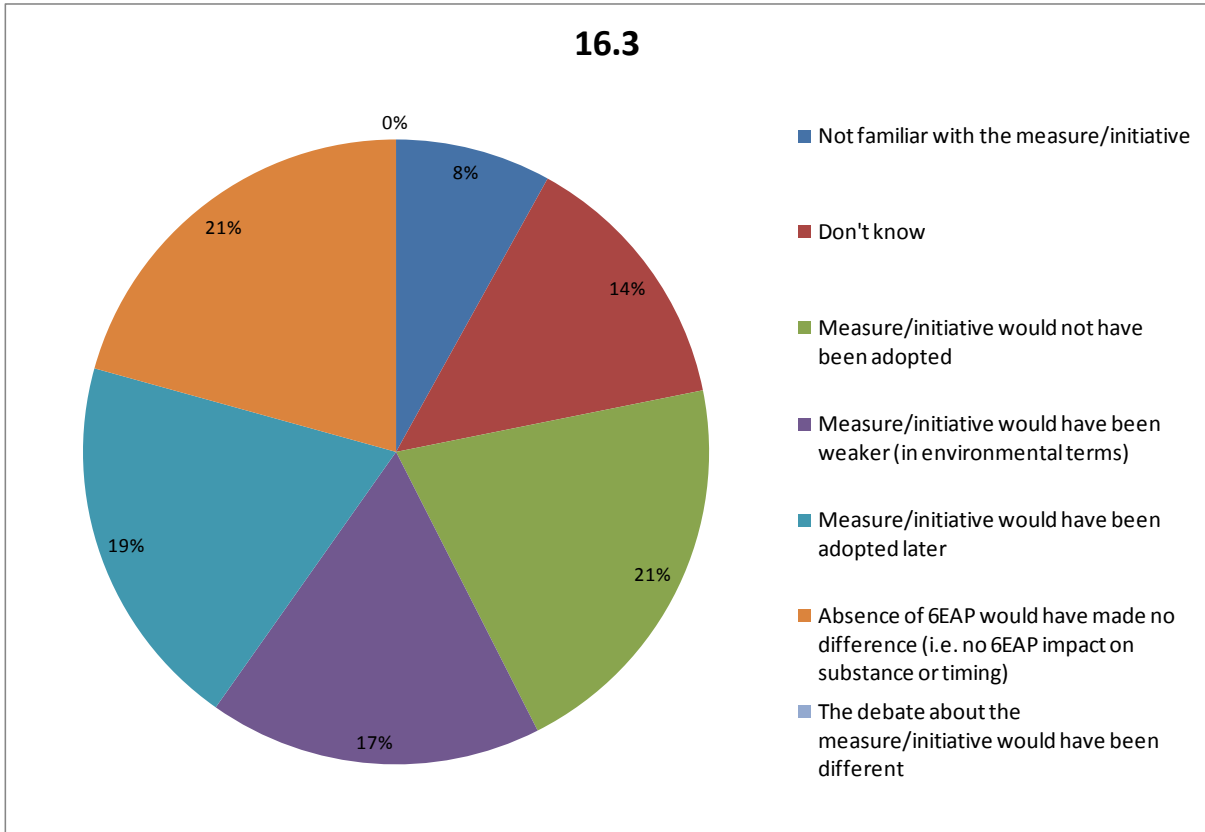
16.2: Financial instrument for the environment: Regulation (EC) No 614/2007 concerning the Financial Instrument for the Environment (LIFE+)

24% think that the measure/initiative would have been weaker (in environmental terms), 16% think that the measure/initiative would have been adopted later, 14% think that the measure/initiative would not have been adopted while 16% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing).



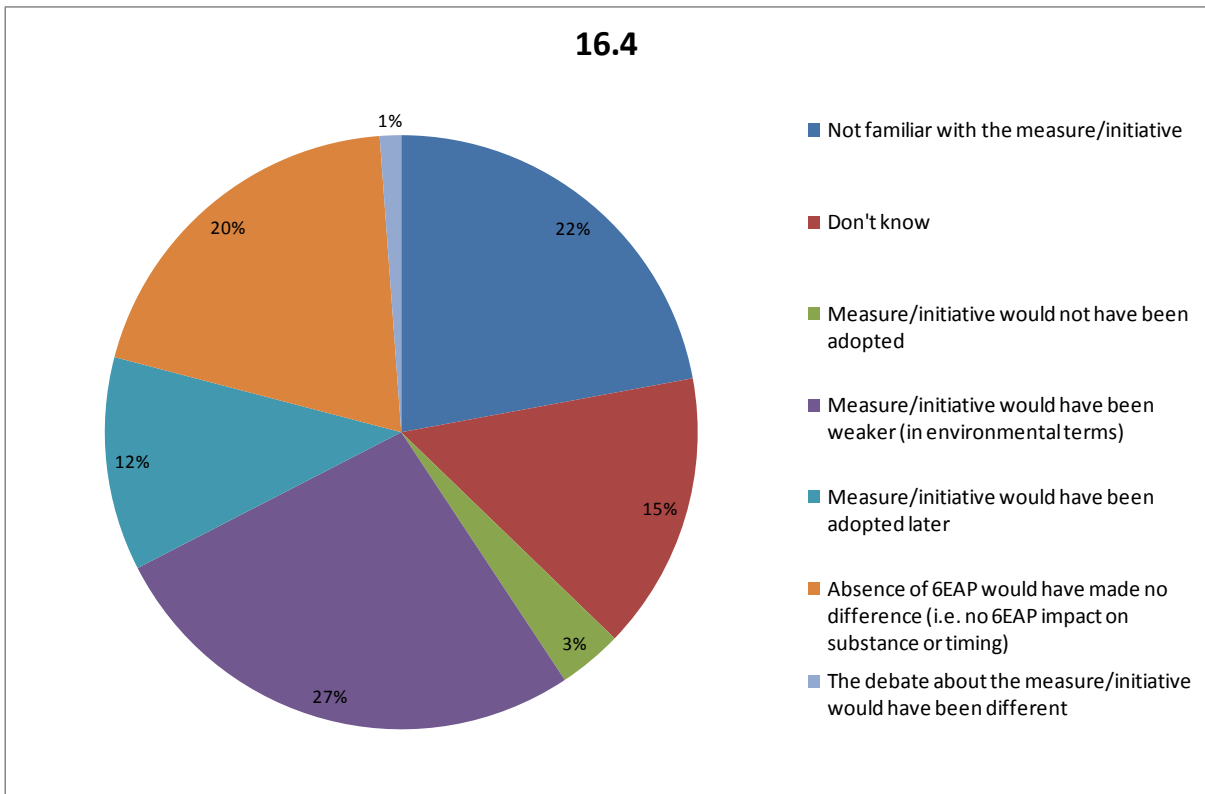
16.3: Soil protection framework directive: Proposal for a framework Directive for the protection of soil (COM(2006)232)

21% think that the measure/initiative would not have been adopted, 19% think that the measure/initiative would have been adopted later, 17% think that the measure/initiative would have been weaker (in environmental terms), while 21% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing).



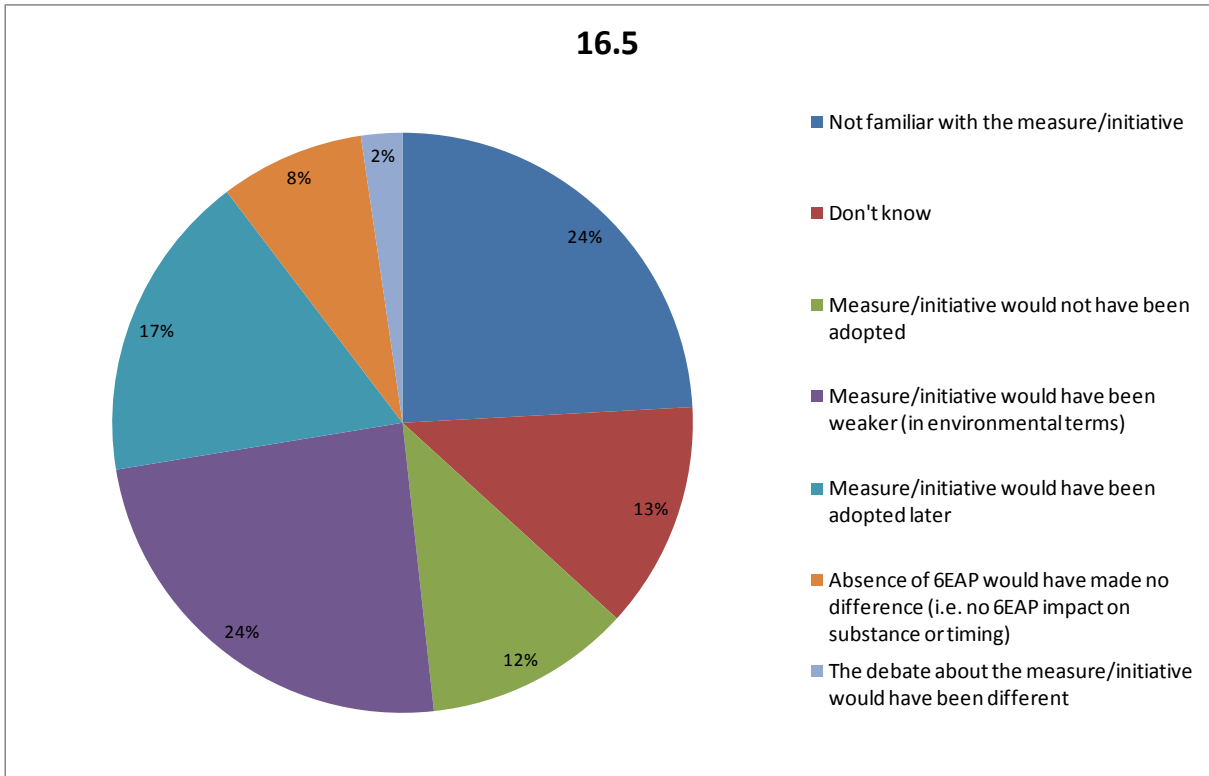
16.4: Financial instrument for rural development: European Agricultural Fund for Rural Development (EAFRD): Axis 1 Measures (Advice and training measures); Axis 2 Measures (Agri-Environment; Natural Handicap Measures; Natura 2000)

27% think that the measure/initiative would have been weaker (in environmental terms), 12% think that the measure/initiative would have been adopted later, while 20% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing). 22% were not familiar with the measure/initiative.



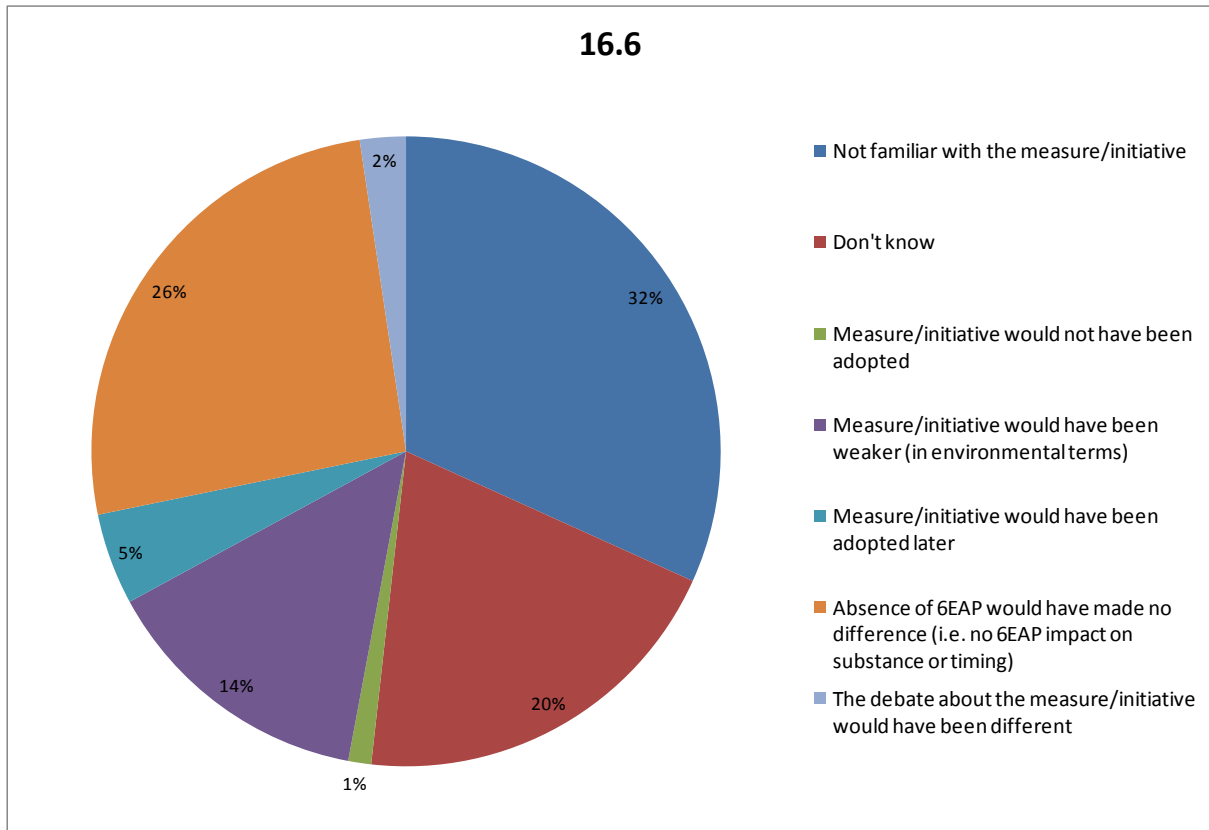
16.5: Marine Strategy Framework Directive: Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy

24% think that the measure/initiative would have been weaker (in environmental terms), 17% think that the measure/initiative would have been adopted later, 12% think that the measure/initiative would not have been adopted, while only 8% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing). 24% were not familiar with the measure/initiative.



16.6: European Fisheries Fund: Council Regulation (EC) on the European Fisheries Fund (No 1198/2006)

26% think that the absence of 6EAP would have made no difference (i.e. no 6EAP impact on substance or timing), while 14% think that the measure/initiative would have been weaker (in environmental terms). However, 32% stated that they were not familiar with the measure/initiative and another 21% stated that they don't know.



Overall, it can be stated that these questions leads to mixed results. However, a trend towards a positive effect of the 6EAP for the environmental dimension of EU policies/measures can be observed.

The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 17: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘Nature and biodiversity’? If so, please elaborate and give one or more examples.

Answer
Cross compliance is in practice extremely weak and has not influenced the policy very much
No
No. As I said above it is a question of enforcement and better implementation by Member States.
The introduction of watersheds as the administrative unit for surface waters.
protecting important species and habitats through Natura 2000
There are many good examples, but the international fisheries policy has not been a success because of lack of clear objectives and inter-sectoral instruments. The biofuels policy (supposedly against climate change) has been a disgrace - the EU decisions have been taking without studies of the EROI, the HANPP, ‘virtual’ water... the bureaucracy far behind research in this case.
Soil was very much triggered by the 6th EAP and the thematic strategy but the Member States do not want legislation in this field
Not really and many more should have been done to reach the strategic objectives in the field of nature and biodiversity, especially with regards to effective implementation and enforcement of environmental legislation related to: -wild animals kept in zoos, and more specifically the role of zoos in conservation of wild species. The EU Zoo Directive aims at ensuring that zoos have a detailed educational and research programme but very few national laws include detailed provisions to guarantee this role. -CITES Regulation/Trade in wild animals: The EU is looking at enforcement in Member States, recognising there are major problems in many of them. In addition, in implementing the Regulation, the precautionary principle should be applied as a rule, when there are no data concerning the status of a population or a species. -marine wildlife: much needs to be done for a real protection of marine fauna: there is a strong need to ban shark finning, to enforce the ban on driftnets in the Mediterranean, to protect marine mammals from by-catch and hunting, to ban unsustainable fishing methods and to build support from non-EU Member States to oppose whaling.

<p>In the area 'Nature and biodiversity', the 6EAP failed to influence positively the regulatory approaches in terms of:</p> <ul style="list-style-type: none"> - Lack of a sustainable development approach (i.e conservation of biodiversity with social and economic benefits). -The scientific basis has been largely lacking, as evidenced by the very large number of habitats and species for which the current status is recognized as 'unknown'. -Although consultation of business is improving now, business was largely excluded from the process of designating Natura 2000 sites. -The question of competition for the use of land for different purposes has been largely lacking (e.g. more flexible/adaptable approach to managing site boundaries over time, so that both business and conservation purposes can be served).
<p>6EAP gives clear emphasis to integrating environmental requirements into sectoral policy, which is an important driver in respective policy debates.</p>
<p>There are some good intentions and improvements in the area of 'nature and biodiversity' but the policies, instruments, funds and the interaction between the areas are too complicated and ineffective.</p>
<p>Raised awareness across the Commission of biodiversity and latterly ecosystem services. A great deal of work still to be done in this area!</p>
<p>It definitely affected the choice. Business sector has turned more accountable and responsible, the civil society got more active and involved; Example: Natura 2000 proved to be quite an incentive for involvement.</p>
<p>There have been few new significant regulatory instruments introduced in the 6EAP period for this policy area. This has been a weakness and a missed opportunity in this period. Opportunities existed to instigate cross-sectoral instruments with greater strength and instruments to strengthen the advancement of existing laws such as an instrument to empower, finance and produce management plans for all Natura 2000 sites.</p>
<p>Yes</p>
<p>No</p>
<p>Aside from the Framework Directive on the Marine environment, the 6EAP has had little effect. The 6EAP was less specific on the Nature and Biodiversity area in terms of proposed legislation.</p>

Integration of environmental protection requirements into sectoral policies has not been reached, see e.g. midterm review of the BAP. For the 7. EAP more commitment by other DGs (Agri, fish, transport, region) must be much stronger, and more instruments must become legally binding!

Additionally, control functions of the EC must be improved, as at moment discussed re. finances/budgets of the Member States.

Participation and civil society was perhaps invigorated over the board. The Water framework directive is a good example

More or less. There are more local/regional initiatives to motivate and cooperate with farmers to improve biodiversity, especially concerning Agro-Biodiversity.

In relation to 'Financial instrument for rural development: European Agricultural Fund for Rural Development (EAFRD): Axis 1 Measures (Advice and training

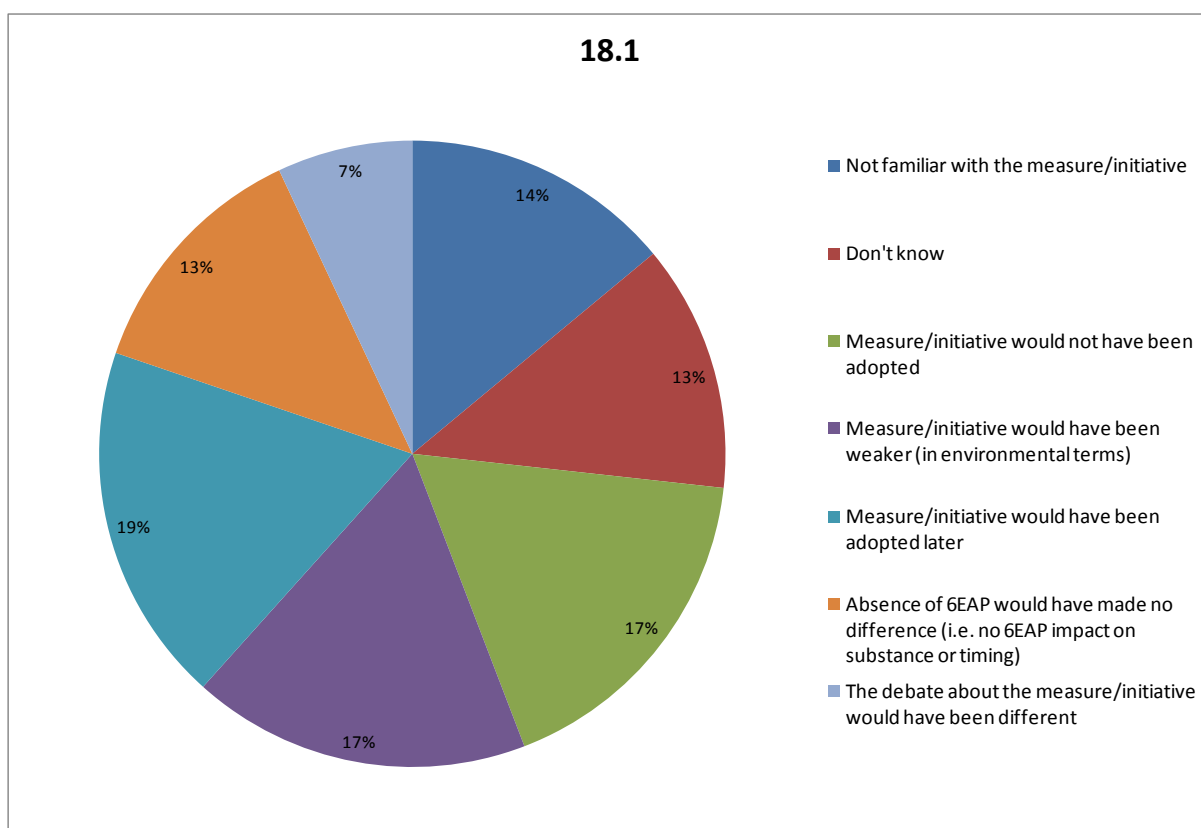
6.1.3.3 Environment and health and quality of life

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 18: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

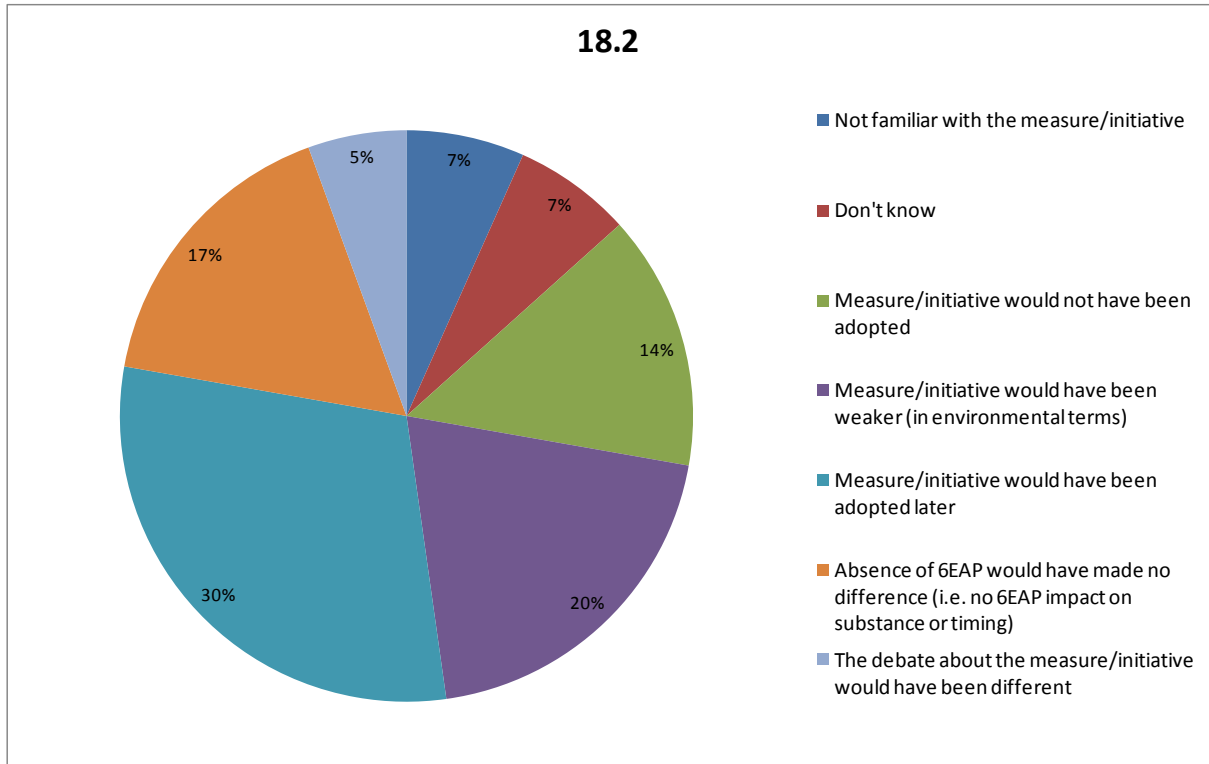
18.1: Commission Communication - The European Environment and Health Action Plan 2004-2010 (COM(2004)416).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 17% of the participants thought that the measure would not have been adopted, 17% thought that the measure would have been weaker in environmental terms, 19% thought that the measure would have been adopted later without the 6EAP. Only 7% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 13% thought that the absence would have made no difference in substance or timing. Overall 27% were either not familiar (14%) with the measure or did not know (13%).



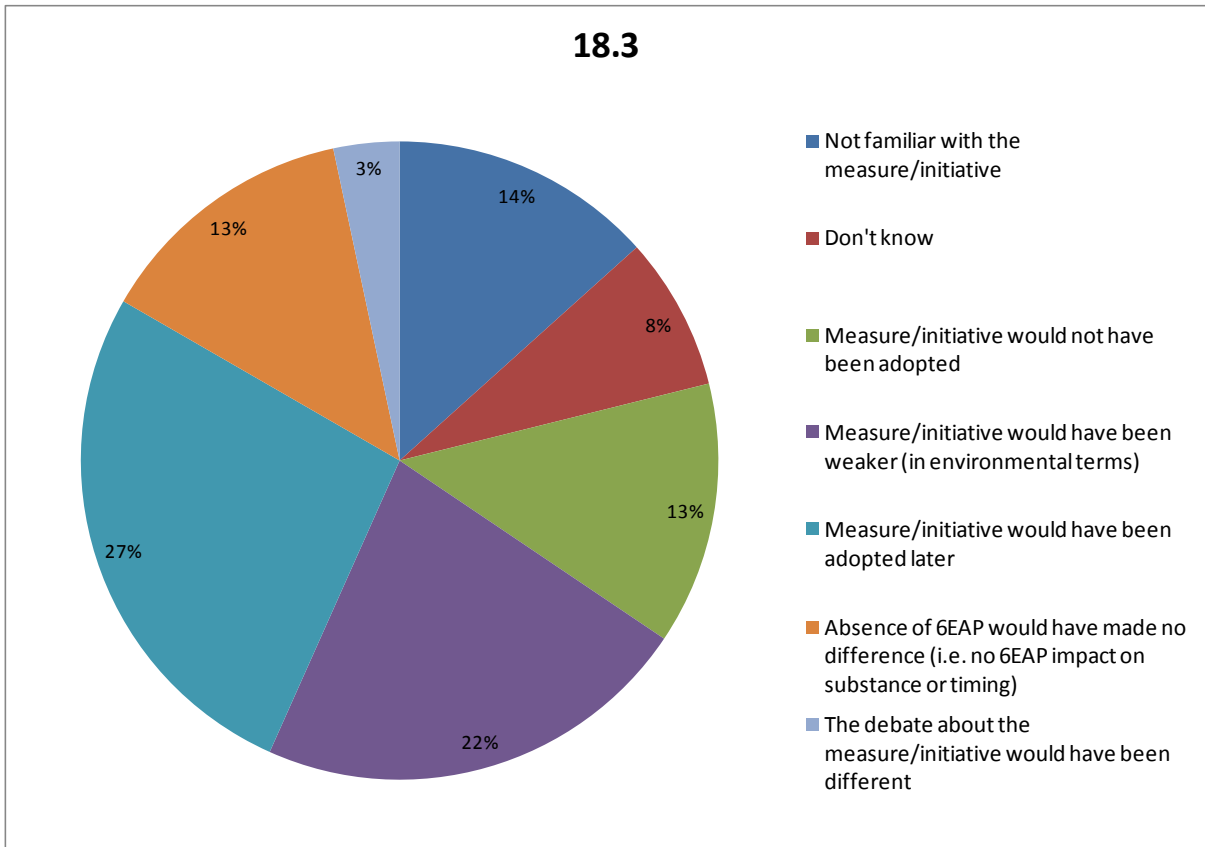
18.2: REACH chemicals regulation: Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 14% of the participants thought that the measure would not have been adopted, 20% thought that the measure would have been weaker in environmental terms, 30% thought that the measure would have been adopted later without the 6EAP. Only 5% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 17% thought that the absence would have made no difference in substance or timing. This measure was better known than the one before: Overall 14% were either not familiar (7%) with the measure or did not know (7%).



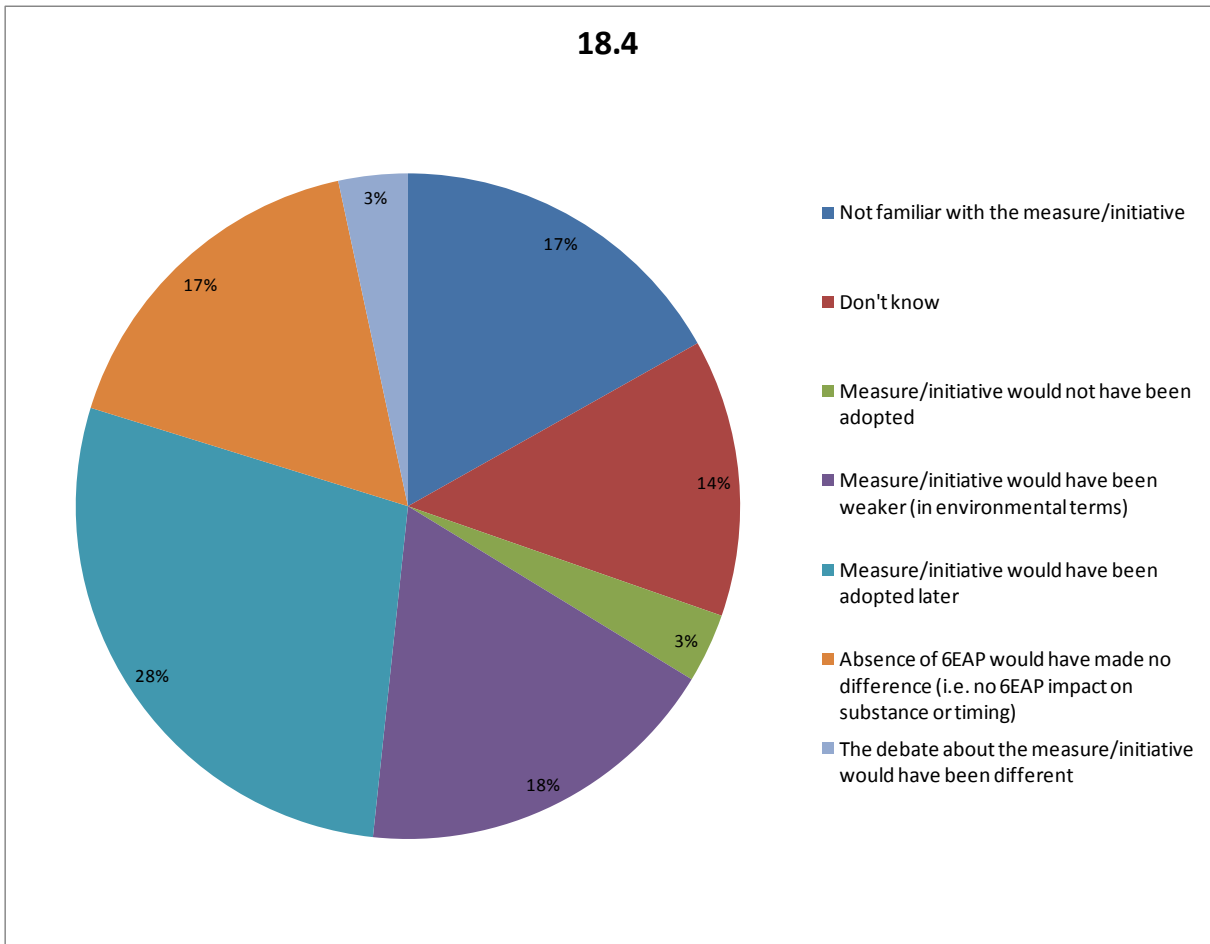
18.3: Sustainable use of pesticides: Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 13% of the participants thought that the measure would not have been adopted, 22% thought that the measure would have been weaker in environmental terms, 27% thought that the measure would have been adopted later without the 6EAP. Only 3% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 13% thought that the absence would have made no difference in substance or timing. Overall 22% were either not familiar (14%) with the measure or did not know (8%).



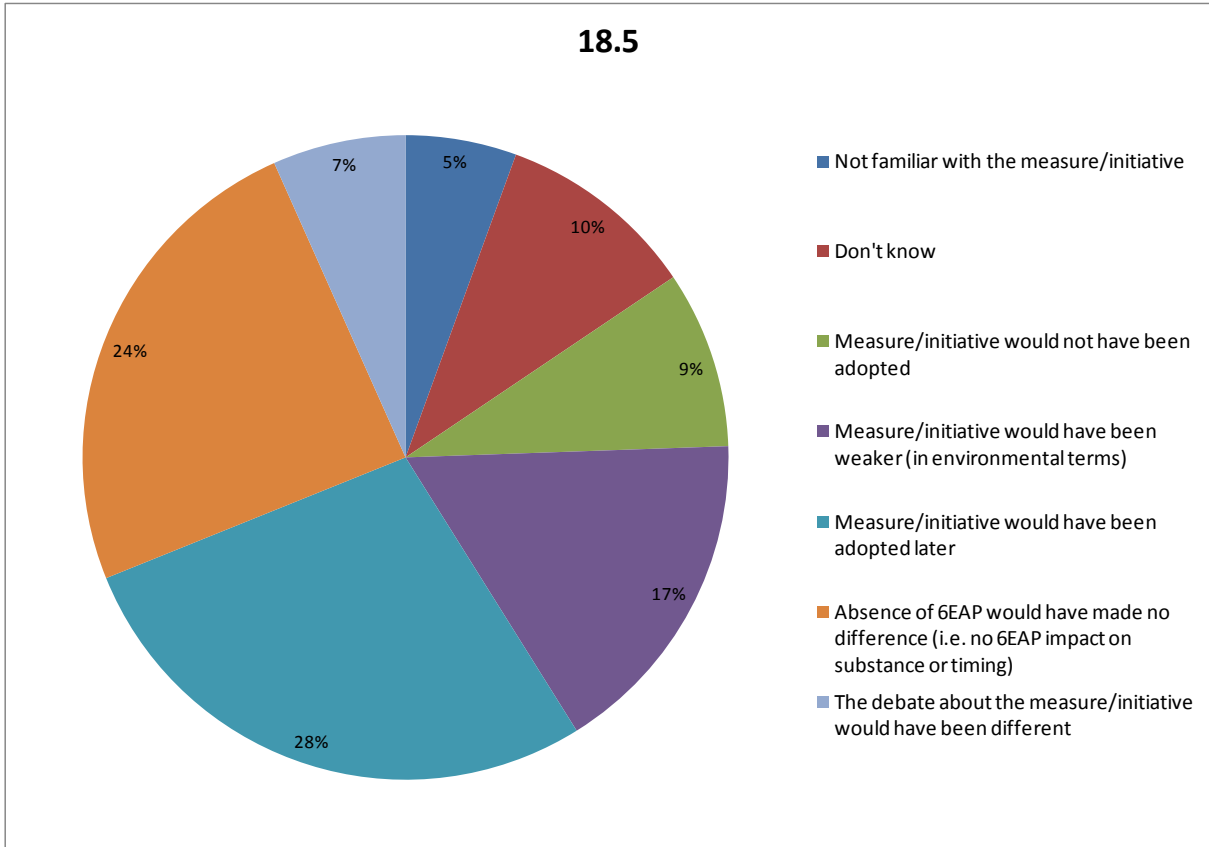
18.4: Marketing authorisation for pesticides: Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 3% of the participants thought that the measure would not have been adopted, 18% thought that the measure would have been weaker in environmental terms, 28% thought that the measure would have been adopted later without the 6EAP. Only 3% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 17% thought that the absence would have made no difference in substance or timing. With overall 31% participants a surprisingly high number of participants were either not familiar (17%) with the measure or did not know (14%).



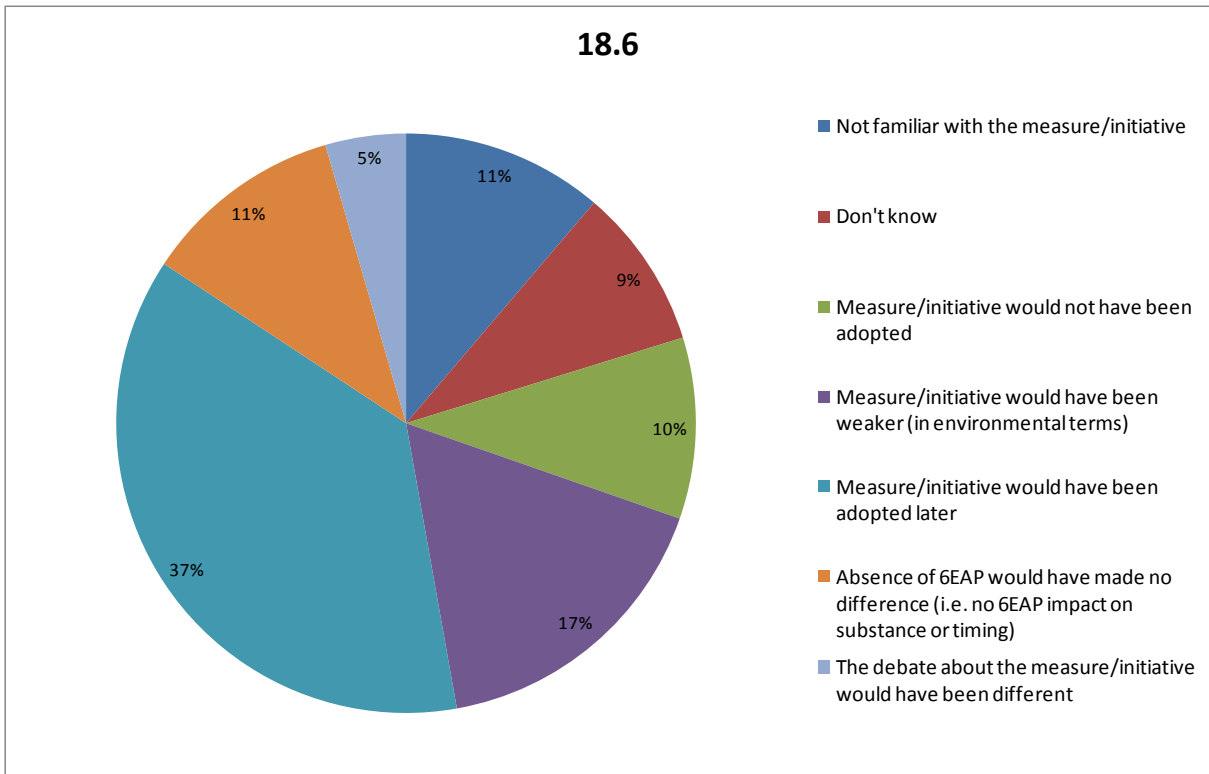
18.5: Common Implementation Strategy (CIS) of the Water Framework Directive.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 9% of the participants thought that the measure would not have been adopted, 17% thought that the measure would have been weaker in environmental terms, 28% thought that the measure would have been adopted later without the 6EAP. Only 7% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 24% thought that the absence would have made no difference in substance or timing. Overall 15% participants were either not familiar (5%) with the measure or did not know (10%).



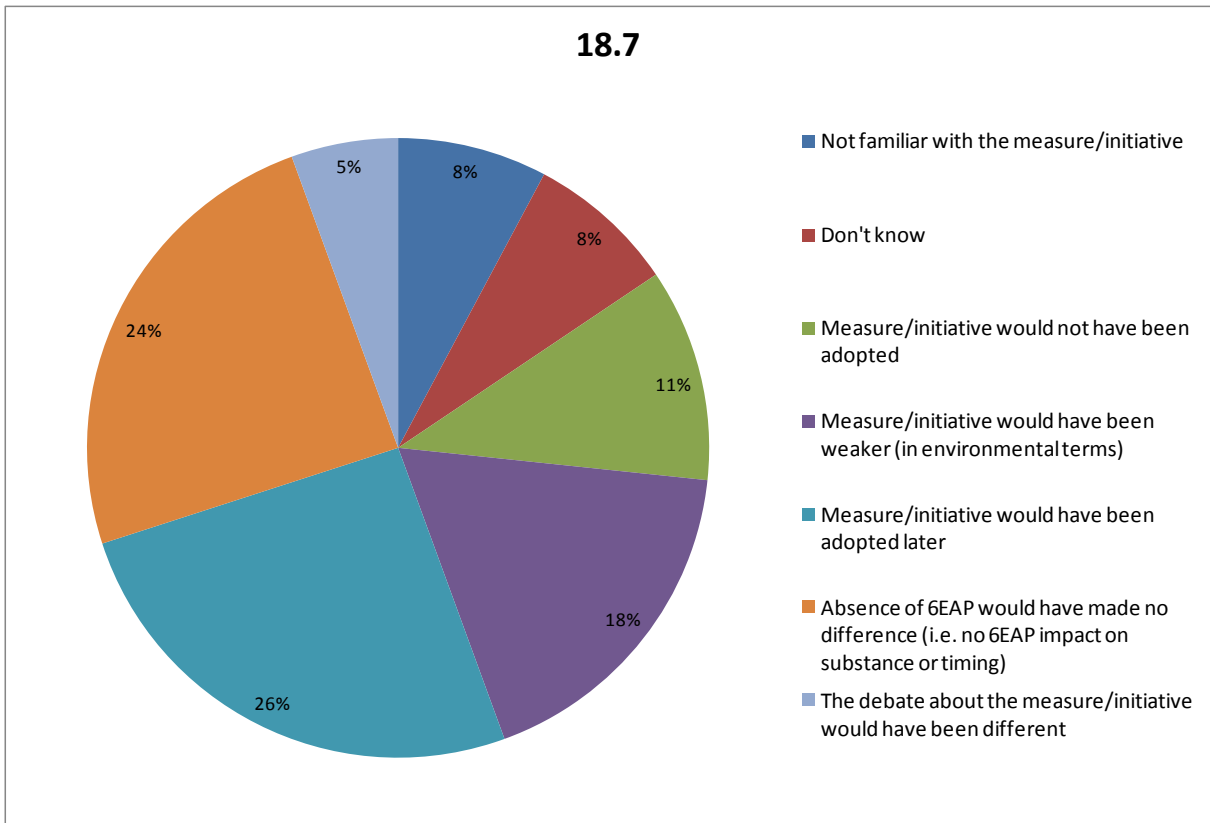
18.6: Air quality: Directive 2008/50/EC on ambient air quality and cleaner air for Europe.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 10% of the participants thought that the measure would **not have been adopted**, 17% thought that the measure would have been **weaker** in environmental terms, 37% thought that the measure would have been adopted **later** without the 6EAP. Only 5% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 11% thought that the absence would have made **no difference** in substance or timing. Overall 20% of the participants were either **not familiar** (11%) with the measure or **did not know** (9%).



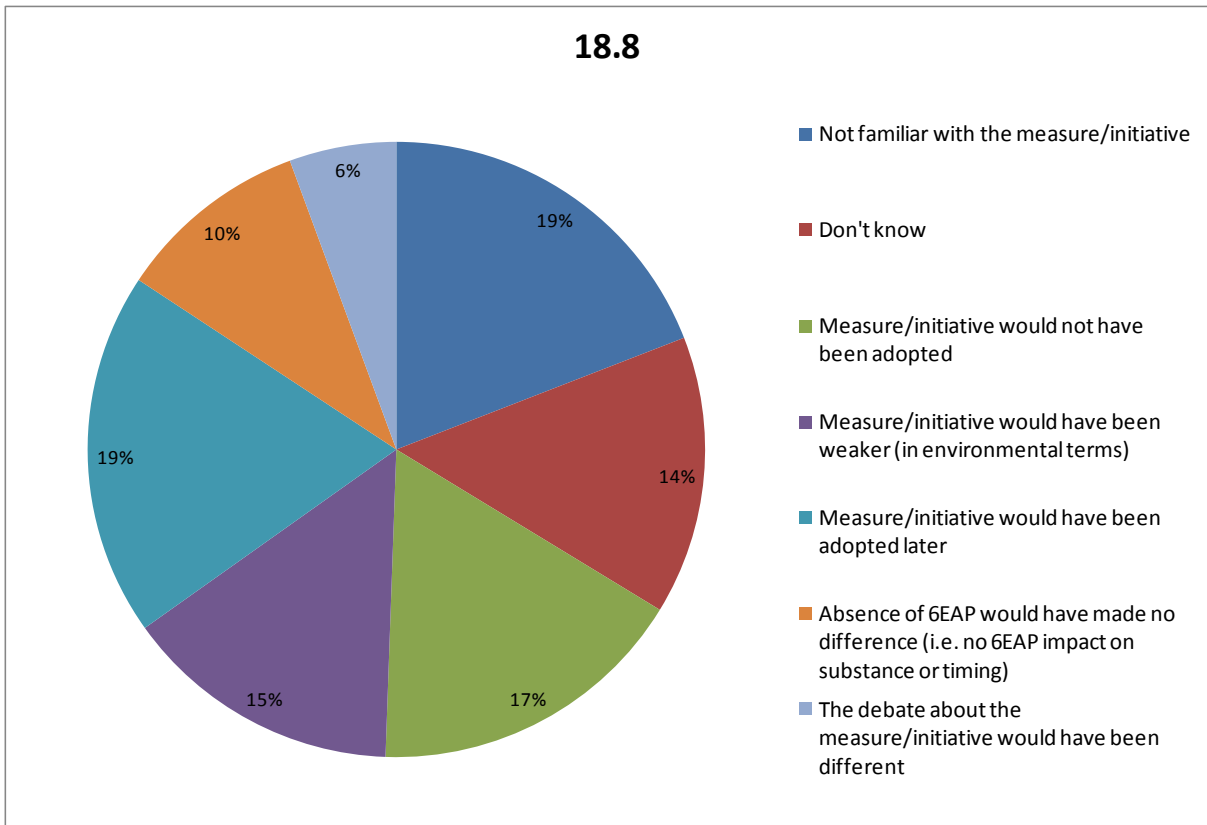
18.7: Industrial pollution (revision of the IPPC Directive): Proposal for a Directive on industrial emissions (recast) (COM(2007)844).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 11% of the participants thought that the measure would not have been adopted, 18% thought that the measure would have been weaker in environmental terms, 26% thought that the measure would have been adopted later without the 6EAP. Only 5% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 24% thought that the absence would have made no difference in substance or timing. Overall 16% participants were either not familiar (8%) with the measure or did not know (8%).



18.8: Urban environment: Commission Communication - Thematic Strategy on the urban environment (COM(2005)718).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 17% of the participants thought that the measure would not have been adopted, 15% thought that the measure would have been weaker in environmental terms, 19% thought that the measure would have been adopted later without the 6EAP. Only 6% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 10% thought that the absence would have made no difference in substance or timing. With overall 33% participants a surprisingly high number of participants were either not familiar (19%) with the measure or did not know (14%).



The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 19: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘Environment and Health and Quality of Life‘? If so, please elaborate and give one or more examples.

Answer
All of the listed instruments have had a logic of their own, this is a chicken and egg problem - the EAP may have influenced, but the likewise the preparation of the initiatives influenced the EAP
6EAP has contributed to too much focus from the European Commission on emissions trading for air pollutants.
No
No. As I said above it is a question of enforcement and better implementation by Member States . In these cases, the sensibility and opposition of some Member States have been important (as in the case of the Water measures).
reduction of SO2 emission preparing RBMP integrated permitting, inspection risk based approach in sustainable use (permitting) of pesticides
EU policy has not been strong enough in revising indicators of Quality of Life, in trying to make GDP lose political salience. This aside, the Water Framework Directive and REACH are pieces of legislations that many member countries would never have adopted on their own. the WFD integrates many different aspects and policies. On urban policy, the integration of economic policies and soil protection (objectives against soil sealing) have obviously failed in Ireland, Spain... the EU policies were too weak.
Yes, as the 6EAP applies the precautionary principle as leading, the decision making process often ignores the scientific facts that are available. This often leads to situations where new data disproving a measure or standard is not incorporated adequately to relieve the burden on the involved stakeholders.
In a follow-up EAP the principle of ‘sound science‘ has to become leading and measure or requests for action should become supported by solid scientific evidence. In case a topic is of general concern that action is required a precautionary approach can be adopted to bridge the period to develop the science required to answer the concern at stake. However, when disproven, the measure or standard must be relieved

<p>The are many EQSs and EQOs that are based upon old data that is no longer valid, when new scientific information indicate the these to be too stringent these are not altered whereas as the dat indicates these to be not sufficiently protective immediate action is initiated. This appears to be incorrect and again driven by precautionary principles.</p> <p>Furthermore EQSs for substances that are no longer on the EU market drive stakeholders o unnecessary monitoring of these and wasting resources that could be applied more effectively.</p>
<p>Yes in chemicals and in water protocol for examples</p>
<p>Commission Communication - The European Environment and Health Action Plan 2004-2010 (COM(2004)416) was very weak with little DG ENV buy-in.</p> <p>Urban environment: Commission Communication - Thematic Strategy on the urban environment (COM(2005)718) was also stillborn due to lack of buy-in from DG REGIO and lack of EU competence.</p>
<p>It has. Strict standards and bans where public health is threatened. These should be given up.</p>
<p>n/a</p>
<p>Yes, regarding the new directives and regulations for air emissions, REACH etc.</p>
<p>6EAP gave an impetus to a number of policy and legislative approaches in the area of 'Environment and health and quality of life'.</p> <p>The risk-based approach defined in the 6EAP for chemicals wad embarrassed in the REACH proposal.</p>
<p>yes</p>
<p>No</p>
<p>e.g. legislation on chemicals (see above)</p>
<p>6EAP has been influential in developing and delivering a number of regulatory approaches under this thematic area - including REACH regulation, Bathing Water Directive, PRTR, CAFE. It has been less successful in developing other aspects such as indicators for environment and health.</p>

EAP itself has been driving force to place the connections between environment and health higher on the agenda. It has certainly affected the choice of instruments and has been crucial for the set up of the EU Action Plan on Environment and Health.

Both EAP and EHAP have been instrumental in providing the scientific and knowledge base for policy-making, thus improving the use of scientific knowledge. EAP and EHAP have also greatly helped to integrate environment and health into the EU Health Strategy and programme. However, the integration of environment and health into other EU policy areas (budget, financing mechanisms) still remains to be achieved.

Pesticides Regulation - While not prescribed specifically in the 6th EAP, the elaboration of the hazard based 'cut off criteria' for the evaluation of PPP active substances agreed under Regulation No 1107/2009 as an example of how a needlessly extreme approach was taken.

Pesticides Directive - With respect to Directive 2009/128/EC, the proliferation of buffer zones and no spray zones regardless of toxicological profile of PPP active substances is another example of where the approach is more extreme than is necessarily required.

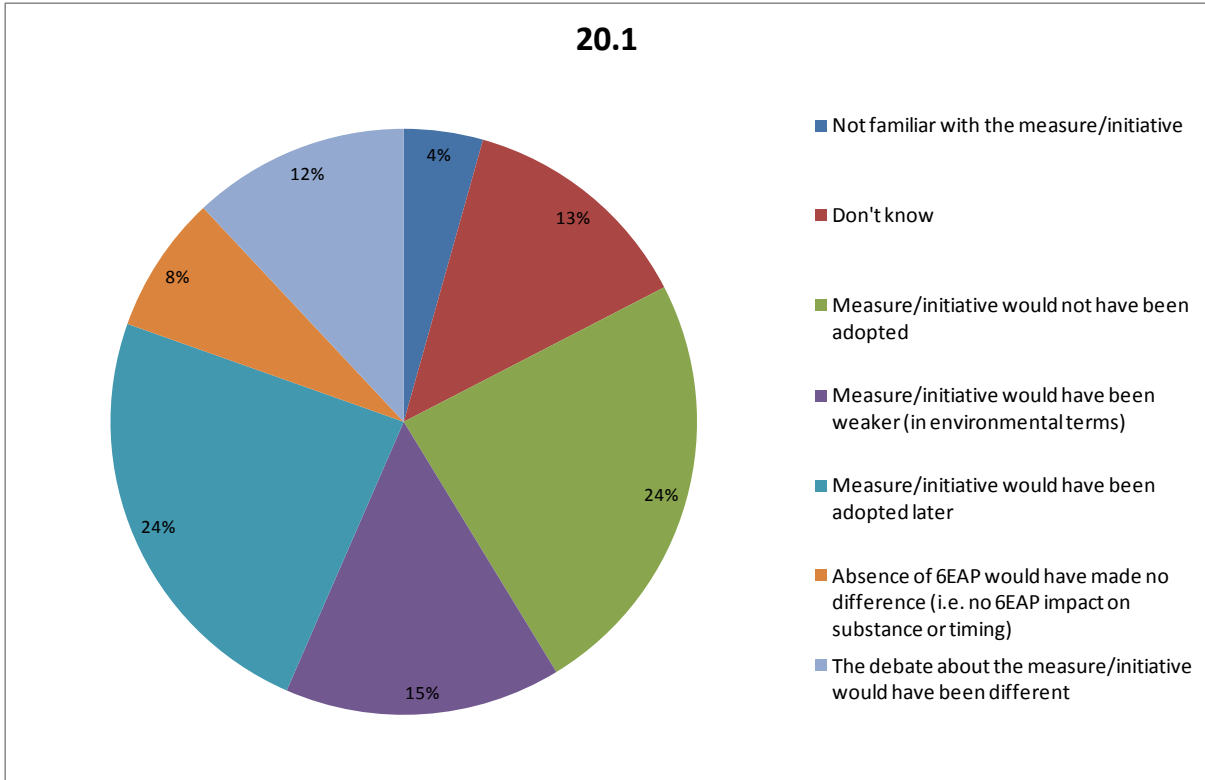
6.1.3.4 Natural resources and waste

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 20: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

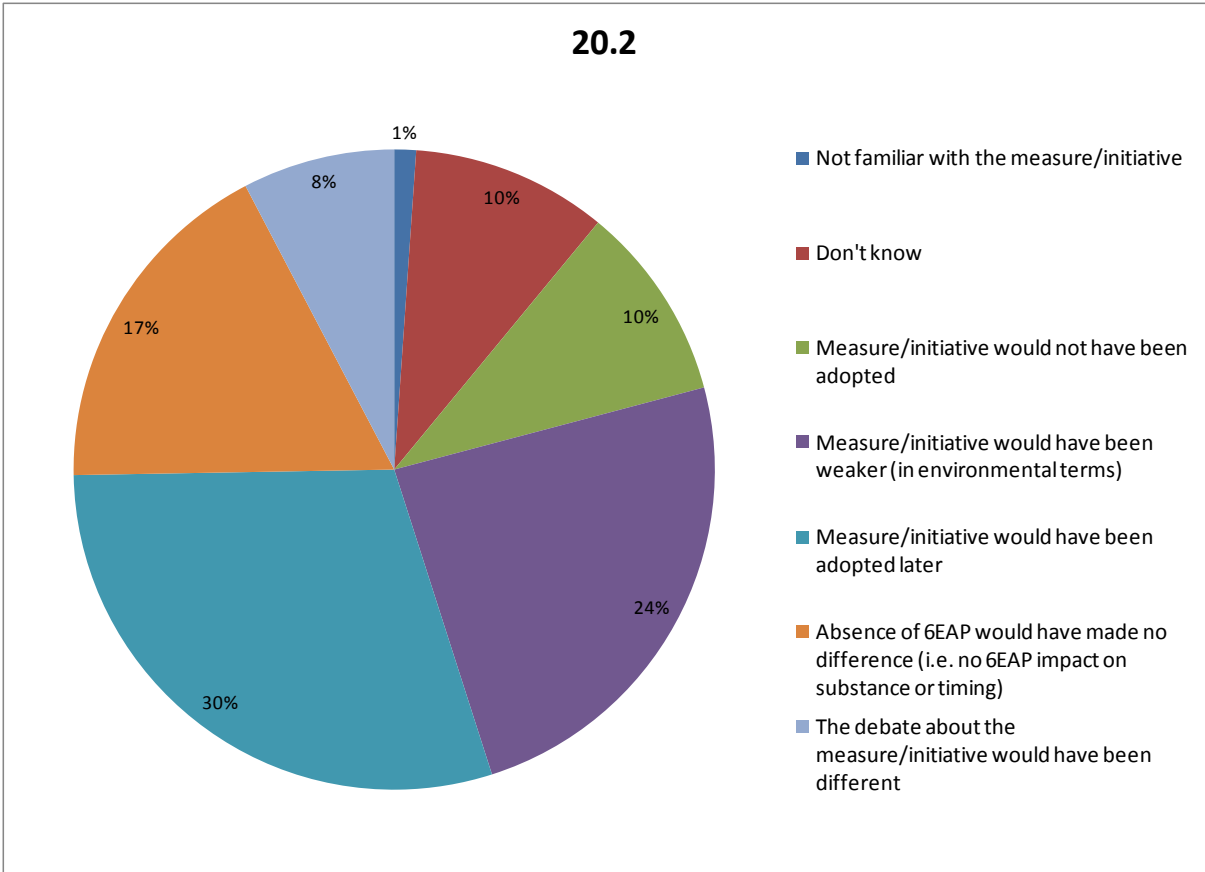
20.1: Natural resources: Commission Communication - Thematic Strategy on the sustainable use of natural resources (COM(2005)670).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 24% of the participants thought that the measure would not have been adopted, 15% thought that the measure would have been weaker in environmental terms, 24% thought that the measure would have been adopted later without the 6EAP. 13% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 8% thought that the absence would have made no difference in substance or timing. Overall 17% of the participants were either not familiar (4%) with the measure or did not know (13%).



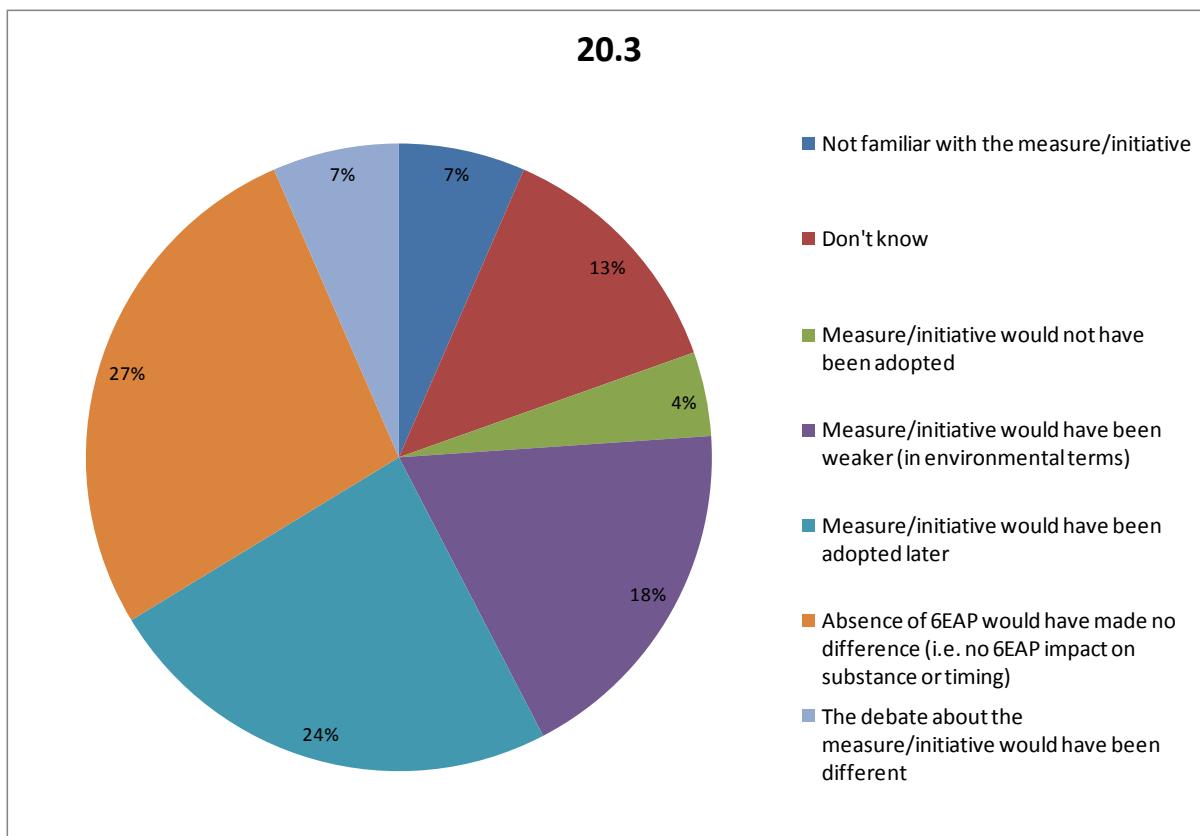
20.2: Waste framework directive: Directive 2008/98/EC on waste.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 10% of the participants thought that the measure would not have been adopted, 24% thought that the measure would have been weaker in environmental terms, 30% thought that the measure would have been adopted later without the 6EAP. Only 8% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 17% thought that the absence would have made no difference in substance or timing. Overall 11% of the participants were either not familiar (1%) with the measure or did not know (10%).



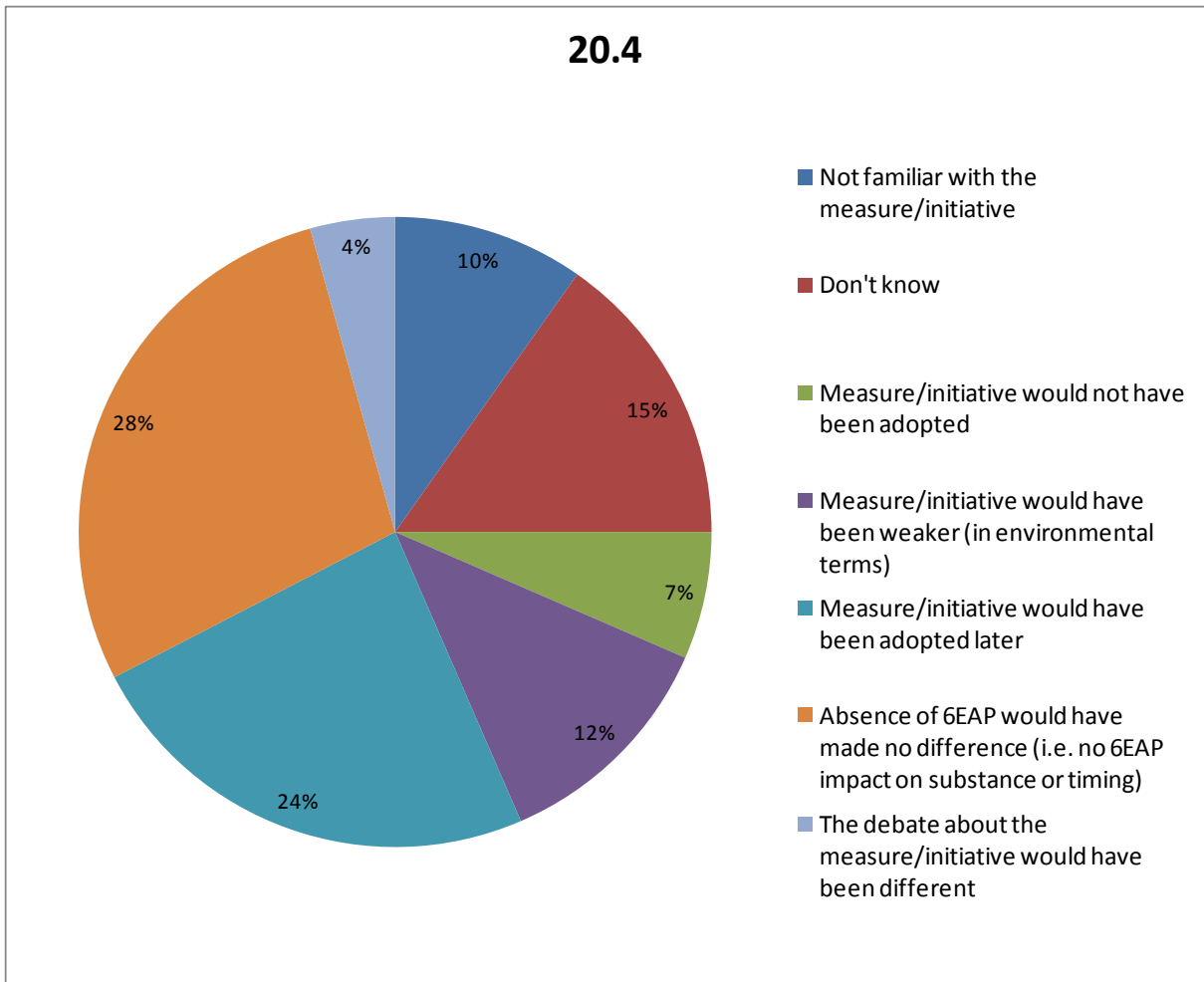
20.3: Revision of the electronic waste Directive (WEEE): Proposal for a Directive on waste electrical end electronic equipment (recast).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 4% of the participants thought that the measure would not have been adopted, 18% thought that the measure would have been weaker in environmental terms, 24% thought that the measure would have been adopted later without the 6EAP. Only 7% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 27% thought that the absence would have made no difference in substance or timing. Overall 18% of the participants were either not familiar (7%) with the measure or did not know (13%).



20.4: Revision of the hazardous substances Directive (RoHS): Proposal for a Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 7% of the participants thought that the measure would **not have been adopted**, 12% thought that the measure would have been **weaker** in environmental terms, 24% thought that the measure would have been adopted **later** without the 6EAP. Only 4% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 28% thought that the absence would have made **no difference** in substance or timing. Overall 24% of the participants were either **not familiar** (10%) with the measure or **did not know** (15%).



The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 21: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘Natural Resources and Waste‘? If so, please elaborate and give one or more examples.

Answer
no
No. The Member States are reluctant to go further in their commitments in these subjects.
reduction of the amount of hazardous waste

<p>enlarged landfill sites,sewage treatments,greatly</p> <p>use of producer responsibility reduced amount of waste</p>
<p>Unfortunately, strategic thinking on resources has not led to a substantial change in the way of looking at waste policy. It remains a separate area with its own policy-intensive approach.</p> <p>The fact that resources and waste remain conceptually interlinked in the context of the EAP has significantly hampered the development of effective resource policy.</p>
<p>Apart from the instruments, the objectives are important, and there is no clear EU policy in taking into account the impacts outside the EU of our use of minerals and fossil fuels. An integrated assessment is needed. It is doubtful if we are making real progress towards Dematerialization (before the economic crisis of 2008). Citizens have no idea yet whether we are using 15 tons per capita of materials or 25 or 5, this is irrelevant in politics.</p>
<p>WEEE and ROHS are not adopted yet</p>
<p>6EAP gave an impetus to a number of policy and legislative initiatives in the area of 'Natural resources and Waste'. The need for a solid knowledge basis on the natural resources issue was rightly stressed in the 6EAP. The need for a coherent and simplified waste management framework was rightly defined in the 6 EAP</p>
<p>Natural resources: Commission Communication - Thematic Strategy on the sustainable use of natural resources (COM(2005)670) is possibly the most disappointing product of the 6th EAP. It is weak and unclear.</p> <p>Industry roll-back on waste legislation would have happened without the 6th EAP.</p>
<p>Better integration of environmental protection requirements into sectoral policies was achieved. Civil society has become more committed to secure protection of natural assets and put more pressure on responsible governmental bodies regarding waste management.</p>
<p>It appears the Thematic Strategy on sustainable use of natural resources has the most direct relationship with 6EAP.</p>
<p>yes</p>
<p>No</p>
<p>This instrument has positively affected the choice of the approaches both in Natural Resources area as well as Waste area. We should mention particularly linked policies aiming at promotion of sustainable production and consumption patterns and recycling society as an example.</p>

e.g. adoption of new waste legislation (see above)
There is an implementation gap in terms of investments in particular in the new member states , in the areas of air pollution control, water and waste water treatment, waste and nature conservation.
6EAP included quite a limited set of actions in this thematic area - but was influential in underpinning a number of important waste legislative instruments .
The 6EAP pushed the policy shift from 'end of pipe' waste management towards integrated resource management- resulting in the adoption of the so called [incomplete submission]
The Programme has mainstreamed the inclusion of environmental considerations into sectoral policy
Environmental considerations are now an integral consideration in all energy policy areas and are taken on board at design stage.

6.1.4 Part C: Cross-cutting issues of the 6EAP (22-25) optional

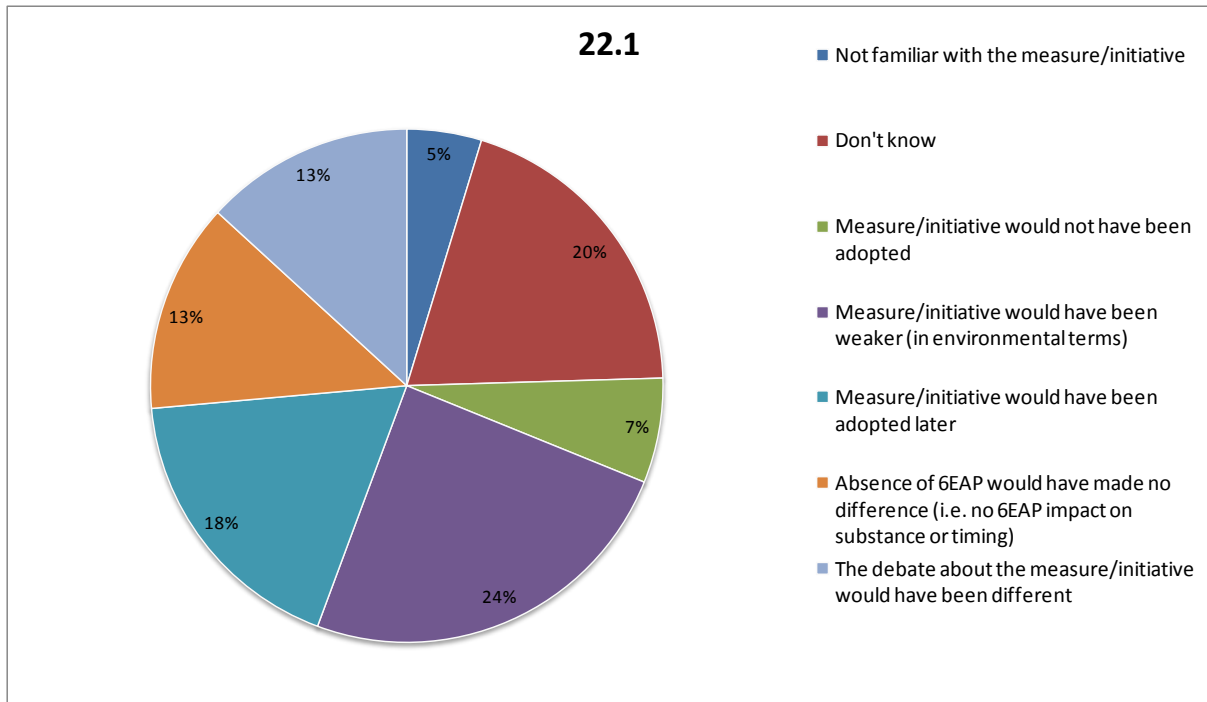
6.1.4.1 International

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 22: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

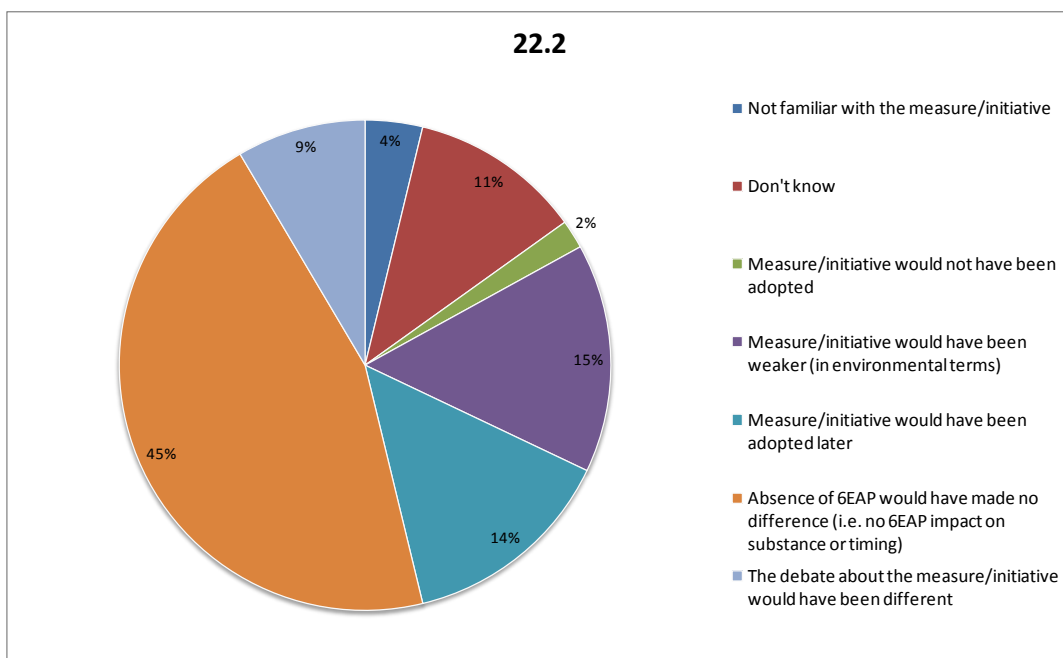
22.1: Renewed EU Sustainable Development Strategy.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 13% of the participants thought that the measure would not have been adopted, 24% thought that the measure would have been weaker in environmental terms, 18% thought that the measure would have been adopted later without the 6EAP. 13% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 13% thought that the absence would have made no difference in substance or timing. Overall 25% of the participants were either not familiar (5%) with the measure or did not know (20%).



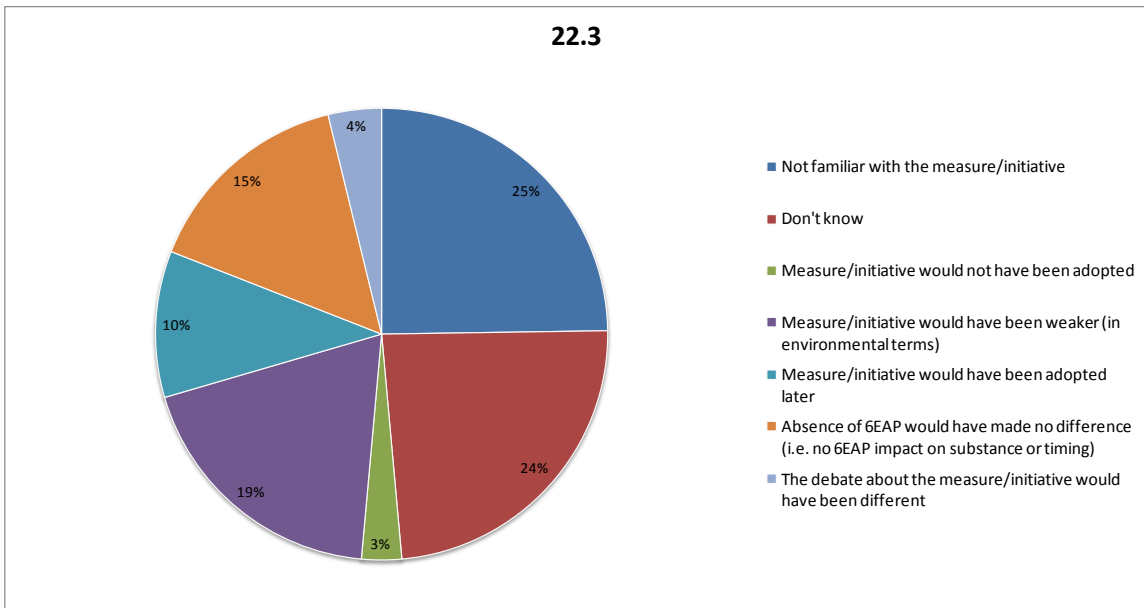
22.2: Measures to implement the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and the EU role in post-Kyoto negotiations.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 2% of the participants thought that the measure would not have been adopted, 15% thought that the measure would have been weaker in environmental terms, 14% thought that the measure would have been adopted later without the 6EAP. Only 9% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 45% thought that the absence would have made no difference in substance or timing. Overall 15% of the participants were either not familiar (4%) with the measure or did not know (11%).



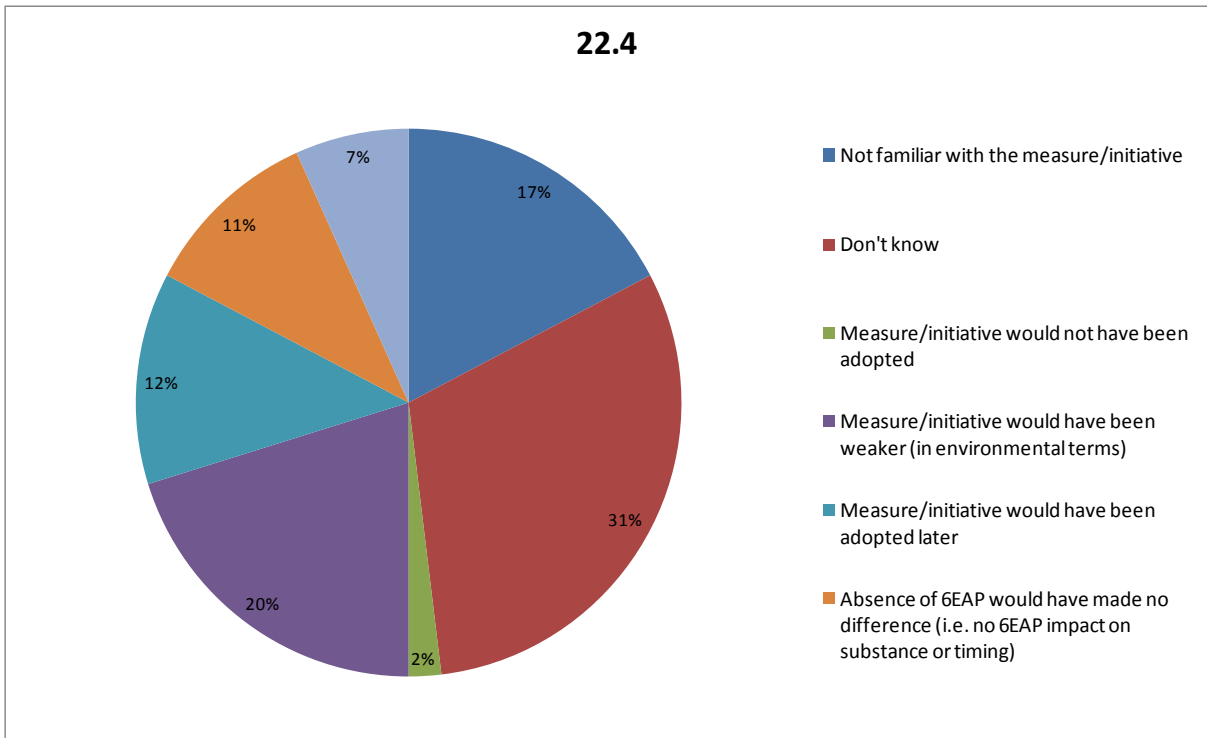
22.3: European Neighbourhood Policy: Regulation (EC) No 1638/2006 laying down provisions establishing a European Neighbourhood and Partnership Instrument (ENPI).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 3% of the participants thought that the measure would not have been adopted, 20% thought that the measure would have been weaker in environmental terms, 10% thought that the measure would have been adopted later without the 6EAP. Only 4% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 16% thought that the absence would have made no difference in substance or timing. Overall 47% of the participants were either not familiar (24%) with the measure or did not know (23%).



22.4: Council Conclusions on Integrating Environment in Development Cooperation, Council (Environment), 26 June 2009, 11474/09.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 2% of the participants thought that the measure would not have been adopted, 20% thought that the measure would have been weaker in environmental terms, 12% thought that the measure would have been adopted later without the 6EAP. Only 6% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 11% thought that the absence would have made no difference in substance or timing. Overall 48% of the participants were either not familiar (17%) with the measure or did not know (31%).



The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 23: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘International’? If so, please elaborate and give one or more examples.

Answer
No
As I said above, Member States, even institutions are reluctant to go further in some

<p>international issues, and they are ignoring some important aspects of the trade agreements and economic partnership agreements on environment in the Third countries. Even the implementation of the Climate Change measures in Third Countries (both mechanisms Joint implementation and Clean Mech.) is biased by economic interests and sometimes it is used to benefit the strategies of international expansion of European multinationals.</p>
<p>In the international area (and with the partial exception of climate change policies), there is a clear clash between EU economic policies and environmental objectives which is not solved by rhetorical statements. The EU contributes to loss of biodiversity worldwide. Very weak regulation of corporate liability, for instance.</p>
<p>Don't know</p>
<p>It definitely has. The use of scientific knowledge was much improved leading to the concept of 'knowledge-based society'; the regular reviewing and reporting made room for more transparency and accountability.</p>
<p>The 6EAP did not affect substantially the choice of regulatory approaches and instruments in the area 'International'. On the contrary, in many cases, the European Policy put in place under the 6EAP instituted distortions of competition at international level given that legislation is less ambitious in others regions. This can be see clearly in the area of climate change policy were the EU has not yet been successful in persuading other countries to adopt ambitious binding targets, and also for REACH. In addition, the 6EAP has not placed enough emphasis on an approach conducive to stimulating the competitiveness of European industry in the short and long term.</p>
<p>It is difficult to know what influences what for these very specific instruments and activities - it is a little 'chicken-and-egg'. However, from a general perspective, the use of an overriding strategy provides greater underpinning for such activities.</p>
<p>Yes</p>
<p>yes</p>
<p>No</p>
<p>It did not integrate enough the social aspects: employment, social cohesion, education, training, new skills and jobs decent jobs; R&D;...nor the economic aspects: what instruments to be promoted, how, through which instruments and funds; nor the good governance aspect; social dialogue, regulation</p>
<p>6EAP was non-specific in relation to a actions to support this area and had little influence in many respects. For example, the post-Kyoto negotiations were influenced significantly through international developments and debate.</p>

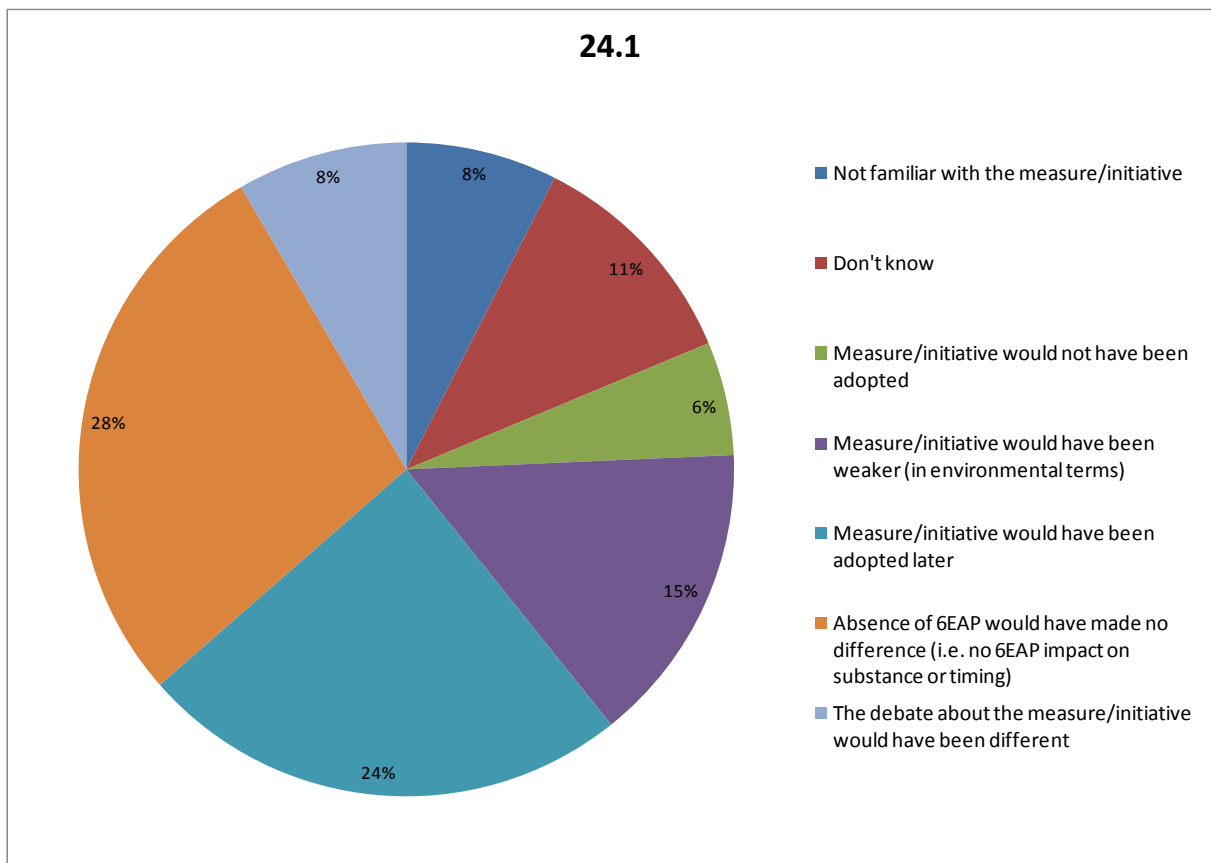
6.1.4.2 Strategic approaches and governance

For each EU environmental measure/initiative listed below, please indicate whether you agree with one of the following options: (1) Absence of 6EAP would have made no difference; In absence of the 6EAP (2) the measure/initiative would have been adopted later; (3) the measure/initiative would have been weaker (in environmental terms); (4) the measure/initiative would not have been adopted.

Question 24: How would the absence of the 6EAP have affected the adoption of the following measures/initiatives?

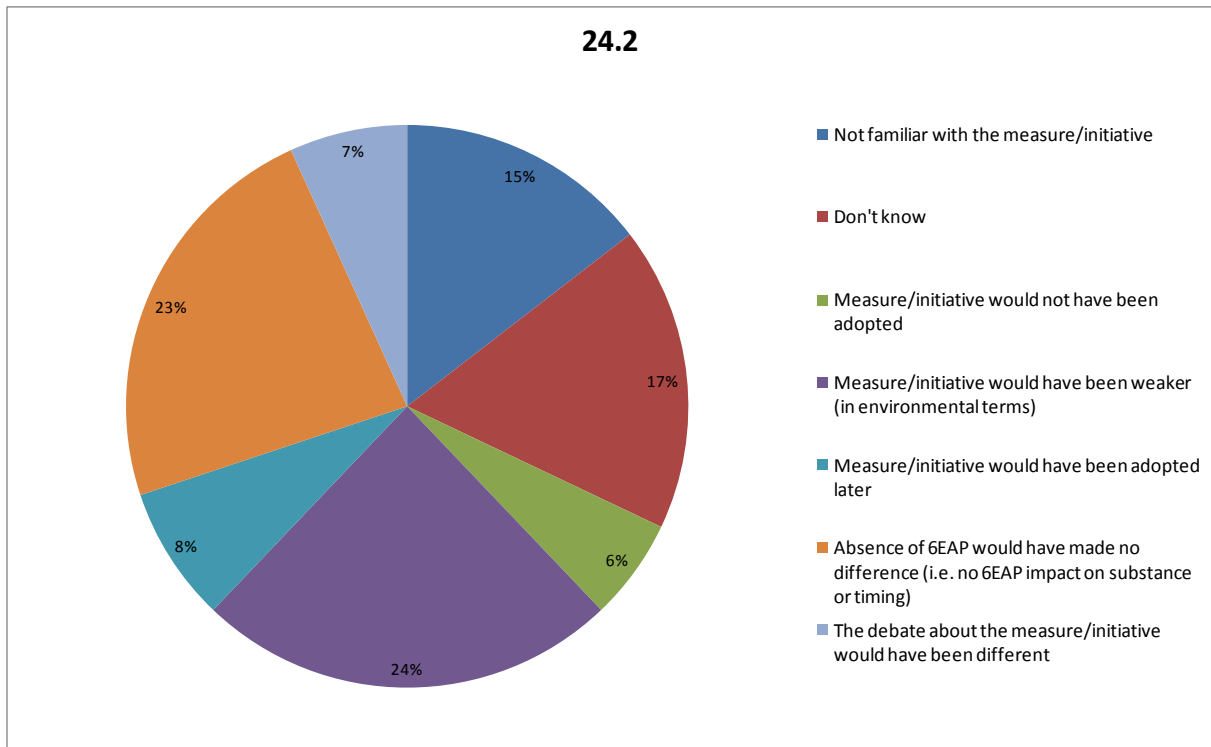
24.1: Access to environmental information (implementation of Aarhus Convention): Directive 2003/4/EC on public access to environmental information.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 6% of the participants thought that the measure would not have been adopted, 15% thought that the measure would have been weaker in environmental terms, 24% thought that the measure would have been adopted later without the 6EAP. 8% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 28% thought that the absence would have made no difference in substance or timing. Overall 19% of the participants were either not familiar (8%) with the measure or did not know (11%).



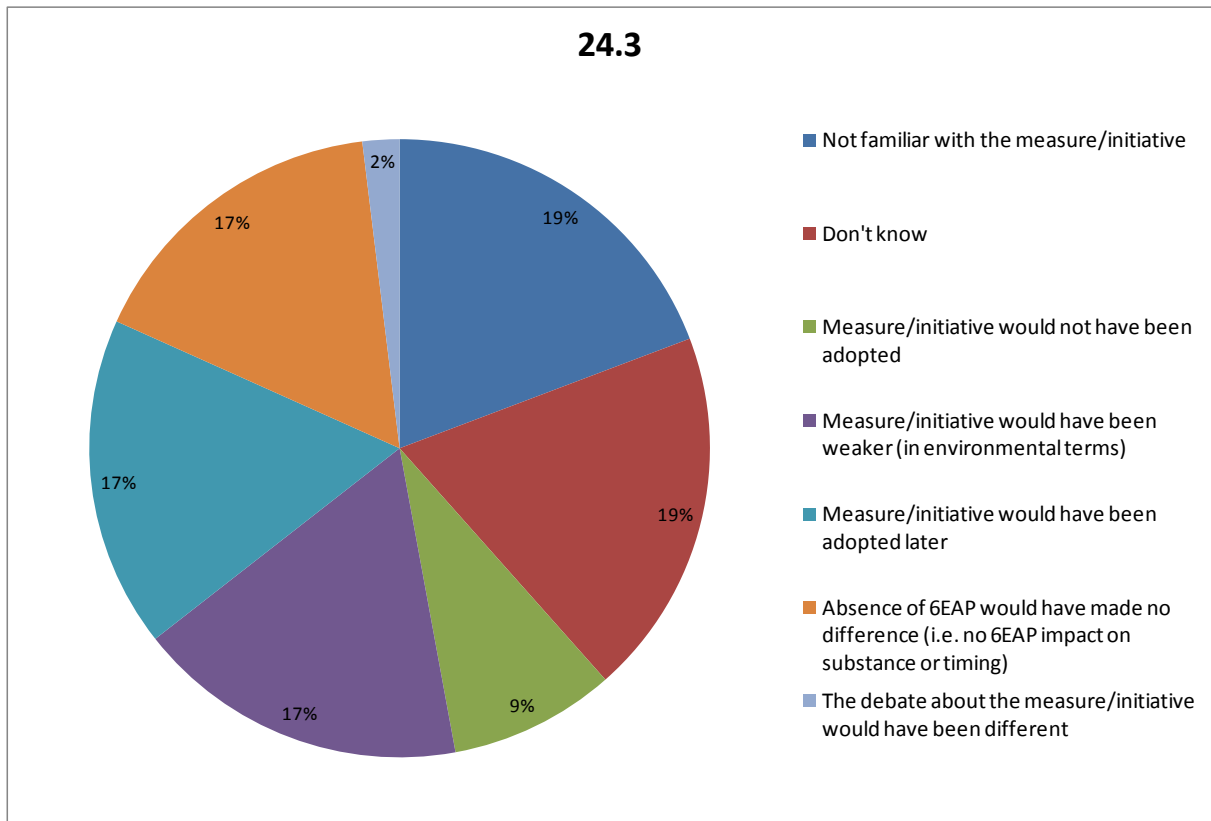
24.2: Research Framework Programme: Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 6% of the participants thought that the measure would not have been adopted, 24% thought that the measure would have been weaker in environmental terms, 8% thought that the measure would have been adopted later without the 6EAP. 7% thought that in absence of the 6EAP the debate about the measure would have been different. In contrast, 23% thought that the absence would have made no difference in substance or timing. Overall 30% of the participants were either not familiar (15%) with the measure or did not know (17%).



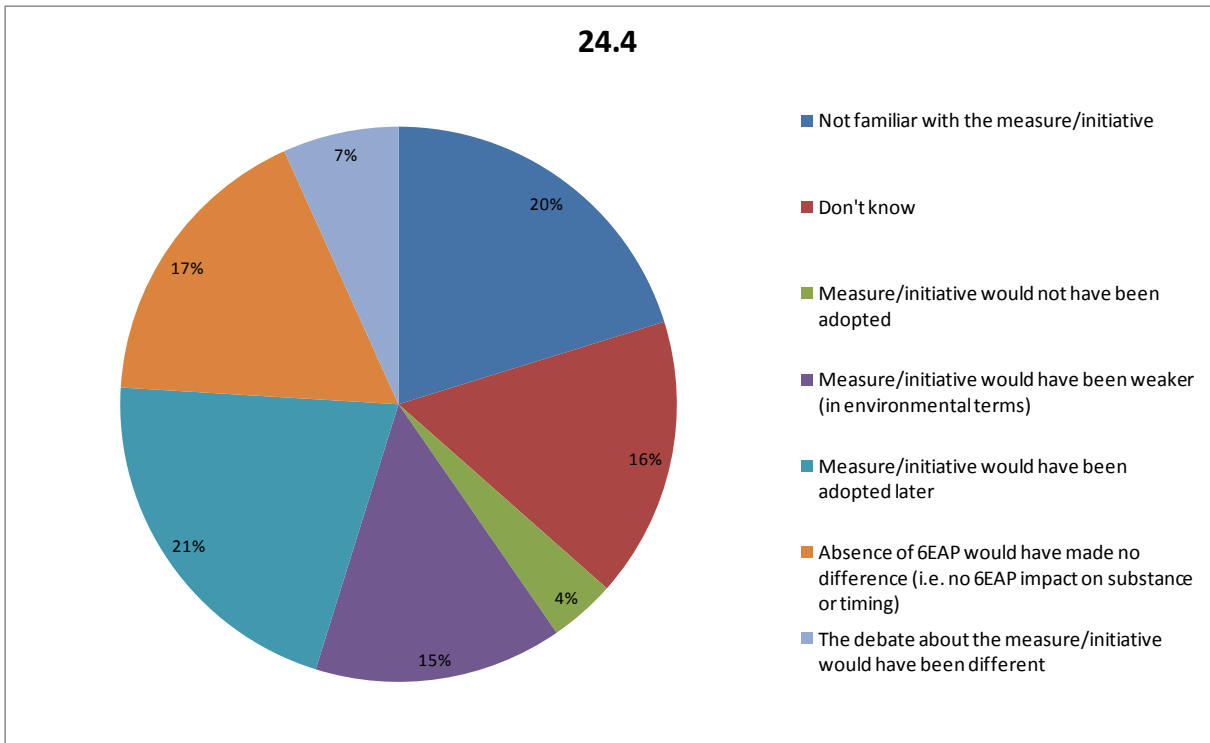
24.3: Provision of spatial information for the environment (INSPIRE): Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 9% of the participants thought that the measure would **not have been adopted**, 17% thought that the measure would have been **weaker** in environmental terms, 17% thought that the measure would have been adopted **later** without the 6EAP. 2% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 16% thought that the absence would have made **no difference** in substance or timing. Overall 38% of the participants were either **not familiar** (19%) with the measure or **did not know** (19%).



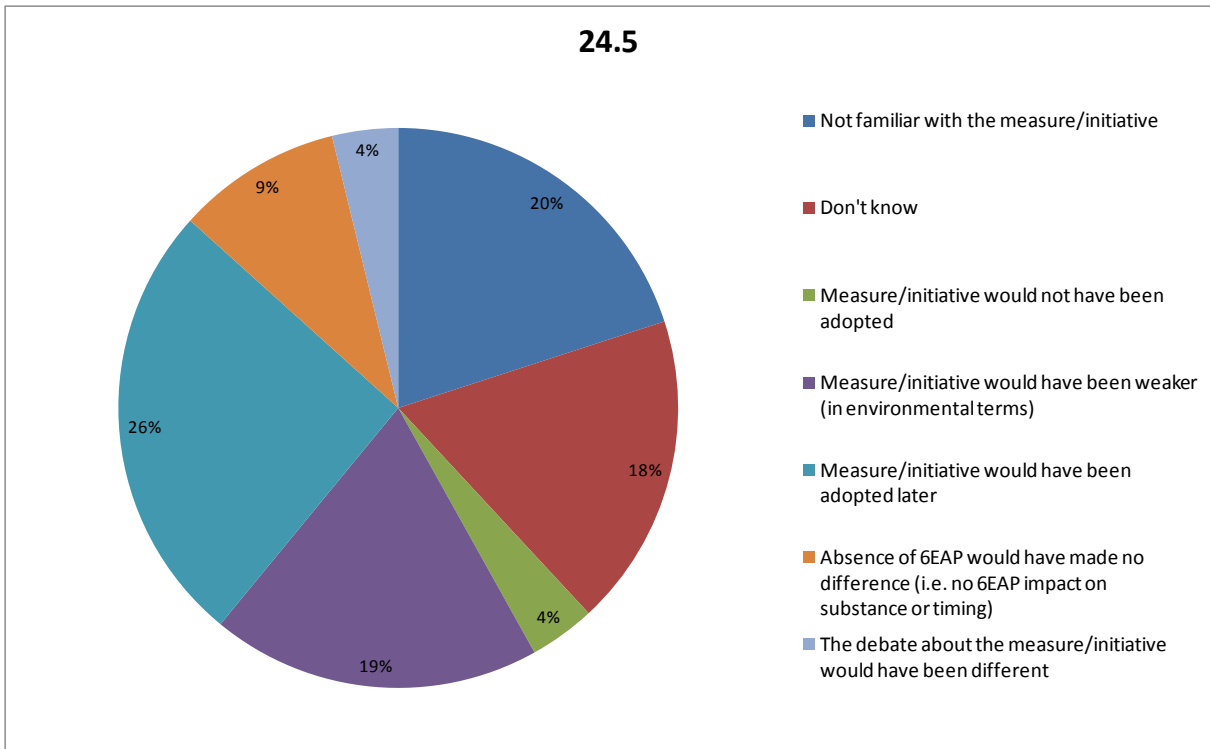
24.4: Environmental criminal law: Directive 2008/99/EC on the protection of the environment through criminal law.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 4% of the participants thought that the measure would **not have been adopted**, 15% thought that the measure would have been **weaker** in environmental terms, 21% thought that the measure would have been adopted **later** without the 6EAP. 7% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 17% thought that the absence would have made **no difference** in substance or timing. Overall 36% of the participants were either **not familiar** (20%) with the measure or **did not know** (16%).



24.5: Promotion of environmental technology (ETAP): Commission Communication - An Environmental Technologies Action Plan for the European Union (COM(2004)38).

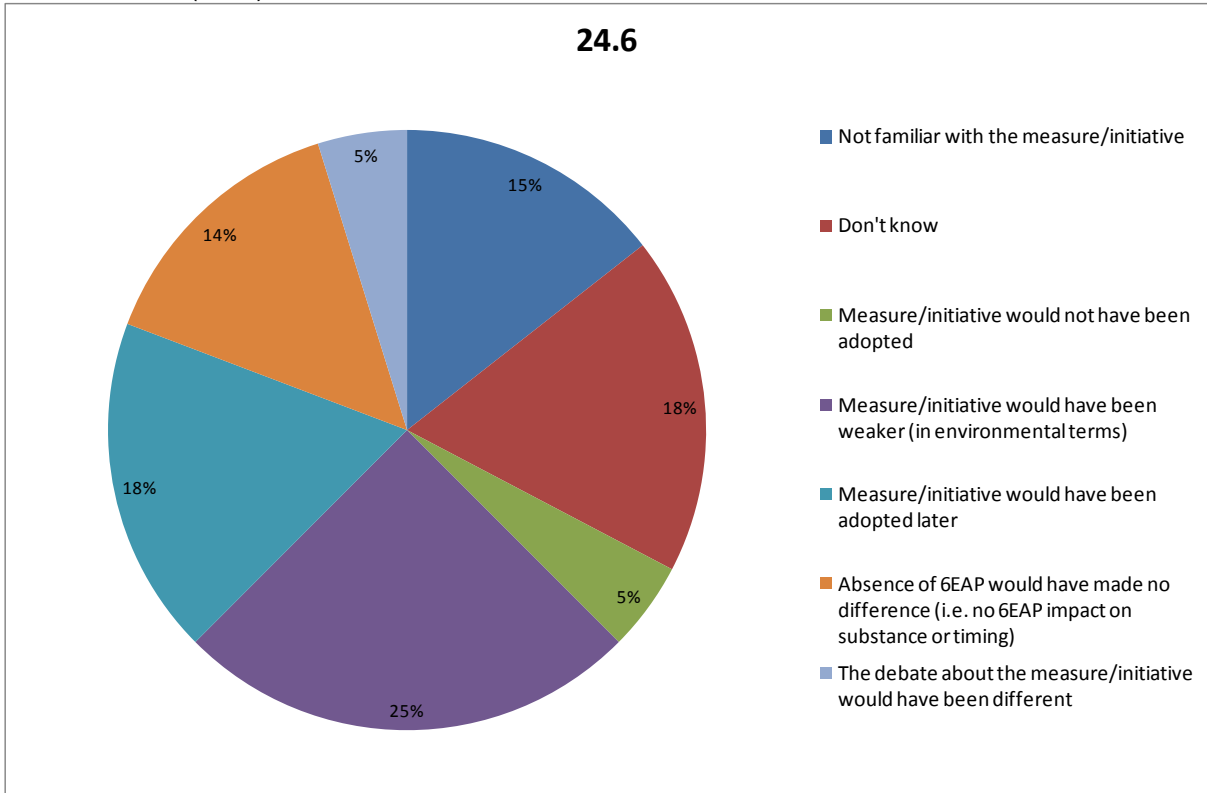
Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 4% of the participants thought that the measure would **not have been adopted**, 19% thought that the measure would have been **weaker** in environmental terms, 26% thought that the measure would have been adopted **later** without the 6EAP. 4% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 9% thought that the absence would have made **no difference** in substance or timing. Overall 38% of the participants were either **not familiar** (20%) with the measure or



did not know (18%).

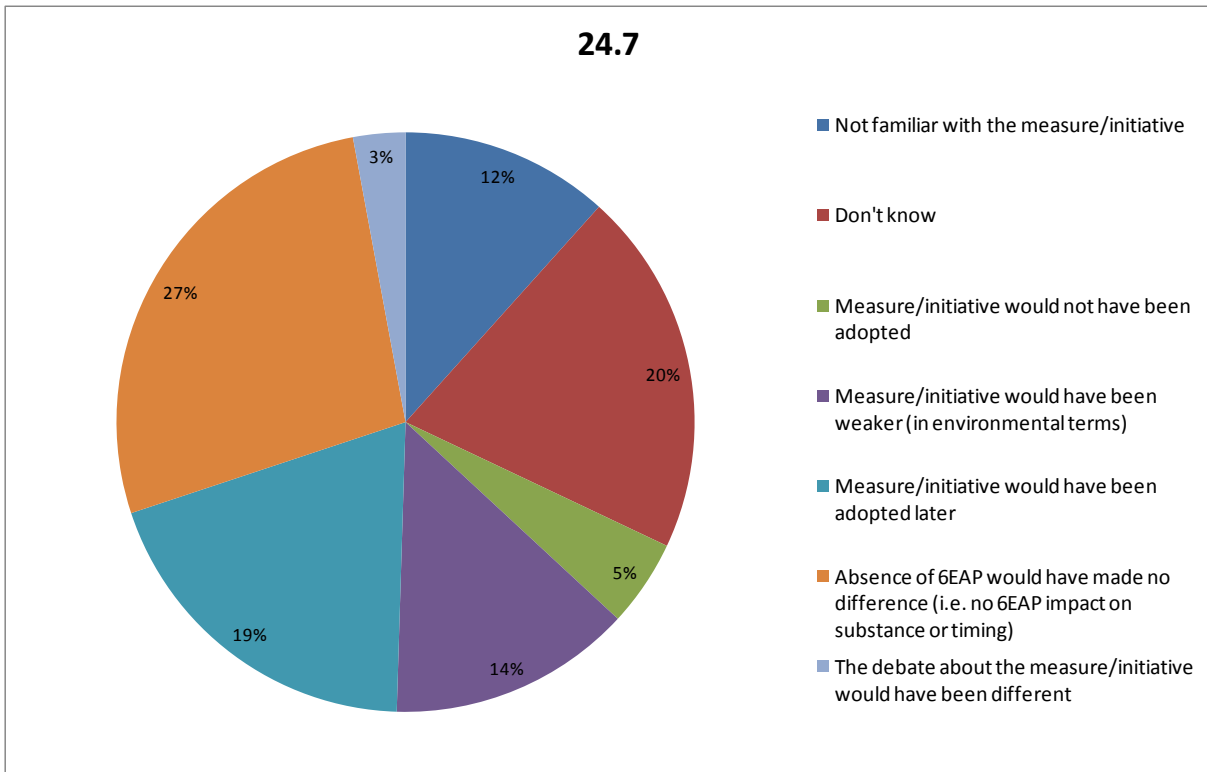
24.6: Eco-design to support sustainable production and consumption: Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products (recast) and related measures.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 5% of the participants thought that the measure would **not have been adopted**, 25% thought that the measure would have been **weaker** in environmental terms, 18% thought that the measure would have been adopted **later** without the 6EAP. 5% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 14% thought that the absence would have made **no difference** in substance or timing. Overall 33% of the participants were either **not familiar** (15%) with the measure or **did not know** (18%).



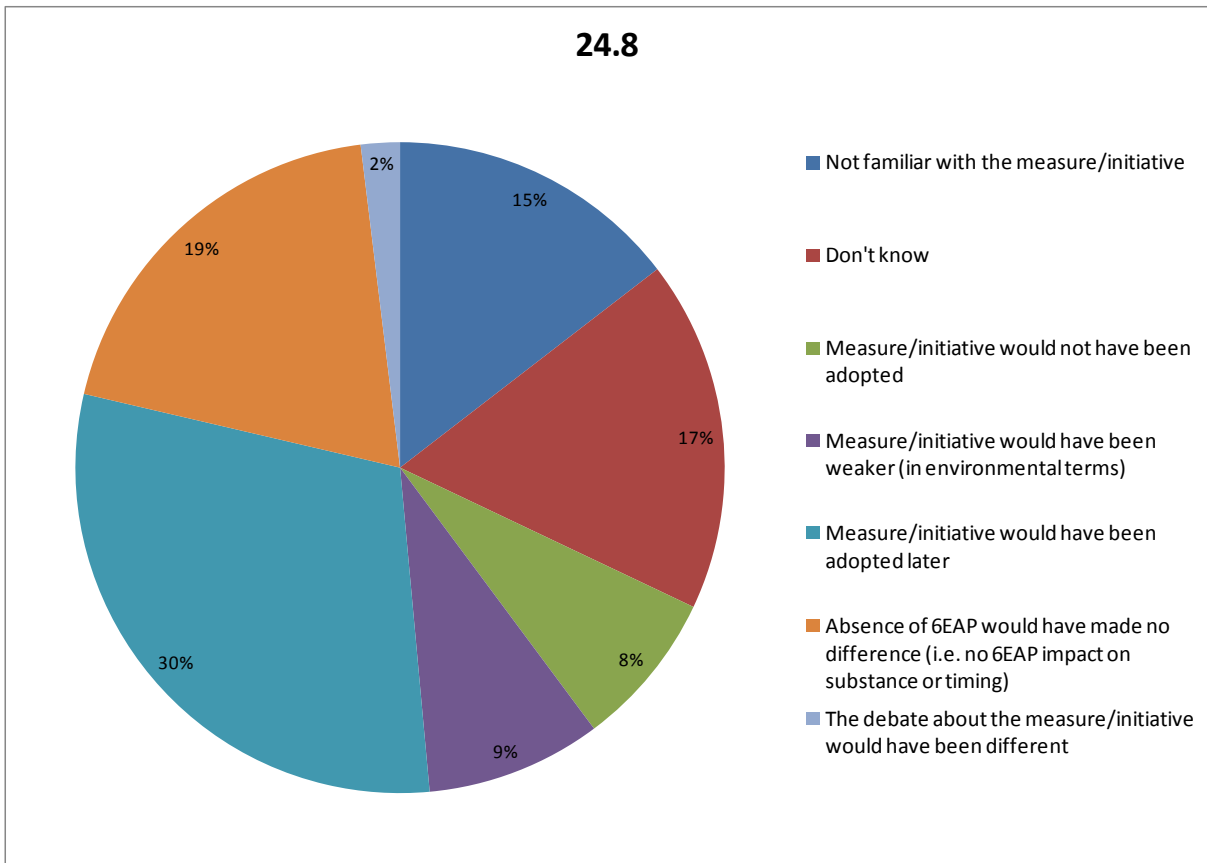
24.7: Environmental management (EMAS): Regulation (EC) No 1221/2009/EC establishing an eco-management and audit scheme.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 5% of the participants thought that the measure would **not have been adopted**, 12% thought that the measure would have been **weaker** in environmental terms, 19% thought that the measure would have been adopted **later** without the 6EAP. 3% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 27% thought that the absence would have made **no difference** in substance or timing. Overall 32% of the participants were either **not familiar** (12%) with the measure or **did not know** (20%).



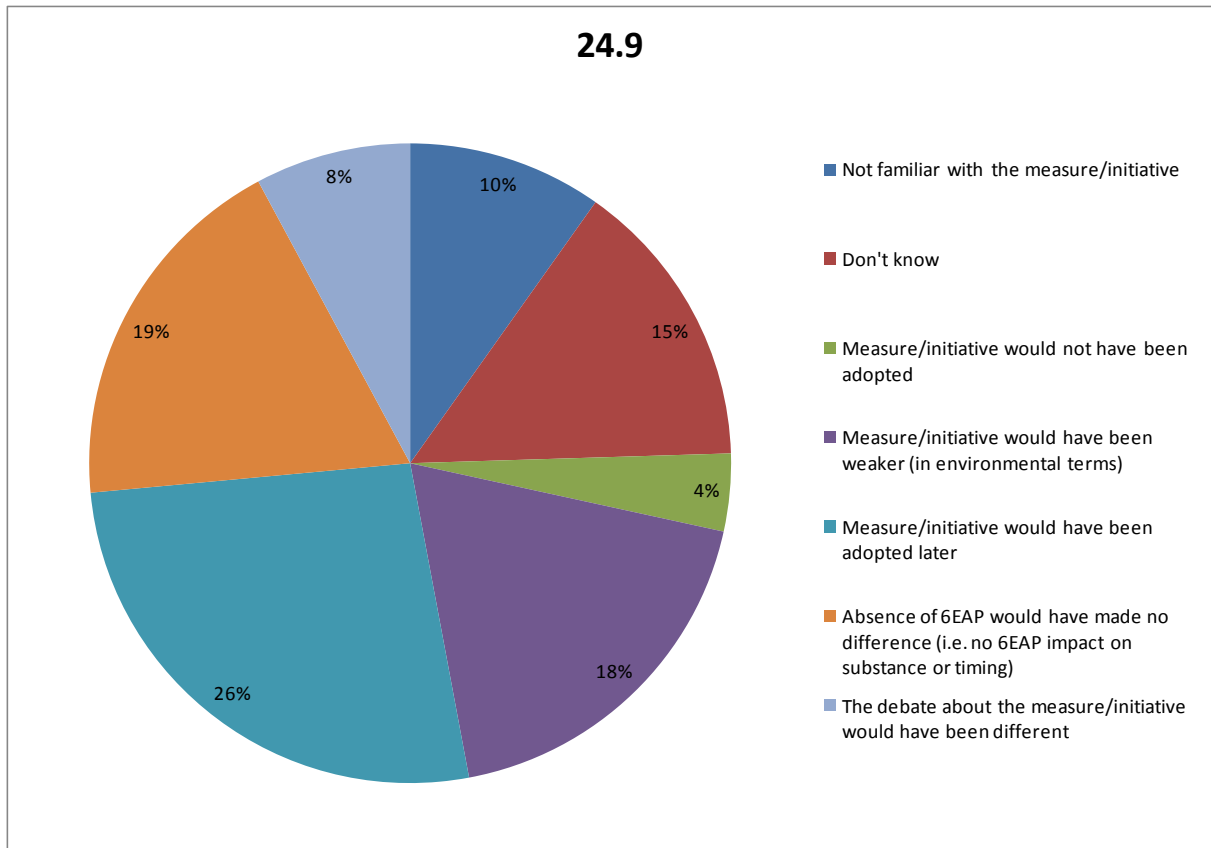
24.8: Environmental liability: Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 8% of the participants thought that the measure would **not have been adopted**, 9% thought that the measure would have been **weaker** in environmental terms, 30% thought that the measure would have been adopted **later** without the 6EAP. 2% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 19% thought that the absence would have made **no difference** in substance or timing. Overall 32% of the participants were either **not familiar** (15%) with the measure or **did not know** (17%).



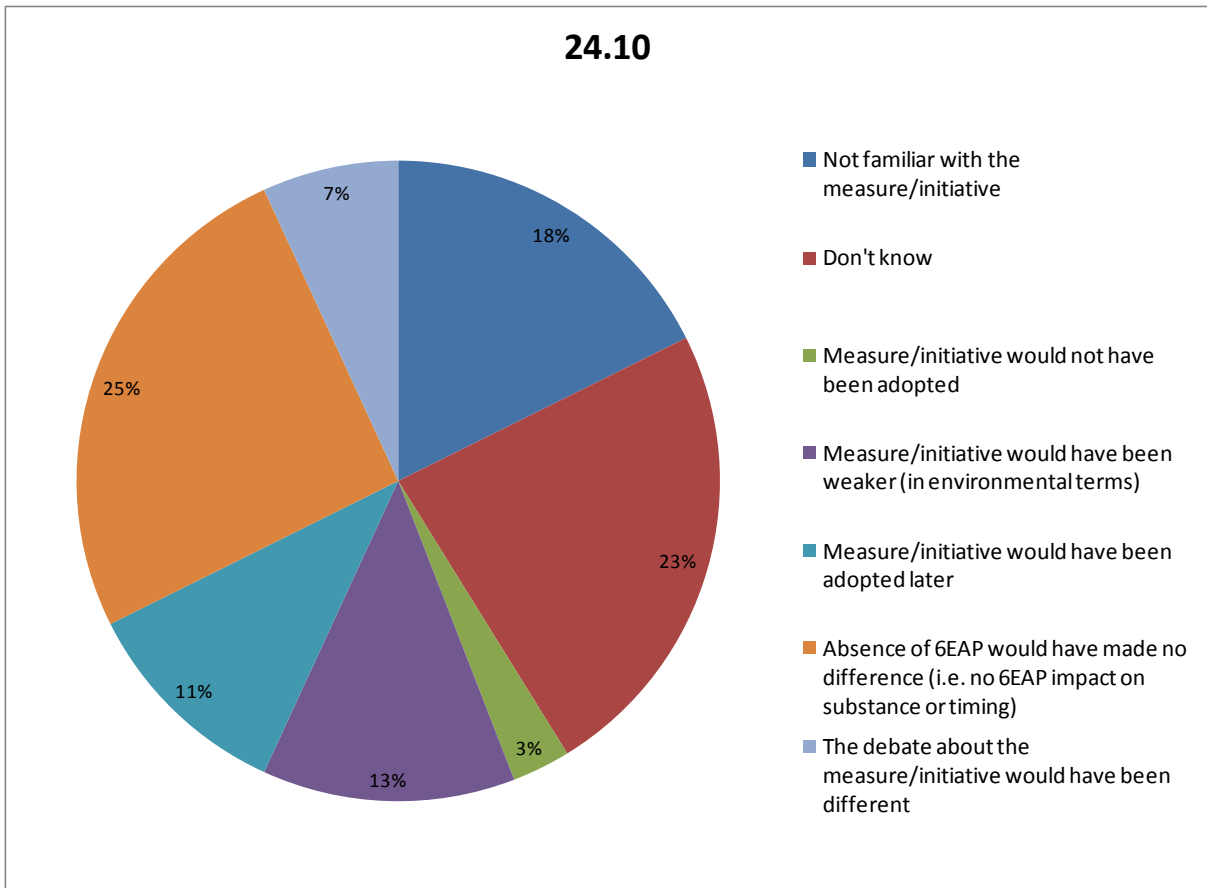
24.9: Impact Assessment: Commission Impact Assessment Guidelines (SEC(2009) 92) and previous versions.

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 4% of the participants thought that the measure would **not have been adopted**, 18% thought that the measure would have been **weaker** in environmental terms, 26% thought that the measure would have been adopted **later** without the 6EAP. 8% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 19% thought that the absence would have made **no difference** in substance or timing. Overall 25% of the participants were either **not familiar** (10%) with the measure or **did not know** (15%).



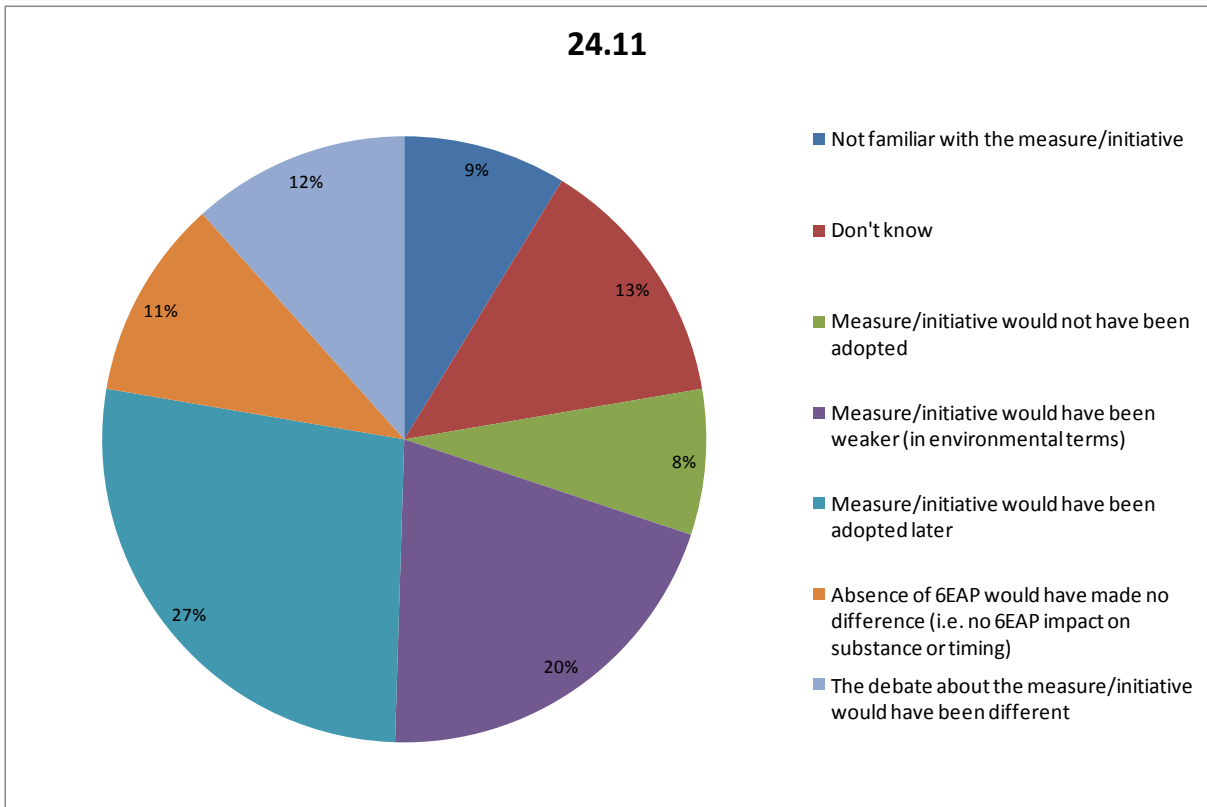
24.10: Cohesion Policy: Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund ((EC) No 1083/2006 and repealing Regulation (EC) No 1260/1999).

3% of the participants thought that the measure would **not have been adopted**, 13% thought that the measure would have been **weaker** in environmental terms, 11% thought that the measure would have been adopted **later** without the 6EAP. 7% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 25% thought that the absence would have made **no difference** in substance or timing. Overall 41% of the participants were either **not familiar** (18%) with the measure or **did not know** (23%).



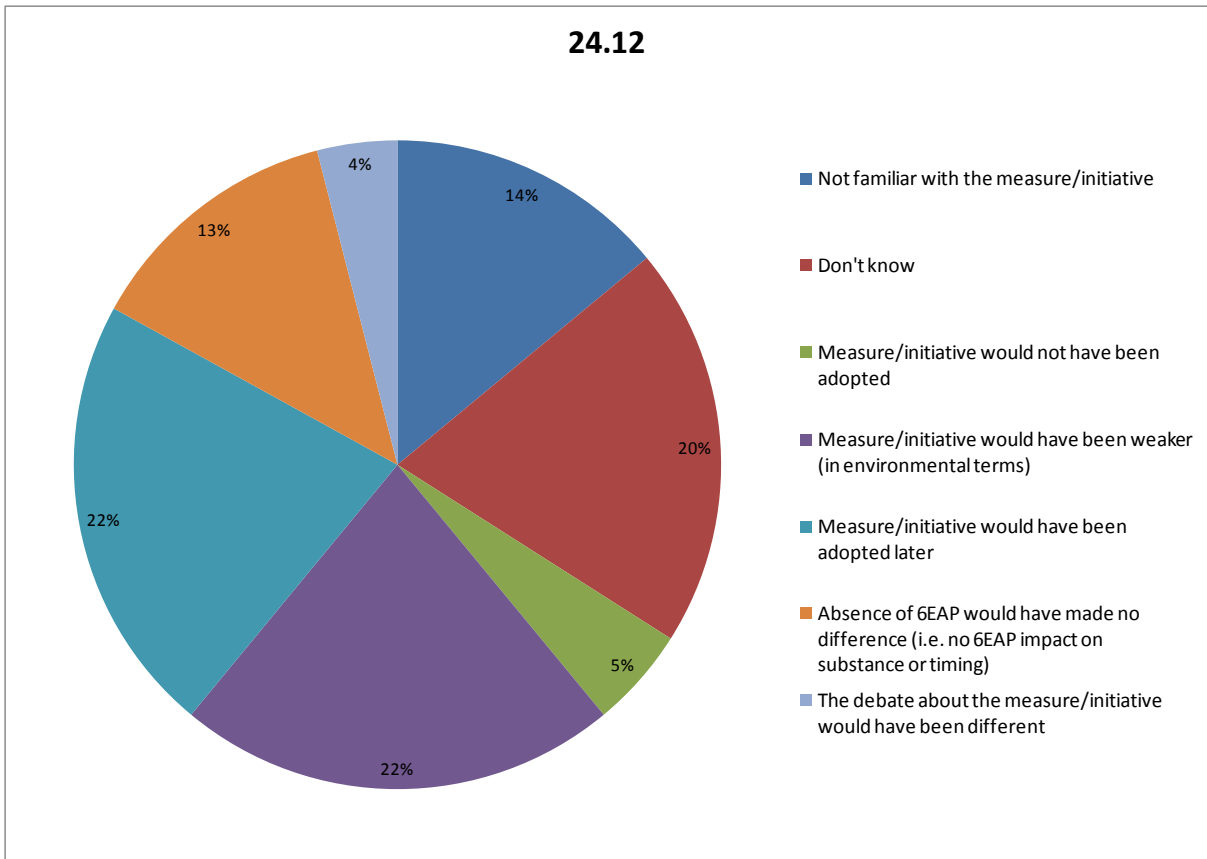
24.11: Green Public Procurement: Communication from the Commission on Public procurement for a better environment (COM/2008/0400 final).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 8% of the participants thought that the measure would **not have been adopted**, 20% thought that the measure would have been **weaker** in environmental terms, 27% thought that the measure would have been adopted **later** without the 6EAP. 12% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 11% thought that the absence would have made **no difference** in substance or timing. Overall 22% of the participants were either **not familiar** (9%) with the measure or **did not know** (13%).



24.12: Transport: Communication from the Commission on ‘Greening Transport’ (COM(2008) 433 final).

Most of the participants agreed that the 6EAP has contributed to the ambition of the measure as follows: 5% of the participants thought that the measure would **not have been adopted**, 22% thought that the measure would have been **weaker** in environmental terms, 22% thought that the measure would have been adopted **later** without the 6EAP. 4% thought that in absence of the 6EAP the **debate** about the measure would have been different. In contrast, 13% thought that the absence would have made **no difference** in substance or timing. Overall 34% of the participants were either **not familiar** (14%) with the measure or **did not know** (20%).



The 6EAP sets out numerous general and issue-specific principles of governance, regulatory approaches and instruments. Examples include the integration of environmental protection requirements into sectoral policies, collaboration and partnership with business and civil society, application of market-based instruments, improving the use of scientific knowledge, regular review and reporting.

Question 25: In your opinion, has the 6EAP affected the choice of regulatory approaches and instruments in the area ‘Strategic approaches’? If so, please elaborate and give one or more examples.

Answer
Environmental information is still not appropriately available for the public. The problem is not only with how and where to access the data, but also about the data quality, which is generally quite bad!
less contaminated sites: cleaned up many contaminated sites use of integrated assessment in EIA and SEA better public participation in the decision making procedure
Not to the necessary extent. The issue of company reporting and environmental liability (particularly outside the EU) has not been solved. There is no obligation by companies to report on negative externalities , try to quantify them (and therefore no reflection in terms of added value in the GDP). Much talk of integration but externalities and cost shifting keep growing.
It has. it also emphasized the need to better enforce the EU legislation in day-to-day practice.
The 6EAP has positively affected the introduction/reinforcement of the lifecycle principle in the EU landscape such as the eco-design directive. The 6EAP gave an impetus to policy developments in the field of green public procurement and ‘green’ transport
The flagging of environmental liability in the 6EAP was useful at early legislative stages, but thereafter it was less as the other institutions took over the reins.
Yes
Yes
No
same response as to question 23 (it did not integrate enough the social aspects : employment, social cohesion, education, training, new skills and jobs decent jobs;

R&D;...nor the **economic aspects**: what instruments to be promoted, how, through which instruments and funds; nor the good governance aspect; social dialogue, regulation)

The actions in this section of the 6EAP are in some cases quite general although **the action plan was key in underpinning some priority legislative instruments such as the environmental liabilities directive. However some actions outlined in the plan (e.g. on indicators to access process of sectoral integration) were less successful.**

6.1.5 Part D: Overall assessment (26)

Question 26: If you have any additional comments that have not been addressed by the questions above, please make use of the following free text field. Please note that the length is limited to 150 words.

Answer
<p>The 6EAP had no influence in high-profile areas of environmental policy such as climate change and biodiversity, where different, independent policy drivers were already in place before the 6EAP was adopted. It had some influence on other areas where there were no other strategic documents, but was implemented very unevenly. Focus was on thematic strategies to the detriment of areas for which no thematic strategies were foreseen. Development of TS was used as opportunity to renegotiate objectives of 6EAP and delay implementation rather than as proper implementation tool. In the end Lisbon Agenda and Better Regulation had stronger impact on TS and resulting legislation than 6EAP itself.</p>
<p>The chicken and egg problem of the EAP is not revealed by the questions - the EAP has mainly been important in putting different things together and may thereby have influenced the thinking, but it is nearly impossible to say overall what its role has been in a specific instrument.</p>
<p>no comment</p>
<p>The subsidiarity principle has been widely misused to curb EU legislation on environmental matters. Typical worries of the opposition to environmental legislative initiatives include lack of capacity and fear of implementation costs. The use of fees and taxes as financial instruments must therefore be included in the future. Alternatively the need to do so and the consequence of not doing so must be highlighted.</p>
<p>For 7EAP we should concentrate on the following: On the process of a 7EAP: first agree on strategic aims, then develop integrated policy in priority areas. On the substance: concentrate on land use, biodiversity and food. These are central to the problem of unsustainable use of resources. It does not need to address climate, as this policy field is clear as to the strategy and aims. Implementation is important now. On governance and instruments: Develop a stronger cooperation with stakeholders and activate them to take responsibility. Regulatory approaches on their own are no longer valid. We need to attack the main problems at a global level. Ensure that incentives for change are created, for instance for improvement of resource efficiency.</p>

The main importance of 6AEP that it gives a frame. Creating the frame is done through open dialogue, making platform for further discussions, 6EAP is a part of a feedback loop, necessary but not sufficient to drive environmental policy on its own. It is a part of much wider picture

6EAP was too process oriented, and provided too little quantified targets with timetables.

None

Negligence of project and programme purposes and absence of distinction between properly run/successful projects, and completely useless ones with no results

Our experience of managing EU research projects terrible: very poor EU organisational and financial contract management. Systematic unacceptable - totally unjustified delays in payment because of prima donna, constantly changing and unaccountable task managers. No recourse possible in EC hierarchy or via contractual agreements which hold for nothing.

Shocking inconsistencies in contractual and financial requirements e.g. abrupt demands for information, for retrospective audits (at whim of moronic accountants)

Unending bureaucratic - off the project objectives.

Stupid requests for information for gender balance requiring dedicated ultra complex on-line encoding, specific authorisations for this one form and permission from lead partner!

Completely disproportionate effort in administration and financial headaches and utter disregard for small organisations that don't have armies of secretaries, lawyers and accountants with infinite time on their hands

On the basis of more than 10 yrs experience, I make it my business to advise any small association, small business to avoid EU research projects like the plague

I am sorry not have been able to fill in this questionnaire. The questions are very detailed and would require me to reread the 6EAP as well as several other documents. Perhaps other people have a better memory than I do or focus more in their work on the 6EAP. I would suggest that a more fruitful methodology would have been one or two focus groups. These would encourage more preparation by the 'experts' and more consideration of the answers.

Action Programs are necessary and provide the basis for legislation - especially if done by co-decision - I therefore support a 7th EAP as a basis for further action - DG Env will need priorities apart from climate

The content of the programme is one thing, its implementation is another aspect. I'd like to make two main remarks on the implementation:

- **transparency and access to information** must be improved, as is essential to fulfil the aim of the Programme to help ensure consumers are informed about the processes and products in terms of their environmental impact **with a view to achieving sustainable consumption patterns**. This can be done through the organisation of regular meetings with civil society to improve dialogue, similar to the civil society dialogue put in place by DG Trade or the advisory groups organised by DG Agri or DG Sanco. There is also a **strong need to publish information on time** on the European Commission's DG environment website and to better inform all NGOs working on environmental matters about news related to the 6EAP

- **enforcement of environmental law** is crucial to environmental protection, and needs to be strongly improved if laws are to reach their objective. There is an **urgent need for an EU environmental inspectorate or a mechanism which would allow to monitor the way Member States control the enforcement of EU environmental legislation at national level**. At the moment there is no coordinated effort to assess Member States action in this field. The functioning of an environmental inspectorate could be similar to the role of the Food and Veterinary Office in the field of feed and food controls, with regular missions of inspection in individual Member States and reports publicly available to all EU citizens. The 6EAP should have allowed the creation of such an inspectorate or centralised inspection mechanism.

Integration of environmental objectives into different sectoral directives was an aim of the 6EAP but has not been achieved. There needs to be an increased emphasis on this in any future work

Some answers could have been adapted if questions were more precised or detailed

While the 6EAP provides **an interesting framework** for environmental programme development in the EU, **many of the objectives have yet to be achieved**. The Biodiversity Action plan has not met the 2010 goals and clearly **more quantifiable goals** should be incorporated into the program. Additionally, some components (eg. strategies on invasive species) have still not be implemented. A bigger commitment to the precautionary principle is necessary and further research is needed into the trade in wild species focusing on the impacts to biodiversity and risks to species/individuals from transportation and captivity.

There are **too many political legislative administrative etc. instruments papers discussions and much less energy is spent on linking them to other sectors policies and monitoring their impact on national circumstances**. (Changes in nature protection, CO2 emission, healthy food water quality of the MSs)

-Difficult to take back from the European Parliament the role it was given on the 6th EAP.
-Need **clear overview of revision clauses coming up in environment acquis** and how revisions can be conducted in more joined up fashion.
-**CARE package was a success in the last few years, but had little to do with 6th EAP -**

<p>how to learn from that lesson.</p> <p>-Impact Assessment within the Commission is a double-edged sword that has been used to water down the environment agenda. This issue needs to be addressed.</p>
<p>It's quite difficult to do that. Maybe later.</p>
<p>We would be in favour of a 7EAP. However, this would be under the proviso that serious legislative approaches would be applied across all major themes, and not just 'cherry-picked' from those that are politically less challenging.</p>
<p>I have tried to answer honestly but I consider that some of the proposed answers to Qs inevitably lead to a somewhat biased result</p>
<p>The real added-value of the EAP (or equivalent overarching strategic paper) is :</p> <ul style="list-style-type: none"> i) to provide coherence, consistency, clarity and predictability in the policy priority initiatives that will be implemented in the agreed timeframe. ii) to fix a number of key guiding principles which must be applied when initiating renewed or new policy initiatives.
<p>The 6EAP has been successful in providing the framework for a range of key legislative and other instruments published in the past decade. However the timescale of the 6EAP is very lengthy and may be somewhat inflexible in its ability to react to emerging issues and changes in the wider economic and environmental context.</p>
<p>The EAP, in its evolving forms, is a useful and probably necessarily instrument. It expresses the EU's environmental ambitions and the boundaries to that ambition. To some, the boundaries are disappointing, to others reassuring, but it is helpful to policy formulation to have the boundaries clarified. To be most useful, a future EAP (7th and thereafter) should emerge swiftly with the entry into office of a new Commission and should be as compact (brief) as possible, Decision-making should not be dragged on by elaboration of subsidiary elements like Thematic Strategies. The Commission can make use of the existing arsenal of possibilities for discussion, consultation and strategy: Green Papers, Communications, public consultations, etc. A future EAP could usefully include a mechanism for augmenting the strategy to deal with emerging or</p>
<p>For environment and health policy, the 6 EAP was a milestone, with its priority on environment&health and the quality of life. This focus of the EAP was crucial in shaping not only the EU Action Plan on Environment and Health, but other EU policies, even though implementation and full integration of health concerns in environmental policy, and environment concerns in health policy has still not been achieved. It is absolutely necessary that the next EAP retains this focus on environment and health, also to ensure that emerging and new threats such as combination effects, endocrine disruptors or noise are adequately addressed.</p>

7 Annex G: Summaries from the three workshops



THE 6TH ENVIRONMENT ACTION PROGRAMME: REVIEWING PROGRESS, LESSONS LEARNED, AND POSSIBLE IMPLICATIONS FOR THE FUTURE

Report from expert workshop on 14 September 2010

Summary of discussions

7.1 Introduction Workshop Brussels

The 6th Environment Action Programme (6th EAP) establishes a framework for Community action on the environment from July 2002 to July 2012. The Commission's final assessment of the Programme is expected to be presented in 2011. An independent, in-depth assessment of the achievements of the 6th EAP is currently underway to support the Commission's own assessment. This study, carried out by the Ecologic Institute, the Institute for European Environmental Policy (IEEP), and the Central European University, is based on an analysis of relevant EU policy/legislative measures and tools adopted since 2002 and targeted interviews and consultations with key European stakeholders.

As part of the stakeholder consultation exercise, three expert workshops are being organised. The first workshop was held on 14 September in Brussels and aimed to bring together stakeholders from different sectors to gather their views on progress in implementing the 6th EAP, the added value of the 6th EAP, and possible implications for the future. The workshop focused on the four thematic priorities of the 6th EAP (Climate Change, Nature and Biodiversity, Environment and Health, and Natural Resources and Waste) and some of the strategic approaches to policy-making put forward. Discussions were organised in thematic sessions which began with a presentation of the preliminary results of the research work undertaken to date and was followed by organised discussion and interaction among the stakeholders. This paper provides a summary of the discussions in the sessions of the workshop. The key messages will be built into the conclusions of the research currently underway.

The presentations from the workshop, the programme, and the background paper can be found on the event webpage: http://ecologic-events.eu/6EAP/workshop_brussels.htm

For any further queries regarding this paper, the workshop, or the ongoing study, please contact Sirini Withana: swithana@ieep.eu

7.1.1 Opening session

The workshop was opened by a welcome address by David Baldock (Executive Director, IEEP). The session included a short presentation by Ingmar von Homeyer (Ecologic Institute), providing a brief introduction to the study and the main questions guiding the analysis.

Domingo Beltran (Environment consultant and former head of the European Environment Agency) gave an insightful perspective on the 6th EAP. He maintained that Environment Action Programmes (EAPs) have been a main tool in ensuring coherence and the medium term predictability of environmental policy at the EU level. The adoption of the 6th EAP by the Council and the European Parliament was considered a big step forward given the status of previous action programmes. However, he maintained that while the 6th EAP is a good tool and is relatively well known at the EU level, there is limited awareness of it at the Member State level. Moreover, Domingo considered the Programme's failure to integrate economic issues to have led to its marginalisation. He maintained that progress in many important areas of the 6th EAP in particular in relation to climate change have been a result of other

external developments, however the adoption of the Thematic Strategies and the Framework Directives were considered successful tools resulting from the 6th EAP.

In terms of the future, Domingo maintained that EAPs can continue to play a role for environmental policy and can even begin to play a role for more sustainable development if they were to take stock of experiences and adapt to changing scenarios. More effective monitoring and review mechanisms were also considered necessary. Throughout his presentation, Domingo emphasised the importance of mainstreaming the future EAP, establishing links between different strategies (for example by recuperating the integrated monitoring system and building on what is proposed in the Europe 2020 Strategy), integrating the economic dimension in the thematic areas and introducing initiatives for 'green fiscality' or 'fair fiscality'. He also stressed the importance of mechanisms to transpose high-level EU strategies at the national level, recommending the establishment of a monitoring and benchmarking system of performance at Member State level similar to the National Reform Programmes under the Lisbon Strategy and the Europe 2020 Strategy.

A number of issues were raised during the discussion session including the need for a good benchmarking system and regular reports to the Council, which are visible in the media and publically available; drawing the local and regional level into policy-making processes and making a direct link between the local and EU level; the limited connection between the environment and other socio-economic issues; and the need for a coherent management of natural resources.

7.1.2 Thematic session I: climate change

In general, participants in the climate change thematic session agreed that in hindsight the **level of ambition** of the 6th EAP in relation to climate change was not very high, however given the time period in which it was adopted and in comparison to what was being done in other OECD countries, it can be considered to have been very ambitious. They also noted that the 6th EAP did not set a new level of ambition but rather reported on the existing ambition already set out in other documents and represented a collection of existing initiatives and targets. Climate change turned out to be a much more dynamic area than originally anticipated in the 6th EAP and the ambition set out was subsequently overtaken by other targets and actions. It was noted that the 6th EAP did not provide a framework to react to new and dynamic developments, by for example allowing for changes to its targets/measures. Participants did however recognise that it would be unfair to compare climate change to other thematic areas given the unprecedented attention afforded to climate issues.

In terms of the **main drivers** in the area and the **role of the 6th EAP**, participants largely agreed that progress had been achieved through other means. The 6th EAP was viewed as one programme amongst many other strategies and to not have been very visible in relation to other drivers of action. Some participants maintained that the 6th EAP helped consolidate the 2°C target, increasing its legitimacy and reinforcing efforts to support the target at the global level. It was also noted that the 6th EAP helped draw further attention to climate change, setting out a path for action, and opening up the way for the environment to influence policies in other sectors, e.g. energy and transport

A number of general issues relating to the 6th EAP were brought up during discussions in the session. Some key points in relation to the **added value of the 6th EAP** were as follows:

- The 6th EAP helped consolidate targets and ideas from various documents in one place;
- The 6th EAP, in its first years, has been an important internal management tool within DG Environment (although some participants criticised the lack of involvement by other DGs in developing the 6th EAP and the limited ownership of the programme within the Commission outside DG Environment).
- The 6th EAP has been a valuable tool for DG Environment to push forward action in certain areas (e.g. Thematic Strategies etc);
- The 6th EAP has provided an important *raison d'être* for DG Environment;
- The 6th EAP has acted as an interface between different environment policies, e.g. biofuels (although it was recognised that there is room for improvement in this regard);
- The 6th EAP has been an important strategic guiding document and reference point for the Commission, Member States, and other stakeholders, helping to organise the work programme of various players, increasing the predictability of action, and to some extent managing expectations.

7.1.3 Thematic session II: environment and health

Participants in the environment and health thematic session noted that there has been a proliferation of thematic and strategic debates in the area and that a number of strategies/action plans relating to environment and health are locked in their own logic and timeframe. The bigger picture of environment and health, a clear strategy, and how to increase coherence among the different measures is not addressed. Furthermore, it was noted that as environmental health policy is a small fraction of health policy and is not predominant at the EU level there is a need for integration not only across issues, and different bureaucratic sectors, but also across policy levels.

Participants noted the tensions between the principle of subsidiarity and the need for policies at the EU level in the environment and health area, in particular in relation to urban environment. It was pointed out that much of the groundwork carried out by DG Environment in the 1990s relating to the urban environment area was not taken up in the Urban Thematic Strategy due to a certain degree of scepticism in certain parts of the Commission, concerns relating to subsidiarity, and various intra-institutional changes. It was also noted that enlargement had an impact on the Urban Thematic Strategy as there were a number of new stakeholders and experts who did not know the processes and previous discussions, were not familiar with urban environment policies and how to implement them, and had different national starting points. Thus, the focus shifted from pace setter cities to laggard cities in the new Member States.

In terms of the added value of the 6th EAP, some participants maintained that the 6th EAP helped keep certain ground breaking legislation, like **REACH**, on track and on the agenda in the context of strong opposition. It was also noted that much of the focus in relation to chemicals has been on negative aspects, whereas some of the more positive aspects, i.e.

benefits in terms of protection against environmental pollution should also be taken into consideration.

The Thematic Strategy on **pesticides** was considered to be a success in that it led to stronger legislation in the area. However, the aims of the 6th EAP were considered to be vague and not very ambitious in relation to pesticides and it was recognised that much more remains to be done in this area.

In relation to **water**, participants questioned whether water should have been covered at all in the 6th EAP given that the Water Framework Directive had only recently been adopted when the 6th EAP was being discussed, which meant that the 6th EAP only covered marginal issues which were missing in the WFD, rather than focussing on the main priorities in the area.

7.1.4 Thematic Session III: nature and biodiversity

Participants in the nature and biodiversity thematic session generally agreed that the level of **ambition** of the 6th EAP in the area was very high, with a particular emphasis given to habitat fragmentation. However, with the exception of the rather concrete 2010 target of halting biodiversity loss (which was reiterated in the 6th EAP), other targets in the area were considered to be relatively weakly developed, while the targets on integration in other policy areas were considered to not have been ambitious enough. The 2010 target was considered to be too comprehensive and to some extent set up for failure. Some participants maintained that not reaching a target does not mean the target did not have an impact, given that in certain cases setting a high target helps stimulate action. Other participants claimed that there is no point having a target that is evidently unreachable because the target stops being a driver of action. One participant maintained that aspirational targets do make sense; however, they need to be specific, and revised if they have not been achieved.

The **main drivers** behind action in this area were identified as being the Gothenburg target and the Johannesburg global target which provided two high-level EU political commitments, together with the Biodiversity Strategy and its review which led to the adoption of the Biodiversity Action Plan (BAP) in 2006. The 6th EAP was not recognised as a major driving force in the area as policy priorities were largely set before the adoption of the Programme. One participant claimed that the actions and objectives of the 6th EAP were not looked at in detail when the BAP was being designed, although certain stakeholders reportedly brought up the fact that the 6th EAP has a particular commitment during discussions on the BAP and thus there was need for action in a particular area (e.g. soil).

The **key barriers** to action in the area identified by stakeholders included:

- The limited success of the BAP was attributed to the lack of specific funding dedicated to its implementation (e.g. covering administrative costs), the fact that the BAP post-dated action on the financial perspective, that private financing of biodiversity has not yet been mobilised, that the knowledge base is still being developed, and the failure to mobilise existing funding opportunities.
- The lack of political will, reluctance of Member States to prioritise nature conservation and biodiversity, and the lack of ownership by Member States

(partly due to perceptions about the threats of nature and biodiversity compared to other environmental challenges such as climate change).

- Lack of concrete targets.
- Very high level of ambition.
- Failure to link to the market.
- Lack of a baseline.
- Limited competence in relation to land use planning which has been a barrier to action in relation to marine environment, landscape etc.

In terms of the **role** of the 6th EAP, although participants recognised that targets in the area have been driven outside the 6th EAP, their inclusion in the Programme made them implicit headline targets and for example helped reinforce the 2010 target. The **added value** of the 6th EAP was considered to be in emancipating nature and biodiversity issues from climate change policy, making it more comparable to efforts in other areas. The 6th EAP was also considered to be useful in bringing a number of different issues under one umbrella, providing a signal of political intention, and pushing forward developments in certain areas in particular with regards forestry and soil. However, the lack of a common denominator between the different sub-areas and the limited linkages between the nature and biodiversity thematic area and other thematic areas, in particular natural resource management, was criticised by a number of participants.

7.1.5 Thematic session IV: natural resources and waste

With regard to **natural resources**, participants recognised that although the 6th EAP aimed to have a holistic approach and the Natural Resources Thematic Strategy was meant to be cross-cutting and cover all relevant policies; the actual implications of the 6th EAP's objectives were difficult to translate in practice for methodological reasons. Moreover, difficulties in dealing with other policy areas/other DGs during the development of the Thematic Strategy were noted. The development of the Thematic Strategy was considered to be process oriented (rather than results oriented) and to have been too ambitious given the knowledge gaps and methodological challenges in the policy area, thus resulting in limited delivery in terms of concrete results beyond institution building.

One major **driver** for the Thematic Strategy on the Sustainable Use of Natural Resources was considered to be the need to change consumption and production patterns (the 6th EAP was for example considered to be one of the drivers behind the adoption of the revised EU eco-label legislation and similar initiatives); however this was also considered to be an underlying **barrier** to progress given the difficulty in tackling this issue or, more generally, the lack of agreed approaches to tackling the issue of resource use and its reduction/decoupling from economic growth. Despite the importance of having a holistic approach to natural resources, this was considered to be a major barrier to the adoption of an ambitious Natural Resource Thematic Strategy, especially the setting of targets. Another barrier was considered to be industry opposition to certain concepts, it was claimed that industry supported decoupling of environmental impacts but not decoupling of resource use.

With regard to **waste**, participants recognised that the 6th EAP set some strategic objectives relating to implementation, recycling, moving towards more sustainable consumption and

production patterns etc; however the adopted Waste Thematic Strategy was criticised by some participants for not delivering as anticipated and for not setting effective, measurable targets. Although waste reduction including the set-up of concrete targets is mentioned in the 6th EAP, it was noted that this has not been taken up by the Commission sufficiently; the focus of efforts to date have been on waste management issues rather than on reduction.

The jurisdiction of the European Court of Justice was identified by participants as a **driver** for the adoption of the new Waste Framework Directive, which was not as such foreseen in the 6th EAP. The European Parliament's role in clarifying certain key issues / concepts was also noted as another driver of progress. The lack of / uneven implementation of existing waste legislation was recognised by participants as a major **barrier** in the area. The role of local authorities was considered to be decisive as they determine whether waste legislation is properly implemented or not. In terms of the **role** of the 6th EAP, some participants considered the 6th EAP to have had an impact on certain aspects in the area, such as the development of the new waste hierarchy in the Waste Framework Directive; while some participants considered the Programme to have been helpful because it helped defend EU waste legislation against critics from industry etc.

The discussions suggested that some specific objectives, like the further development of waste legislation and the further fostering of recycling and recovery were fulfilled in practice while the more generic objectives, such as a broad change of production and consumption patterns and a clear absolute de-coupling of resource use and waste production from economic growth were not fulfilled. In the current framework, progress has been made especially in waste management (recycling/recovery); consumption and production patterns as such have not been altered substantially.

7.1.6 Horizontal session I: strategic approaches and tools of the 6th EAP

Thematic Strategies

There were diverging views among participants on the role of the Thematic Strategies. While some participants questioned the need for Thematic Strategies given the existence of the 6th EAP and the parallel development of legislation; others saw the Thematic Strategies as an opportunity to address structural issues, promote integration, and generate knowledge. Certain participants also claimed that the Thematic Strategies resulted from other Commission initiatives such as the White Paper on European Governance. In terms of the added value of the Thematic Strategies, some participants considered the Strategies to have delayed policy developments and postponed action; while others considered the Strategies to have helped stimulate debate in certain areas and keep them on the political agenda.

The process of developing the Thematic Strategies was considered to be positive in that it brought in a number of new stakeholders early in the decision-making process. At the same time, it was claimed that this expansion led to the adoption of more watered down proposals than would have been the case if the Commission was given more time to develop the proposal further before putting it forward for stakeholder consultation. The Air Thematic Strategy and the preceding CAFE process was raised as a positive example of stakeholder participation which helped generate knowledge and led to the adoption of a good strategy.

Participants noted that the question of whether the Thematic Strategies delayed action should be considered against the background that a normal EU legislative proposal takes approximately five years to be adopted. The Thematic Strategies was often accompanied by corresponding legislative proposals. Nonetheless, it was maintained that the instruments of the 6th EAP do not appear to be well matched to the objectives of the 6th EAP: the instruments were considered to simply take too long to adopt and implement for real effects to be noticeable before the end of the programme.

Environment Policy Integration (EPI)

Participants noted that integration has worked with regard to specific issues and that EPI in different sectors takes different pathways depending on the internal dynamics of the sectoral policy itself. For example, there are several short-term problems in the fisheries sector which are difficult to overcome; in the agriculture sector certain drivers are difficult to overcome (e.g. some stakeholder groups), while others are more compatible (e.g. WTO pressure) and help increase support for EPI. High-level political backing (at Heads of State and Government level) was considered a critical factor in ensuring successful EPI. Participants also highlighted the need for improved arguments to influence other policy areas and for better knowledge to convince people of the need to integrate environmental concerns in their sectors.

The role of the 6th EAP

Participants raised a number of issues throughout the day which related to the role and added value of 6th EAP. Some of these points are summarised below.

- The 6th EAP was considered to provide an **interface between different environmental areas and different sectors** with the aim of providing a strategic and more holistic approach to EU environmental policy making. However, certain participants considered the 6th EAP to have failed to introduce a holistic approach due to the **limited linkages between different thematic areas** (e.g. biofuels relates to both climate change and nature and biodiversity) and **within the Commission** (the 6th EAP is viewed as a programme of DG Environment rather than of the Commission as a whole).
- EAPs were considered to provide a **coherent framework** for action in the Commission.
- The 6th EAP acted as a roadmap of the main initiatives to be taken and was thus considered to provide an important **element of predictability** for different stakeholders, including businesses.
- The 6th EAP was considered to have **helped keep certain initiatives on track and on the agenda**, providing DG Environment with a certain degree of authority in the face of strong opposition.
- The **process of developing the 6th EAP** was considered to be useful in terms of gathering and setting out existing commitments, plans and actions already in line to be adopted, helping to identify overlaps and potential gaps.
- The 6th EAP provided an important **horizontal** framing role, establishing various principles, instruments, modus operandi, catch words and concepts, and reframing the consideration of environmental issues in a wider context.

7.1.7 Closing session: lessons learned

A number of interventions by invited participants were made in the closing session on the lessons learned from the 6th EAP and possible implications for the future. The main issues raised during the closing session are summarised below.

The need to improve implementation was recognised as a key factor by a number of speakers. The need to look at the costs of non-implementation, increase resources to follow-up implementation issues, adopt better instruments to improve implementation, and strengthen powers of implementation and enforcement was noted.

The need to increase **integration** and **coherence** between the environment and other policy areas, improve linkages within and between the different themes and within the Commission itself, and take into account impacts outside the EU were stressed by a number of speakers. In particular, the need to have a stronger **economic perspective** and enhance links with the Europe 2020 Strategy was highlighted.

The need for **clearly defined objectives, ambitious but realistic targets, and a strong outcome focus** were raised as key issues by a number of speakers. A good State of the Environment Report by the EEA was considered important to help shape firm objectives going forward.

In terms of the **time horizon**, while speakers recognised the need to have a long term vision of where the EU is going, they cautioned against the adoption of a lengthy programme given issues relating to the decreasing commitment of EU institutions and problems with ownership that result from longer timeframes. A long term perspective could be combined with robust, regular reviews. The need for strengthened mechanisms for **evaluation** and a platform to **review** performance of the programme was also stressed.



**THE 6TH ENVIRONMENTAL ACTION PROGRAMME
AND
EU ENLARGEMENT**

DRAFT

Report from expert workshop on 6 October 2010

Summary of discussions

7.2 Introduction workshop in Berlin

The 6th Environment Action Programme (6th EAP) establishes a framework for Community action on the environment from July 2002 to July 2012. The Commission's final assessment of the Programme is expected to be presented in 2011. An independent, in-depth assessment of the achievements of the 6th EAP is currently underway to support the Commission's own assessment. This study, carried out by the Ecologic Institute, the Institute for European Environmental Policy (IEEP), and the Central European University, is based on an analysis of relevant EU policy/legislative measures and tools adopted since 2002 and targeted interviews and consultations with key European stakeholders.

As part of the stakeholder consultations, three expert workshops were organised. The first workshop was held on 14 September in Brussels and aimed to bring together stakeholders from different sectors to gather their views on progress in implementing the 6th EAP, the added value of the 6th EAP, and possible implications for the future. The second workshop was held on 6 October in Budapest and focused on the 6th EAP in the context of enlargement. The third workshop was held on 14 October in Berlin and focused on the issue of implementation and the 6th EAP.

The presentations from the workshop, the programme, and the background paper can be found on the event webpage http://ecologic-events.eu/6EAP/workshop_budapest.htm.

7.2.1 Opening session

The workshop was opened with a welcome and introduction to the project by **Tamara Steger** (Central European University, Department of Environmental Studies). **Ingmar von Homeyer** (Ecologic Institute) provided an overview of the project and its contribution to the 6th EAP assessment process.

The Enlargement Context

Prof. Ruben Mnatsakanian (Central European University, Department of Environmental Studies) provided a historical overview of the central and eastern European region referring to its environmental and economic development in particular. In the past, these countries tended to adopt a sectoral approach to nature protection, with distinct divisions in responsibilities within the administration. This historical context helps to explain the current approach to environmental issues and industrial development as well as the administrative structures in place, public perceptions etc.

Peter Balazs (former foreign minister in Hungary and Head of the CEU Center for EU Enlargement) provided some perspective on the enlargement process referring to the provisions in the Treaties which state that membership is open to any European country which respects and promotes the values of the EU. He mentioned some of the dynamics in the enlarged EU of 27 Member States, including divisions between new and old Member States, big and small Member States, net contributors versus net withdrawers etc and the difficulties in reaching agreement among such a large group of countries. He also noted the issue of conditionality and credibility and recognised that in certain cases the institutional

framework in the new Member States was not ready to adopt the EU acquis. This has had implications on subsequent implementation of EU legislation (as became evident in discussions later in the day).

Harold Scholz (Joint Research Centre) provided some insights on how the JRC underpins the implementation of the 6th EAP scientifically and noted how the 10 year timeframe of the 6th EAP enables the JRC to feed the results of its research efforts into the policy cycle. He also noted the role of the JRC in assisting Member States in the implementation of legislation and the importance of going from data to information that is useful for decision-makers.

7.2.2 Focus group I: The EU Accession Process – The Role of the 6th EAP and the Environmental Acquis

Richard Filcak (Slovak Academy of Sciences) facilitated a focus group session on the role of the 6th EAP and the environmental acquis in the accession process. During the session, several key points were made about the environmental acquis and its role in the new Member States during accession and post-accession and also in the candidate countries. In particular it was noted that the adoption of the EU environmental acquis was an important and necessary step in the enlargement process, without which developments in environmental legislation might not have happened in certain countries. However, participants considered that the framework / groundwork for the adoption of the acquis in many candidate countries was not ready and the rushed transposition process, during which EU requirements were merely 'copied and pasted' into national legislation, was not effective and has led to some of the problems relating to implementation in the new Member States that are becoming evident now. Moreover, the lack of adequate monitoring structures in the new Member States has created implementation gaps.

During the session, participants maintained that EU pressure to transpose and implement various pieces of environmental legislation was used to justify the Government's actions in certain areas. It was noted that the implementation of EU environmental legislation was really driven by the provision of EU funding, especially with regards to Natura 2000, EIA. Twinning projects and the IMPEL network were also noted as important / useful factors both during the accession process and afterwards. While the EU environmental acquis was considered to have an impact on policy development, the need for better communication of the benefits to people was considered necessary.

It was recognised that there were and continue to be different levels of understanding, implementation, institutional infrastructure / capacity etc among the new Member States which is often not adequately taken into consideration. Participants raised the issue of whether there was an 'overstretching of capacity' in particular with regard to multiple obligations under different international and EU processes.

Participants described the experiences among different countries. For instance one participant maintained that in Hungary, climate related regulations were merely 'cut and pasted' into Hungarian law which limited their effectiveness. In certain instances, harmonisation with EU law was also considered to have hindered the development of domestic legislation which may have had stronger provisions previously, e.g. measures

relating to public participant in Hungary. In Slovakia, it was noted that following a period of speedy adoption of the environmental acquis, things began to slow down.

In relation to approaches to policy making, it was recognised by participants that while the EU Commission and the EU Parliament are open to civil society input in the development of legislation, at the domestic level, public participation does not have a big impact on further efforts to promote integration of environmental considerations in other policy areas. The accession and transition process was considered to have helped increase the capacity of NGOs which was critical along with cooperative efforts such as the cooperation between NGOs and the EEA.

Some participants noted that the 6th EAP (and EAPs in general) provide a good point of reference, helping to increase understanding of the basis of EU environmental policy and providing a broader approach to EU policy making. Participants however recognised that during the accession process, the capacity of administrations in the candidate countries was often stretched and thus tended to focus on issues of transposition of legislative requirements and in fulfilling minimum requirements, leaving little time for a more strategic approach. It was however noted, that in some cases, the 6th EAP has been linked to National Action Plans and sustainable development efforts at the national level, for example the Hungarian National Environment Plan contains references to the 6th EAP.

7.2.3 Focus group II: Implementation of the 6th EAP in the New Member States

Fulop Sandor (Office of the Parliamentary Commissioner for Future Generations, Hungary) facilitated the second focus group which looked at implementation issues in the new Member States. Some participants noted that in the lead up to accession, there was significant activity and capacity building efforts, which subsequently declined once the countries had become part of the EU. Following the 2004 and 2007 accessions, the new Member States required tools to address the priorities set out in the 6th EAP as well as in a changing policy context, with the adoption of new targets etc.

It was noted that in certain new Member States environment is not a major priority of the government and the current framing of environmental issues largely refers to impacts on industry. Although in many areas, EU legislation has helped to improve domestic legislation, in certain case the hopes of some of civil society organisations in the new Member States have not been fulfilled for example one participant mentioned the contradiction between action on biodiversity protection and proposed developments in Natura 2000 sites. However it was pointed out that the primary responsibility for implementation lies with the Member States and the EU lacks capacity to scrutinise all Member States efforts in terms of implementing the numerous pieces of EU legislation. Moreover, EU proceedings should not replace national level courts and other national processes. It was noted that in certain cases, the threat of EU proceedings has helped change a particular course of action which may have had a harmful effect on the environment and thus helped set a precedent for future action. Some participants also brought up the sensitiveness of dealing with certain issues such as sustainable consumption and production in the new Member States given

unfavourable connotations this may bring up based on the historical context of these countries.

It was noted that new Member States were influencing EU policy in various ways, the influence of a group of new Member States during negotiations on the CARE package was given as an example where new Member States may be seen to have had a negative influence on the policy-making process. This position was how recognised to vary across policy areas, in certain instances new Member States were considered to have been helpful in developing more ambitious environmental policy, e.g. with regards to GMOs. It was also pointed out by one participant that some new Member States were supportive of the proposed soil framework Directive (currently blocked in Council) given previous agriculture monitoring systems etc.

A number of barriers were identified in relation to effective implementation efforts, including weak inspection capacity, lack of training, failure to adopt a risk based approach. Participants noted that the integrated approach of the 6th EAP was not translated in practice. However, it was noted that, in the last two years, there has been increasing cooperation between different government ministries, for example in considering the renewables directive and thus will help improve integration. Participants also recognised the lack of a strategic approach to environmental policy in a number of the new Member States. This is primarily due to resource / capacity constraints which have led to a focussing of efforts on what needs to be done to fulfil the legal requirements of EU legislation with little time for anything beyond this. Nonetheless, the importance of the 6EAP in terms of providing direction and acting as a point of reference was recognised.

7.2.4 Focus group III: The 6th EAP, Enlargement, and Other EU Strategies

The third focus group was facilitated by Ada Amon (Energy Club, Hungary) and looked at the role of the 6th EAP and other EU strategies in the enlargement process. Some issues were raised in relation to the Urban Thematic Strategy, it was noted that after the change of regime there was a move towards decentralization, with a number of aspects of urban planning shifting to the level of local administrations. However this entailed significant costs and in most cases there was insufficient capacity at these levels. It was noted that in some respects, the enlargement process had an impact on the development of the Urban Thematic Strategy given that cities with very different circumstances (transport systems etc) were brought into the discussions.

It was also noted that EU funding was a driving factor behind implementation, although some contradictions were also noted to exist, in particular between environmental and economic priorities. Changes in the allocation of Cohesion Funds to include sustainable transport was for example considered to be a weakening of the environmental priorities given that less funding would be available to immediate environmental priorities.

With regards to the 20-20-20 targets, it was noted that climate change and renewable energy was still viewed by the majority of new Member States as an expense and although the

majority of countries were said to have learned the rhetoric of climate change and energy, this was often not reflected in their actions.



**THE 6TH ENVIRONMENT ACTION PROGRAMME:
STRATEGIC APPROACHES, IMPLEMENTATION AND SUB-EU
IMPLICATIONS**

DRAFT

**Report from expert workshop on 14 October 2010
Summary of discussions**

7.3 Introduction workshop in Budapest

The 6th Environment Action Programme (6EAP) establishes a framework for Community action on the environment from July 2002 to July 2012. The Commission's final assessment of the Programme is expected to be presented in 2011. An independent, in-depth assessment of the achievements of the 6EAP is currently underway to support the Commission's own assessment. This study, carried out by the Ecologic Institute, the Institute for European Environmental Policy (IEEP), and the Central European University, is based on an analysis of relevant EU policy/legislative measures and tools adopted since 2002 and targeted interviews and consultations with key European stakeholders.

As part of the stakeholder consultations, three expert workshops were organised. The first workshop was held on 14 September in Brussels and aimed to bring together stakeholders from different sectors to gather their views on progress in implementing the 6EAP, the added value of the 6EAP, and possible implications for the future. The second workshop was held on 6 October in Budapest and focused on the 6EAP in the context of enlargement. The third workshop was held on 14 October in Berlin and focused on the issue of implementation and the 6EAP.

The programme for the workshop and the background paper can be found on the event webpage http://ecologic-events.eu/6EAP/workshop_berlin.htm.

7.3.1 Opening session

The workshop was opened with a welcome and introduction to the project by **Anneke von Raggamby** (Ecologic Institute). **Ingmar von Homeyer** (Ecologic Institute) provided an overview of the project and its contribution to the 6th EAP assessment process.

Implementation and the 6EAP

Given that correct and timely **implementation was crucial to achieving the objectives of the 6EAP** and given the fact that implementation is amongst the Programme's strategic approaches **Kristof Geeraerts** introduced the theme of the workshop with an overview of efforts to improve implementation of environmental policy in the EU. He noted the EUs more strategic approach to infringements as well as its renewed aim to increase preventive action. In relation to promoting improved standards of inspection, the 2007 review of Recommendation 2001/331/EC on minimum criteria for environmental inspections (RMCEI) has been one of the most important actions taken at EU level. The review shows that although most Member States had partially implemented the RMCEI, only a few had achieved full implementation. As a result the 2007 review of RMCEI concludes that there are currently 'still **large disparities** in the way environmental inspections are being carried out within the Community'.

A final indicator of the increased value being placed on environmental implementation in the EU was highlighted by the evolution of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) from informal network to legal entity. Emphasising the value that the **quality of the original legislation** plays in its eventual

implementation, IMPEL and the **heads of EPA network** have worked to develop ‘checklists’ to assess whether a proposal is capable of achieving its objectives.

7.3.2 Session I: Promotion of more effective implementation as set out in Article 3 (2) of the 6EAP

The first session was chaired by **Terry Shears of the Environment Agency for England and Wales and Vice-Chair of IMPEL** and began with a historical overview of IMPEL which is explicitly mentioned in the 6EAP decision as an organisation able to help with the implementation of the programme. One participant maintained that amongst environmental NGOs, there was a very strong sense that **implementation of European environmental policy has not been effective**. The implementation of the Water Framework Directive (WFD) was mentioned as having been particularly difficult, not least in light of the **‘new governance structures’** required by the Directive. The participant noted that there appeared to be an **‘either/or’ approach** being taken by the Commission (either prevention or infringement proceedings) as opposed to the ‘double-track’ approach that was necessary. Furthermore, it was noted that a focus on implementation at the cost of other measures may be interpreted as an excuse for **lack of ambition** for pursuing action beyond meeting current targets.

The 6EAP was seen by some participants as providing value as a **strategic framework to keep environment on the agenda rather** than as a tool for implementation. It was mentioned that the added value of the 6EAP was to raise awareness of priority areas and increase the predictability of European environmental policy-making. It may also act as a tool to **hold the Commission to account**. Comments were also made by some participants that the lack of targets (or too broad, perhaps unattainable targets) has made it difficult to implement the 6EAP in some areas where targets cannot be achieved by environmental policy alone and are affected by external factors such as the Common Agricultural Policy.

Some participants mentioned that although the better regulation initiative may create regulation that is better written, **public support plays an important role in facilitating implementation which can in turn be hampered by negative public opinion**. It was noted by one speaker that there is still work to be done on convincing policy-makers that alternative approaches such as changing public attitudes can assist with monitoring and inspection.

It was mentioned in the group that **differences between new and ‘old’ Member States** had emerged with those who achieved more in the past now trailing off with new Member States leading in the provision of data. However, it was also remarked that this is equally a consequence of new Member States establishing new monitoring and reporting structures as part of their requirements for accession and being supported with EU financing to do so.

7.3.3 Session II: Instruments and strategic approaches

Chair of the second session, **Andrea Lenschow** of the **University of Osnabrück, Germany** noted that with regards to implementation, the 6EAP seems to represent a shift from

enforcement to a problem-solving approach. She outlined three 'abstract' approaches and the challenges that they implied:

1. **Coordination** – horizontally, vertically and temporally across time. (Challenge: to what extent does this conflict with prioritisation?)
2. **Information** – collecting information to provide input and then also as monitoring (Challenge: information overload or information scarcity?)
3. **Participation** – local, national and EU policy makers and then also stakeholders. (Challenge: effectiveness and efficiency)

Despite high levels of environmental activity in the 1980s and 90s, a number of participants noted that, since the start of the 6EAP there had been **very few areas where Member States acted without EU leadership**. It was noted that the creation of the 6EAP through the **co-decision procedure** had been a **positive aspect** of its design, potentially making Member States feel more involved and responsible in comparison to the 5EAP. It was however proposed that any **future EAPs should address the Member States** in order to increase their responsibility for implementing the EAP at the national level.

The co-decision procedure was also noted by some participants as having had a certain **political value in maintaining momentum and support for the Thematic Strategies**. The Thematic Strategies were found by most members of the group to have been helpful for Member States, **increasing the predictability of EU environmental legislation** and advancing the environmental agenda, with the Air Thematic Strategy given as a specific example of this. There was however a feeling from some participants that the Thematic Strategies had received **insufficient discussion** in the four-year-period (2002-2006) during which the Thematic Strategies were open to debate. It was suggested that this may be due to the fact that the Council does not usually take part in strategic discussions but focuses instead on debate over specific articles or legislation. It was therefore emphasised that one of the **fundamental flaws of the 6EAP was the failure to adequately follow up on certain Thematic Strategies**.

One further explanation for internal reluctance towards particular Thematic Strategies or Directives was offered in that resources from mid 2000s onwards have mainly been focused on the Climate Change package and agenda. It was feared by one participant that the **resources and jobs agenda is at risk of overshadowing less politically important areas** in this same way.

Some participants found the **Framework Directive** approach to be rational, but one noted that this needed to work in conjunction with specific **daughter Directives** in order to have the 'teeth' necessary for carrying out targeted measures. The increasing use of Framework Directives may also create a greater need for **bundling of information** also useful for administrations which were noted as feeling overburdened by **too much EU environmental legislation**.

Differing experiences with regards to implementation were highlighted: where Member States had been involved in the initial debates, implementation was found to be easier than in Member States which had not become involved until late on in the discussions. However, in some cases, a **lack of clarity about objectives** e.g. of the Soil Directive, may create

blockages. Indeed the speaker who mentioned this went on to note that the 6EAP failed to instigate a more overarching discussion to clarify the role of the EU in environmental policy and that difficulties may in fact relate more to **fundamental questions of subsidiarity** and the role of the EU in environmental policy. It was mentioned that there may also be a lack of clarity and differences in the **perception of the legal nature of the definition of a 'programme'** between different Member States. One member of the workshop likened the 6EAP to a National Programme which is **necessarily vague** and for this reason maintained that the 6EAP would require more precise requirements in order to be more easily enforced.

7.3.4 Session III: Multi-level governance and implementation: from EU to Member State level

The third session of the workshop was chaired by **Margareta Stubenrauch** of the **Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria**. In the session, it was noted that the 6EAP is seen by Member States, not as an implementation tool, but as a European programme which commits the EU institutions involved. It was mentioned that Member States have an interest in ensuring EU legislation is as close as possible to the national regulatory framework so as to **avoid too great an administrative burden**. Consequently, an EU Directive or Regulation may be implemented through changes to a whole range of existing national acts rather than going through the lengthier and more complicated process of creating a new national law. It was put forward that that the main interest of stakeholders involved in the implementation of EU law (especially in countries such as Austria and UK where acceptance of EU membership is low) **is to maintain the status quo**. There is often no ability for the Federal government to force the regions to act creating a **disjuncture, as it is the federal state, not the region which is subject to infringement proceedings**. It was felt by one member that the Commission provides sufficient assistance to Member States in terms of implementation and that it is the latter who must assume the real responsibility.

In some countries, it was noted that there is a **general reluctance towards the word 'plan'** which has a number of negative connotations associated with it. It was noted that plans such as the Green Public Procurement Action Plan and National SDSs therefore need to have strong political backing in order to be effective. Some participants agreed that Member States are above all interested in the implications a plan or strategy has for additional work load and tasks required. It was also briefly discussed whether the **reporting commitments** under the 6EAP should be similar to those of the Lisbon strategy and **streamlined** with the EU Sustainable Development Strategy (SDS).

In comparing the SDS and the 6EAP, it was observed by some participants that the **EU SDS had the broader approach** of the two, with less concrete actions required for implementation. SDS may have a higher profile as it covers areas beyond the environment but it was felt by many that the **6EAP provided a basis for action** due to its more concrete approach and was considered to be important as a **strategic guidance document**. Nevertheless, it was suggested by some participants that an assessment of the 6EAP's added value should not be based on the changes it has affected, as **many initiatives** such as the Climate Change agenda **have been driven by factors outside the 6EAP**. The 6EAP

should not be seen as a ‘crystal ball’ and it was clear to all members of the group that not all measures would be fully adopted.

It was felt by a number of participants that Member States did not tend to refer to the 6EAP except where its objectives fitted into the national agenda. It was clearly stated by a number of participants that there is a **need for instruments and leadership from Brussels** in order to make the case for a particular action at the national level and that the **6EAP provides positive support** to the Ministry of the Environment which is often one of the weaker government departments in Member States.

One participant noted that without effective implementation, it is impossible to achieve goals set out and that **perhaps implementation should have been more strongly mentioned by the 6EAP**. They further noted that the Commission has increased stakeholder consultations and impact assessments which assist with implementation and increase the level of buy-in. At the moment however, one participant mentioned that the 6EAP is still perceived to be a DG Environment plan. The speaker concluded that an EAP would be more effective if it were **seen as a ‘European EAP’ created in full consultation with its Member States**.

7.3.5 Session IV: Multi-level governance and implementation: from Member State to regional level

The discussions on the regional aspect of 6EAP implementation were chaired by **Peter Kessler**, consultant and former head of the water management department of the German region of Hessen. He opened the session by remarking that one particular issue with Article 3 (2) of the 6EAP regarding implementation, is that the regional level is not directly addressed and does not have a direct binding influence on the regional level. Furthermore, he pointed out that **legally, there is little opportunity for regions to directly communicate with the EU** except through the Committee of the Regions or through central government. Although the 6EAP was adopted by the Council and the European Parliament, in the case of the regions, it is not law and is not binding or well publicised at local level.¹²⁴⁴ As a political programme, the 6EAP acts as a system of guidance, not a legislative instrument.

One participant made the point that the key determining factor on a regional level is the budget. **The implementation of the WFD and Natura 2000 have placed a great strain on the capacity of that region**, following the four years taken to implement these two Directives, the participant noted that their administration was suffering from ‘EU fatigue’ with a lack of will to implement further EU legislation. It was noted that regional authorities tend to focus on one-to-one legislative transposition given limited resources/capacity. In this context, a number of participants pointed out that a **more holistic approach** is required wherein the amount of work needed is reduced and **funding is combined with the implementation of Directives** in order to increase acceptance from local authorities. It was noted that this has begun to be considered such as through the new pre-accession funds which are geared to decentralised distribution.

¹²⁴⁴ Indeed the 6EAP is not binding at any level.

The obligation to **monitor and collect data** was raised by another participant who remarked that this had become increasingly complex creating the need for a number of technical groups to deal with these requirements. Another participant suggested that there needed to be further backing for a Shared Environmental Information System (SEIS) to harmonise and re-evaluate the need for **data reporting requirements** which **overlap or are redundant**. In many cases, such as for emissions monitoring, these reporting requirements are particularly strenuous due to the **need for near real-time data**.

During the conclusions of the session, two important problems that had emerged during the period of the 6EAP were identified as obstacles to implementation:

- **Lack of/limited funding** (linked to transposition of EU legislation)
- **Decreasing public awareness** (issues such as air and water pollution as well as acid rain were more visible 20 years ago leading to greater public awareness. General improvements to the environment mean that problems are less visible or obvious to the public but new, less visible problems, such as climate change have emerged)

7.3.6 Session V: Added value of 6EAP for multi-level governance and implementation

During the final session, **Ingmar von Homeyer** of **Ecologic Institute** examined the **added value** that the 6EAP had brought to multi-level governance and implementation, summarising points from the previous discussions.

- The **6EAP has provided important political support** for the adoption of the thematic strategies and associated legislation when faced with considerable political resistance within the Commission.
- Due to its non-binding nature, it may be possible for environmental actors and national administrations to use the **6EAP as a tool to put issues on the agenda** which may not otherwise be possible in a legislative context.
- Implementation of the 6EAP suffered from a **lack of clarity** with respect to the general aims and purposes of EU environmental policy and the role and interpretation of subsidiarity.
- Implementation is further affected by the fact that while **infringement procedures** are important, they are **limited by the fact that they are directed at the central government** of the Member State, despite the fact that this may have only limited influence on the competent regional authorities, especially in the case of decentralised states.
- There is a need to **simplify and coordinate reporting requirements**. Although environmental policy is still an area where EU-level action has strong public support, its success means that most 'visible' environmental problems have now been addressed increasing the **challenge of maintaining public backing for less tangible areas of environmental action** such as climate change and biodiversity.

It was noted by one participant that although it may be desirable to better address and integrate the regional level in decision-making processes, on a practical level the

Commission cannot deal with the roughly three hundred EU regions in existence at all levels. Indeed, it was concluded that it may be more appropriate to engage them in the later stages of debate such as the methods for implementation of concrete measures such as the 20:20:20 goals.

One participant mentioned that implementation was made difficult by the fact that the **6EAP is created and written for policy-makers who are not directly responsible for carrying out implementation** and that the 6EAP needs more concrete tools. However, most participants maintained that **the 6EAP functioned well as an overall strategy** providing an important road map guiding EU environmental policy. Most participants agreed that a **10-year strategy that has been agreed to by all the parties, was seen to be the correct time frame and valuable** and although much has changed in the last 10 years, the environmental priorities it identified were still relevant. It is also a useful tool for carrying out ex-post evaluations of EU policy-making. However, the previous suggestion that budgets and programmes should be synchronised within this 10 year period was not favoured by some participants as it was felt this would lead to excessive competition for funds and political attention. One member of the group summarised the 6EAP's overall actual success by stating that the most that could concretely be said was that **in some areas, the 6EAP has had some influence.**

7.3.7 Closing session: Lessons learned and possible implications for the future

In his summary conclusions, **Andrea Vettori** of the European Commission, DG Environment noted some of the difficulties in assessing the achievements of the 6EAP given the lack of data, ongoing implementation of recently adopted legislation etc, but at the same time some 6EAP requirements relating to rapidly changing environmental areas such as climate change are outdated. The Commission will hold a meeting in March 2011 to debate the achievements and added value of the 6EAP and hopes to launch a Communication by July 2011 to start a debate on the next steps following the end of the 6EAP.

Some of the main priorities of the Commission going forward include:

- **Improving the knowledge base and coordinating state of the art information and analysis**
- The acquis is currently not properly applied and thus undermining the credibility of the EU. DG Environment is keen to avoid setting targets without considering the implementation problems of the past with the focus being placed on implementation of existing legislation rather than the creation of new legislation. Indeed, a new wave of infringement proceedings may follow the end of transition periods for new Member States. With a view to avoiding the costs of non-implementation, **increased collaboration** with environmental judges and the detachment of Commission staff to Member States experiencing difficulties is taking place.
- Much has changed since the beginning of the **6EAP and environmental considerations are now taken into account more than previously** in non-environmental sectors and the EU environmental acquis now covers most

environmental areas (except soil and forests). However, there is clearly some way to go with a need to **update much legislation, such as on air and water**.

- Furthermore, the EU's external ecological footprint is also growing.
- **Policy actions must be able to respond quickly** to changes in environment (such as with this year's Russian food crisis) as well as considering possible business reactions to environmental policy (e.g. the negative implications of the market's interest for biofuels which were not initially taken into account).
- **The EU should seek synergies** with policies that are mutually supportive such as focusing on resource efficiency and the integration of environment into the core of economic strategies.

In relation to the role of the 6EAP at the **national level**, one participant noted that the 6EAP provides an important overarching framework and a goal to work towards. If there is to be a further EAP, it was suggested that it should be more concise, with a few number of actions and more focus. It was noted that although the **coverage of environmental legislation has indeed increased**; its **quality in certain areas** (permissible levels of Volatile Organic Compounds are, for example, the same as they were in 1999) is variable. It was noted that there is a **great deal of public support for EU environmental legislation** as one of the few issues where people want action to be taken on a supra-national level.

In relation to the role of the 6EAP at the regional level, one participant noted that the 6EAP is not binding and can therefore only have indirect influence on the regions. The **main obstacles at regional level were considered to be the quantity of legislation to be implemented, lack of funding, over stretched capacity, excessive data reporting and monitoring** requirements which are in turn not harmonised. In terms of a future EAP, it was noted the need for the availability of more information and better involvement of regions through European partnering initiative.

7.4 Stakeholders consulted in survey, workshops, interview

Stakeholders consulted for interviews¹²⁴⁵

Number	Main interest	Specific interest	Region	Stakeholder group
1	GP	Implementation and enforcement	EU	EC
2	EH	Energy Efficiency	EU	NGO
3	EH	Air	SC	NGO
4	GP	ENP	EU	NGO
5	EH	Urban	EU	EC (former)
6	GP		WC	REO
7	GP	Implementation and enforcement	EU	EC
8	GP		EU	EC
9	EH		EU	NGO
10	GP	Civil society and environmental	EU	A
11	GP	Environmental Law	EU	EB
12	EH	Urban	EU	REO
13	EH	Air	EU	EC
14	CC	Transport	EU	EC
15	NRW/GP	Waste	EU	MEP
16	GP	Implementation and enforcement	EU	A
17	GP	Investment	EU	EU
18	EH		EU	EC
19	EH	Urban	EU	EC (former)
20	GP	International development	EU	NGO

¹²⁴⁵ The names of people interviewed have been left out to maintain anonymity.

21	EH		EU	MEP
22	GP	Sustainable Development	EU	MEP
23	NRW	Waste Policy	EU	EC
24	CC	Adaptation	EU	EC
25	GP	Implementation	WC	REO

Participants at expert workshops

Workshop on 'The 6th Environment Action Programme: Reviewing progress, lessons learned, and possible implications for the future'

Tuesday 14 September 2010, Brussels

Surname	First name	Organisation	Position	Main interest	Specific interest	Region	Stakeholder group
Affre	Alexandre	Business Europe	Advisor,	NCI		EU	B
Banos De Guisasola	Eva	Eurocities	Policy Officer - Environment	NSI		EU	REO
Baldock	David	IEEP	Executive Director	NSI		NC	A
Bartaire	Jean-Guy	Business Europe	Chairman of BUSINESSEUROPE's	EH	Air	EU	B
Bausch	Camilla	Ecologic Institute	Head of Climate and Energy	CC	Climate change	CE	A
Beltrán	Domingo	Spanish Observatory for Sustainability	Director	GP	Sustainable development	SE	A
Brouwer	Paulus	DG ENV - Institutional Affairs and Programming	Head of Unit, Institutional Affairs and Programming	NSI		EU	EC

Breidenbach	Peter	Business Europe	Chairman of BUSINESSEUROPE's IPPC Task Force	EH	IPPC	EU	B
Bullet	Marie	CEMR (Council of European Municipalities and Regions)	Policy Officer	NSI		EU	REO
Campbell	Nick	Environment Manager - DFL	ARKEMA SA	EH/CC	CC	WC	B
Cil	Hilal	ECNC - European Centre for Nature Conservation	Trainee	NBD	Biodiversity	EU	REO
de Hemptinne	Frédéric	European Water Association	Head of External Relations	EH	Water	EU	NGO
Dewulf	Barbara	Brussels Institute for Environmental Management	International Department	NSI		WC	EB
Duke	Guy		Former Principal Administrator of Biodiversity Policy at DG ENV (2002-2007)	NBD	Biodiversity	EU	
Eksten	Rickard	Scotland Europa	Senior Executive - EU Environment Policy	NSI		WC	B

Ferreira Marques	Jeanine	Belgian Federal Public Service Health, Food Chain Safety and Environment, Directorate-General Environment Federal Public Service Health, Food Chain Safety and Environment Directorate-General Environment	Multilateral & Strategic Affairs	NSI		WC	EB
Ferrigno	Roberto	Independent consultant		NRW	Waste	SE	B
Gantioler	Sonja	IEEP	Policy Analyst	NBD	Biodiversity, forestry	CE	A
Geeraerts	Kristof	IEEP	Policy Analyst	GP	Implementation	WC	A
Goossens	Yanne	Flemish government - Environment, Nature and Energy Department	International Environmental Policy Division	NSI		WC	EB
Hallo	Ralph	Brussels Strategics	Director and IEEP Board Member	CC	Energy	WC	NGO
Hannequart	Jean-Pierre	Brussels Institute for Environmental Management	Director	NSI		WC	EB
Hedlund	Tom	Environment Protection Agency, Sweden	Environment Assessment Department	NSI	Survey on the need for and focus of a 7th EAP	SC	EB

Henrichs	Thomas	European Environment Agency (EEA)	Integrated Environmental Assessments	NSI		EU	REO
Hey	Christian	German Advisory Council on the Environment	Secretary General	CC	Climate change, energy	CE	EB
Hontelez	John	European Environmental Bureau (EEB)	Secretary General	NSI		EU	NGO
Huytebroeck	Evelyne	Brussels Capital Region	Environment Minister	NSI		WC	MS
Kessler	Alexander	BDI/BDA - The German Business Representation	Department of Environment and Technology	NSI		CE	B
Kitou	Erasmina	DG CLIMA - Monitoring, Reporting, Verification	Policy Officer - Climate science, greenhouse gas inventories, monitoring and reporting	CC		EU	EC
Kraemer	Andreas	Ecologic Institute	Director	NSI		CE	A
Laxton	Hugh	UK Nature & Landscape Office	Head of Office	NBD		NC	EB
Long	Tony	WWF - EPO	Director	GP		EU	NGO

Mills	Liz	Freelance policy analyst and IEEP Associate	Specialising in European policy and funding for local sustainability and 'the territory', especially the urban	EH	Urban	WC	A
Muileman	Hans	PAN Europe	Board member	EH	Pesticides	EU	NGO
Neubauer	Alexander	Ecologic Institute	Coordinator European Research	NRW		CE	A
Oberthür	Sebastian	Institute for European Studies	Academic Director	CC	International climate negotiations	WC	A
Osborn	Derek	European Economic and Social Committee (EESC)	Chair of SDO	NSI		EU	REO
Pallemaerts	Marc	IEEP	Head of Environmental Governance Programme	GP		WC	
Panneels	Anne	European Trade Union Confederation (ETUC)	Advisor - Conseiller	NSI		EU	TU
Porter	Martin	The Centre	Managing Director	GP		EU	NGO

Schröder	René	European Federation of Waste Management and Environmental Services - FEAD	Policy Co-ordinator	NRW	Waste	EU	B
Seager	John	Environment Agency of England and Wales	Representative of Heads of EPA Network	NSI		EU	EB
Sponar	Michel	DG ENV - Sustainable production and consumption	Policy officer - Environment and Industry	NRW	Waste	EU	EC
Stauffer	Anne	Health and Environment Alliance (HEAL)	Policy Manager	EH		EU	NGO
Tucker	Graham	IEEP	Head of Biodiversity Programme	NBD	Biodiversity	NC	A
van Ermen	Raymond	European Partners for the Environment	Executive Director	NSI		EU	REO
Van Larebeke	Nicolas	University of Ghent	Department of Radiation Oncology and Experimental Cancer Research	EH	Chemicals, pesticides	WC	A
Vettori	Andrea	DG ENV - Strategic planning and evaluation	Planning and programming officer - Horizontal coordinator	NSI		EU	EC

Vollenbroek	Frans	Ministry of Housing, Spatial Planning and Environment (VROM), Netherlands	Directorate for International Affairs	NSI		WC	EB
Wolters	Rob	ECNC - European Centre for Nature Conservation	Executive Director	NBD	Biodiversity	EU	REO

Workshop on 'The 6th Environment Action Programme and EU Enlargement: Synergy and Frictions'

Wednesday 6 October 2010, Budapest

Surname	First name	Organisation	Position	Main interest	Specific interest	Region	Stakeholder group
Amon	Ada	Energia Klub	Director	CC	Energy, climate	EE	NGO
Antypas	Alex	Central European University				I	
Avramoski	Oliver	Galicica National Park - Macedonia	Manager			CC	
Balazs	Peter	Central European University		GP		EE	
Faragó	Tibor	Former State Secretary for Environmental Policy				EE	
Filcak	Richard	Slovak Academy of Sciences		NSI		EE	A
Fülöp	Sándor	Office of the Parliamentary Commissioner for Future Generations	Commissioner	NSI		EE	EB
Mnatskanian	Ruben	Central European University		GP		I	

Representative of Krisztina Prém (Head of Department)		Ministry of Rural Development				EE	EB
Representative of Erzebet Schmuck (Secretary General)		National Council for Sustainable Development		NSI		EE	EB
Scholz	Harald	European Commission - Joint Research Centre		GP	Research	EU	
Sevic	Dusan	Regional Environmental Centre (REC) - Serbia				CC	NGO
Turkewitsch	Lisa	University of Toronto				I	
Urban	Sergiusz	Environmental Law Center	Head of Poznan Office	GP		EE	NGO
Uyar	Tanay Sidki	Marmara University		CC	Energy	CC	NGO
Varga	Pál	National Inspectorate for Environment, Nature and Water	Head of Department	GP	Implementation	EE	EB
Vasiliiu-Isac	Gabriela	Ministry of Environment and Forestry				EE	EB

Vettori	Andrea	DG ENV - Strategic planning and evaluation	Planning and programming officer - Horizontal coordinator	NSI		EU	EU
Zivcic	Lidija	FOCUS Slovenia		NSI		EE	NGO

Workshop on 'The 6th Environment Action Programme: Strategic approaches, implementation and sub-EU implications'

Wednesday 14 October 2010, Berlin

Surname	First Name	Institution	Position	Main interest	Specific interest	Region	Stakeholder group
Almeida	Ana	Ministry of Environment and Spatial Planning of Portugal				SE	EB
De Pous	Pieter	European Environmental Bureau (EEB)		NSI		EU	NGO
Egilson	David	EPA Network		NSI		EU	REO
Geeraerts	Kristof	IEEP	Policy Analyst	GP	Implementation	WC	A
Kessler	Peter	Independent consultant (Former Director of Water Management Dept., Ministry of the Environment, Hessen, Germany)		NBD	Water	CE	
Lenschow	Andrea	University of Osnabrück		GP		CE	A
Mensen	Antje	Deutsche Naturschutzring (DNR)				CE	NGO
Neudecker	Ilia	Ministry of Infrastructure and Environment		GP		WC	EB
Pykonen	Christina	The Federal Environment Agency				CE	EB

Shears	Terry	Environment Agency for England and Wales	Vice Chair of IMPEL	GP	Implementation	WC	REO
Stubenrauch	Margareta	Federal Ministry of Environment, Youth and Family Affairs				CE	EB
Vettori	Andrea	DG ENV - Strategic planning and evaluation	Planning and programming officer - Horizontal coordinator	NSI		EU	EC
Vogel	Wolfgang	Landesamt für Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein				CE	EB

8 Annex H: Comparative analysis of the 6EAP and the EU-SDS

8.1 Environmental objectives of the 6EAP and the renewed EU-SDS

The 6EAP Decision names five priority areas for environmental action: Climate Change; Nature and Biodiversity; Environment and Health and Quality of Life; Natural Resources and Wastes; and International Issues. The renewed EU-SDS highlights seven key challenges for sustainable development of which the five most relevant to environmental matters are analysed: Climate Change and Clean Energy; Sustainable Transport; Sustainable Consumption and Production; Conservation and Management of Natural Resources; and Public Health. The table below outlines the main objectives of the 6EAP and the renewed EU-SDS.

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
Climate change	<p>Ratification and entry into force of the Kyoto Protocol by 2002 and fulfilment of its commitment of an 8% reduction in emissions by 2008-12 compared to 1990 levels. Show demonstrable progress by 2005.</p> <p>Placing the Community in a credible position to advocate an international agreement on more stringent reduction targets for the second commitment period provided for by the Kyoto Protocol.</p> <p>Achieve a percentage of 22% of the electricity production from renewable energies by 2010.</p>	<p>Kyoto Protocol commitments of the EU-15 and most EU-25 to targets for reducing GHG emissions by 2008 – 2012, whereby the EU-15 target is for an 8% reduction in emissions compared to 1990 levels.</p> <p>Aiming for a global surface average temperature not to rise by more than 2°C compared to the pre-industrial level.</p> <p>Energy policy should be consistent with the objectives of security of supply, competitiveness and environmental sustainability, in the spirit of the Energy Policy for Europe launched in March 2006 by the European Council.</p> <p>Adaptation to, and mitigation of, climate change should be integrated in all relevant European policies.</p> <p>By 2010, 12% of energy consumption, on average, and 21% of electricity</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
		<p>consumption, as a common but differentiated target, should be met by renewable sources, considering raising their share to 15% by 2015.</p> <p>By 2010, 5.75% of transport fuel should consist of biofuels, as an indicative target, (Directive 2003/30/EC), considering raising their proportion to 8% by 2015.</p> <p>Reaching an overall saving of 9% of final energy consumption over 9 years until 2017 as indicated by the Energy End-use Efficiency and Energy Services Directive.</p>
<p>Nature and biodiversity</p>	<p>Conservation, appropriate restoration and sustainable use of marine environment, coasts and wetlands and areas of significant landscape value.</p> <p>Promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification.</p> <p>Protection and restoration of nature and biodiversity from pollution.</p>	<p>Not included in the EU-SDS as a Key Challenge</p> <p>Strategic action points are mainstreamed under the key challenge '<i>Conservation and management of natural resources</i>':</p> <p>Improving management and avoiding overexploitation of renewable natural resources such as fisheries, biodiversity, water, air, soil and atmosphere.</p> <p>Restore degraded marine ecosystems by 2015 including achievement of Maximum Yield in fisheries.</p> <p>Halting the loss of biodiversity, reducing significant decline by 2010.</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
	<p>Halting biodiversity decline by 2010.</p> <p>Conservation of species and habitats, with special concern for habitat fragmentation.</p>	<p>Achieve UN objectives on forests by 2015.</p>
<p>Environment and health and quality of life</p>	<p>Achieving better understanding of the threats to environment and human health in order to take action to prevent and reduce these threats.</p> <p>Contributing to a better quality of life through an integrated approach concentrating on urban areas.</p> <p>Aiming to achieve within one generation (2020) that chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment.</p> <p>Chemicals and pesticides that are dangerous should be substituted by safer alternatives with the aim of a significant overall reduction in risk to man and the environment.</p> <p>Achieving quality levels of ground and surface water that do not give rise to significant impacts on and risks to human health and the environment, and to ensure sustainability of water extraction</p>	<p>Improving protection against health threats by developing capacity to respond to them in a coordinated manner.</p> <p>Further improving food and feed legislation, including review of food labelling.</p> <p>Continuing to promote high animal health and welfare standards in the EU and internationally.</p> <p>Curbing the increase in lifestyle-related and chronic diseases, particularly among socioeconomically disadvantaged groups and areas.</p> <p>Reducing health inequalities within and between Member States by addressing the wider determinants of health and appropriate health promotion and disease prevention strategies.</p> <p>Ensuring that by 2020 chemicals, including pesticides, are produced, handled and used in ways that do not pose significant threats to human health and the environment.</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
	<p>rates.</p> <p>Achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment.</p> <p>Substantially reducing the number of people regularly affected by long-term average levels of noise, in particular from traffic and preparing the next step in the work with the noise directive.</p>	<p>Improving information on environmental pollution and adverse health impacts.</p>
<p>Sustainable use and management of natural resources and waste</p>	<p>Aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use.</p> <p>Achieving a significant overall reduction in the volumes of waste generated and of waste going to disposal through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns.</p> <p>Encouraging re-use and reduction of level of hazard for wastes that are still generated.</p>	<p>Improving resource efficiency to reduce the overall use of non renewable natural resources and the related environmental impacts of raw materials use, thereby using renewable natural resources at a rate that does not exceed their regeneration capacity.</p> <p>Gaining and maintaining a competitive advantage by improving resource efficiency, inter alia through the promotion of eco-efficient innovations.</p> <p>Avoiding the generation of waste and enhancing efficient use of natural resources by applying the concept of life-cycle thinking and promoting reuse and recycling.</p> <p>Promoting sustainable consumption and production by addressing social and economic development within the carrying capacity of ecosystems and decoupling</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
		<p>economic growth from environmental degradation.</p> <p>Improving the environmental and social performance for products and processes and encouraging their uptake by business and consumers.</p> <p>Aiming to achieve by 2010 an EU average level of Green Public Procurement (GPP) equal to that currently achieved by the best performing Member States.</p> <p>The EU should seek to increase its global market share in the field of environmental technologies and eco-innovations.</p> <p>(See also Nature and Biodiversity section of this table for further objectives related to management of natural resources).</p>
<p>Sustainable Transport</p>	<p>Not included in the 6EAP as a Priority Area.</p> <p>Strategic action points are mainstreamed into other Priority Areas:</p> <p>Emissions (Climate Change)</p>	<p>Decoupling economic growth and the demand for transport with the aim of reducing environmental impacts.</p> <p>Achieving sustainable levels of transport energy use and reducing transport GHG emissions.</p> <p>Reducing pollutant emissions from transport to levels that minimise effects on human health and/or the environment.</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
	<p>Decoupling economic and transport growth; air quality; sustainable planning; increased public transport (Environment and Health and Quality of Life)</p>	<p>Achieving a balanced shift towards environment friendly transport modes to bring about a sustainable transport and mobility system.</p> <p>Reducing transport noise both at source and through mitigation measures to ensure overall exposure levels minimise impacts on health.</p> <p>Modernising the EU framework for public passenger transport services to encourage better efficiency and performance by 2010.</p> <p>In line with the EU strategy on CO2 emissions from light duty vehicles, the average new car fleet should achieve CO2 emissions of 140g/km (2008/09) and 120g/km (2012).</p> <p>Halving road transport deaths by 2010 compared to 2000.</p>
<p>International dimension</p>	<p>The pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment;</p> <p>The further promotion of sustainable consumption and production patterns at the international level;</p>	<p>Make significant progress towards meeting the commitments of the EU with regard to internationally agreed goals and targets such as the Millennium Development Goals.</p> <p>Contribute to improving international environmental governance (IEG), in particular in the context of the follow-up to the 2005 World Summit outcome, and to</p>

Thematic area	6EAP objectives	Renewed SDS operational objectives and targets
	<p>Making progress to ensure that trade and environment policies and measures are mutually supportive</p>	<p>strengthening multilateral environmental agreements (MEAs).</p> <p>Promote sustainable development in the context of negotiations at the WTO which sets sustainable development as one of its main objectives.</p> <p>Include sustainable development concerns in all EU external policies, including the Common Foreign and Security Policy, inter alia by making it an objective of multilateral and bilateral development cooperation.</p>

8.2 Location of 6EAP issue areas

Although both documents share a number of similarities, due to their different emphases, objectives may fall under different headings despite being the same e.g. biodiversity targets fall under the heading of the same name in the 6EAP but under management of natural resources under the EU-SDS.

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Issue areas named by 6EAP										
Kyoto Protocol	X					X				
European Climate Change Programme	X					X				
CO ² emissions trading	X					X				
Monitoring of GHGs						X				
Energy sector emissions						X				

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Review of subsidies						X				
Lower carbon fossil fuels						X				
Renewables	X					X				
Combined Heat and Power	X					X				
Methane emissions						X				
Energy efficiency	X					X				
Transport sector emissions		X				X				
Aviation emissions		X				X				
Marine transport emissions		X				X				
Shift to cleaner transport		X				X				

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Sustainable transport system		X				X				
Motor emissions						X				
Increase share of low-fuel vehicles		X				X				
Price of transport linked to full environmental cost						X				
Decoupling economic growth and demand for transport		X				X				
Industrial emissions						X				
Eco-efficiency						X				
Assistance for SMEs for innovation						X				

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Environmentally sound industrial practices						X				
Other sectoral emissions						X				
Energy efficiency in buildings						X				
Emissions under CAP and waste strategy						X				
Use of instruments						X				
Fiscal measures						X				
Environmental agreements with industry on emissions						X				
Research and technological development						X				

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Adaptation to Climate Change	X					X				
Inclusion of adaptation in investment decisions						X				
Climate modelling						X				
EU enlargement						X				
Capacity building						X				
Sustainable transport and energy sector						X				
Cooperation with candidate countries						X				
External relations						X				
Capacity building						X				

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Technology transfer						X				
Adaptation to climate change						X				
Biodiversity				X			X			
Biodiversity strategy implementation, monitoring and assessment				X			X			
BD research							X			
Sustainable use of BD							X			
ABS							X			
Invasive species							X			
Natura 2000				X			X			

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Natura 2000 extension to candidate countries							X			
Accidents and disaster prevention and response							X			
Soil protection				X			X			
Soil protection thematic strategy										
Extractive industries							X			
Landscape values							X			
Agriculture				X			X			
Marine ecosystems				X			X			
CFP				X			X			

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Marine thematic strategy				X			X			
Integrated Coastal Zone management				X			X			
Protection of marine areas				X			X			
Forests				X			X			
Sustainable forest management				X			X			
Stakeholder and policy coordination							X			
Market share of sustainably produced wood							X			
Implementation of international resolutions							X			

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Combating illegally harvested wood							X			
Climate change effects in forestry							X			
GMOs							X			
Environment and Health					X			X		
Research								X		
Development of indicators										
Updating of standards and limit values										
Early warning systems										
Chemicals								X		

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Manufacturer responsibility										
Risk management systems					X					
Criteria for persistent and toxic substances										
Public access to REACH register										
Pesticides								X		
Full implementation and review of Plant Protection Directive								X		
Pesticides thematic strategy								X		
Chemicals and Pesticides					X			X		
Ratification of								X		

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
international agreements and amendment of EU legislation										
Management of chemicals and pesticides in 3 rd party countries								X		
Contribution to international efforts								X		
Water use and quality				X				X		
Protection of surface and groundwater								X		
Water Framework Directive implementation								X		
Bathing water								X		

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Air quality				X				X		
Monitoring and assessment of air quality								X		
Air thematic strategy					X			X		
Ground level ozone and particulates								X		
Indoor air quality					X			X		
Leading role in international negotiations								X		
Instruments for reducing relevant emissions								X		
Noise								X		
Measures to reduce		X						X		

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
noise emissions										
Instruments to mitigate noise		X						X		
Urban environment		X						X		
Urban Environment thematic strategy		X						X		
Resource and waste management				X					X	
Resource management thematic strategy				X					X	
Measures for waste prevention and reduction				X					X	
Reduction targets for waste									X	
Ecologically sound									X	

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
product design										
Public awareness of waste reduction									X	
Indicators for waste management									X	
Waste recycling thematic strategy									X	
Development/revision of waste legislation									X	
Sustainable patterns of consumption and production			X							X (and also in Preamble)
Integration of protection requirements into EU external policy										X
Target setting for global sustainable development pact										X

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
Global environmental governance										X
Ratification and compliance with international conventions										X
Sustainable environmental practices in foreign investment										X
Risk evaluation methods										X
Sustainability Impact Assessments										X
World trade system recognising the precautionary principle										X
Cross-border environmental										X

	EU-SDS key objectives					6EAP priority areas				
	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Climate Change	Nature and Biodiversity	Environment and health and quality of life	Natural resources and wastes	International issues
cooperation										
Policy coherence										X

8.3 Additional issue areas in the EU-SDS

The EU-SDS also contains a number of issue areas which are not contained in the 6EAP, visible in the table below:

	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health
SDS issue areas (not included in 6EAP issue areas)					
Energy supply, competitiveness and environmental sustainability	X				
EU policy integration of adaptation and mitigation	X				
Biofuels/biomass	X				
2°C target	X				
Exploring emissions reduction targets for 2020	X				
Modernising public transport system		X			
Road transport deaths		X			
Development of trans-European freight network		X			

	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health
Coordination and improvement of transport infrastructure and increase of its use		X			
Improve energy efficiency of transport sector through cost-effective instruments		X			
Urban transport plans (to be developed 'in line with the thematic strategy on the urban environment'.		X			
Long term EU fuel strategy		X			
Maximum Yield in Fisheries by 2015				X	
Integrated Maritime Policy				X	
Food labelling review, food legislation					X
Animal health and welfare					X
Reduce increase in lifestyle/chronic diseases					X
Reduce health inequalities					X

	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health
Improving information on environmental pollution					X
Coordination of health and disease prevention strategies					X
Transport Health and Environment Pan European Programme (THE PEP)					X
Improving environmental and social performance of products and encouraging uptake.			X		
Green Public Procurement			X		
Increase global market share in eco-innovation and environmental technologies eg through ETAP and dissemination			X		
Dialogue with business for setting environmental and social performance targets for products			X		
Eco-labelling for harmful products			X (also GMO section)		
Support of information campaigns on <i>i.a.</i> organic and fair trade products			X		

