

## **Manual of European Environmental Policy**

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

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# Emissions trading

<b>Formal reference</b>	
<a href="#">2003/87/EC</a> (OJ L275/32 25.10.03)	Directive establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive <a href="#">96/61/EC</a> greenhouse gas emission allowance trading within the Community and amending Council Directive <a href="#">96/61/EC</a>
Proposed 23.10.2001 – <a href="#">COM(2001)581</a>	
<a href="#">2010/384/EU</a> (OJ L 175 10.7.2010)	Decision on the Community-wide quantity of allowances to be issued under the EU Emission Trading Scheme for 2013
<a href="#">2004/156/EC</a> (OJ L 59 29.2.2004)	Decision establishing guidelines for the monitoring and reporting of greenhouse gas emission pursuant to Directive <a href="#">2003/87/EC</a>
<a href="#">2004/101/EC</a> (OJ L 338 13.11.2004)	Directive amending Directive <a href="#">2003/87/EC</a> establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms
Regulation (EC) No <a href="#">2216/2004</a> (OJ L386 19.12.2004)	Regulation for a standardized and secured system of registries pursuant to Directive <a href="#">2003/87/EC</a> of the European Parliament and of the Council and Decision No 280/2004/EC
<a href="#">2006/780/EC</a> (OJ L316/12 16.11.2006)	Commission Decision on avoiding double counting of greenhouse gas emissions reductions under the Community Emissions Trading Scheme for project activities under the Kyoto Protocol pursuant to Directive <a href="#">2003/87/EC</a>
<a href="#">2007/589/EC</a> (OJ L229 31.8.2007)	Commission Decision establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive <a href="#">2003/87/EC</a> of the European Parliament and of the Council (notified under document number C(2007)3416)
<a href="#">146/2007</a> (26/10/2007)	Decision of the EEA Joint Committee amending Annex XX (Environment) to the EEA Agreement
<a href="#">2008/101/EC</a> (OJ L8/3 13.1.2009)	Directive amending Directive <a href="#">2003/87EC</a>
Commission Regulation (EC) No <a href="#">994/2008</a> (OJ L 271 11.10.2008)	Commission Regulation 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.
<a href="#">2009/73/EC</a> (OJ L24/18 28.1.2009)	Commission Decision amending Decision 2007/589/EC as regards the inclusion of monitoring and reporting guidelines for emissions of nitrous oxide
<a href="#">2009/29/EC</a> (OJ L140 5.6.2009)	Directive amending Directive <a href="#">2003/87/EC</a> so as to improve and extend the greenhouse gas emission

	allowance trading scheme of the Community
Commission Regulation (EU) No <a href="#">1031/2010</a> (OJ L302 18.11.2010)	Commission Regulation on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC
<a href="#">2011/149/EU</a> (OJ L61 8.3.2011)	Commission Decision on historical aviation emissions pursuant to Article 3c(4) of Directive 2003/87/EC
<a href="#">2011/278/EU</a> (OJ L 130 17.5.2011)	Commission Decision determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC
Commission Regulation (EU) No <a href="#">394/2011</a> (OJ L107 27.4.2011)	Regulation amending Regulation (EC) No 748/2009 on the list of aircraft operators that performed an aviation activity listed in Annex 1 to Directive 2003/87/EC of the European Parliament and of the Council on or after 1 January 2006 specifying the administering Member State for each aircraft operator as regards the expansion of the Union emission trading scheme to EEA-EFTA countries
<a href="#">2011/389/EU</a> (OJ L173 1.7.2011)	Commission Decision on the Union-wide quantity of allowances referred to in Article 3e(3)(a) to (d) of Directive 2003/87/EC
<b>Legal base</b>	Article 192 TFEU (originally Article 175 TEC)
<b>Binding dates (2003/87/EC)</b>	
Formal compliance	31 December 2003
Submission of National Allocation Plans	31 March 2004
First period of operation of the scheme	2005 to 2007
Member States report	30 June 2005
Commissions report	30 June 2006
Second period of operation of the scheme	2008 to 2012
Transposition of 2008/101/EC	2 February 2010
Transposition of 2009/29/EC	31 December 2012
Transposition of 2009/29/EC Article 1(10) Adjustment of the Community-wide quantity of allowances	31 December 2009
Transposition of 2009/29/EC Article 1(13)	31 December 2009

## Purpose of the legislation

Directive 2003/87/EC establishes a scheme for trading greenhouse gas (GHG) emissions to help meet the Community's commitments under the Kyoto Protocol to reduce its GHG emissions by 8 per cent from 1990 levels by 2008–2012, in an efficient manner.

Subsequent legislative acts support the practical application of the scheme in different ways as outlined in detail below.

## Summary of the legislation

Directive 2003/87/EC sets up an EU-wide GHG emissions trading scheme (ETS) that initially includes only carbon dioxide emissions and applies to all activities listed in Annex I, which includes large power stations and refineries and large factories that produce steel, cement, glass, ceramics and paper. Operators of such plants have to hold GHG emission permits and are allowed to emit these gases up to a fixed allowance that would be determined by the appropriate Member State. Emitting in excess of the allowance prescribed would incur a fine of €40 per tonne of carbon dioxide equivalent before 2007 and €100 from 2008, with the excess having to come out of the following year's allowance. Member States are also required, to this end, to draw up a publicly accessible registry to ensure the accurate accounting of allowances. In March 2010 the Commission published [guidance](#) on the interpretation of Annex I.

The first period of the scheme ran from 2005 to 2007 and was essentially used to refine the scheme's operation during its second period. The latter runs from 2008 to 2012 to coincide with the Kyoto commitment period. The number of allowances for the first period was determined by Member States and allocated within a National Allocation Plan (NAPI), which was repeated for the 2008–2012 period (NAPII). Member States are also required to submit yearly reports on the application of the Directive with particular reference to arrangements for the allocation of allowances, the application of monitoring and reporting guidelines and fiscal treatment of allowances, if relevant.

The Directive allows for pooling, which effectively allows a number of activities to be included in a bubble to allow them to buy and sell allowances as a group, which could include all the operations of a single company, or even sector, to trade as one. Temporary exclusion until 2007 of certain activities is also permitted. Member States are required to apply to the Commission for such exclusions and must be able to show that their own policies reduced emissions to an equivalent amount compared to if they had been subject to the provisions of the Directive.

From 2008 Member States are allowed to widen the scope of the scheme and unilaterally apply emissions allowance trading to activities, installations and associated GHGs not included in Annex I, provided that they have the Commission's approval. In 2006, the Commission drew up a report on progress and made recommendations on how the scheme should be developed, including whether more activities and other Kyoto GHGs should be included in the Directive.

The Directive also amends the IPPC Directive [96/61/EC](#) (now consolidated as Directive [2008/1/EC](#) with the amendment) to ensure that permits under the latter for any installation covered by the emissions trading Directive do not contain emission limit values for GHG emissions.

Article 14 of the Directive calls for the Commission to establish monitoring and reporting guidelines to help put the GHG ETS into practice. In March 2004, the Commission published a Decision (2004/156/EC) to this effect. The guidelines, inter alia call for the

monitoring and reporting to be based on the following principles: completeness, consistency, transparency, accuracy, cost-effectiveness, materiality, faithfulness and improvement of performance in monitoring and reporting emissions. Operators of installations are required to document all data for the installation's emissions from all sources belonging to activities listed in Annex 1 to the Directive. They are also required to operate an effective data management system and retain such information for a period of at least ten years. These data will then be submitted, verified and used by the competent authority to ensure sufficient number of allowances have been surrendered by the operator in respect of that same installation.

In 2007, the Commission adopted a revision of Monitoring and Reporting Guidelines Decision 2007/589/EC, and apply to the second trading period (2008–2012). The main objective is to improve clarity and cost-effectiveness. In particular, the role of small installations is better taken into account. In December 2008 the Commission published a Decision establishing guidelines for monitoring and reporting of nitrous oxide emissions, which was spurred by the Netherlands' application to have N<sub>2</sub>O included in the ETS in the 2008–2012 period.

Directive 2003/87/EC was amended by Directive 2009/29/EC so as to improve and extend the Community GHG emission allowance trading scheme. This significantly altered the EU ETS, particularly in the way it sets the cap and allocates allowances. The scope of the ETS is expanded to cover new sectors (such as the petrochemical, ammonia and aluminium sectors) and to two new gases (nitrous oxide and perfluorocarbons). The revised Directive sets a single EU-wide cap, replacing the existing 27 national caps. The principle of full auctioning for allocation is introduced, starting with power plants in 2013. A transitional free allocation of allowances will apply to certain power plants in new Member States, which will face from 30 per cent auctioning in 2013 increasing to 100 per cent in 2020. Auctioning in the manufacturing sector will be phased in gradually – in 2013 the sector will be subject to 20 per cent auctioning, increasing to 70 per cent by 2020, 'with a view to' reaching full auctioning in 2027. A broad exception was inserted for industrial sectors at risk of carbon leakage which may be eligible to receive up to 100 per cent of their allowances for free from 2013. The Commission was required to identify these sectors by December 2009, and by June 2010 to report on the carbon leakage implications of any new international climate change agreement and put forward proposals accordingly. Regulation (EU) No 1031/2010 sets out the requirements for the timing, administration and other aspects of the auctioning process.

Smaller installations that emit under 25,000 tonnes of CO<sub>2</sub> per year are permitted to opt out of the ETS, provided that alternative reduction measures are put in place. CO<sub>2</sub> captured and stored according to Directive 2009/31/EC on [carbon dioxide capture and storage](#) will be considered as not emitted under the ETS. In addition, up to 300 million allowances will be made available from the new entrants' reserves until the end of 2015 to subsidize the construction of up to 12 carbon capture and storage demonstration plants and support projects on innovative renewable energy technologies. At least 50 per cent of the proceeds from auctioning should be used for climate-related adaptation and mitigation purposes. The Commission is required to put forward a proposal to include emissions from international maritime transport in the EU reduction commitment from 2013, should the International Maritime Organisation (IMO) fail to agree an appropriate method by December 2011. The text also states that the EU should seek to establish an internationally recognized system for reducing deforestation, increasing afforestation and

reforestation, supporting the development of appropriate financing mechanisms within the context of a post-2012 international agreement on climate change.

On 9 July 2009 (in line with Article 9, paragraph 2 of the revised Directive), the Commission adopted Decision [2010/384/EU](#), setting a single EU-wide cap for 2013, the first year of the 2013-2020 trading period. The cap was set at 1.927 billion allowances. This was calculated on the basis of a formula which applies a 1.74 per cent annual reduction in allowances below the average yearly total allocated through Member States' national allocation plans in the 2008-2012 trading period, to achieve a 21 per cent fall in emissions from the 2005 level by 2020. The cap was not definitive as it reflected the current rather than the future scope of the EU ETS. An adjusted cap taking into account the inclusion in the EU ETS from 2013 of new sectors (e.g. aluminium) and gases (e.g. nitrous oxide) was planned for September 2010. In addition, the 2013 cap for the aviation sector, which will join the EU ETS in 2012, was anticipated to be determined in a separate Decision. The cap was set on the basis of the 2009 climate and energy package of legislation, which requires a 20 per cent cut in EU greenhouse gas emissions by 2020 from 1990 levels, and would need to be revised if a Decision were taken to increase the emission reduction target to 30 per cent<sup>1</sup>.

On 7 March 2011 the Commission adopted Decision [2011/149/EU](#) which defines the historical emissions of the aviation sector against which the total quantity of allowances under Directive 2003/87/EC are defined.

On 20 April 2011 the Commission adopted Regulation (EU) No [394/2011](#). This Regulation extends, to the EEA-EFTA countries, Regulation (EC) No 748/2009 that specified the aircraft operators included in the scheme and the Member States responsible for regulating them. The Regulation thus allocates certain aircraft operators to EEA-EFTA countries for administration.

On 27 April 2011, the Commission adopted Decision [2011/278/EU](#) determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC. The Decision sets out the rules to be used by the Member States to calculate the annual number of allowances to be allocated free of charge to ETS installations in their territories from 2013 onwards. This so-called 'benchmark Decision' was adopted through regulatory procedure with scrutiny.

As noted above, the principle of full auctioning is introduced for the power sector from 2013 (with the exception of certain power stations in new Member States where the phase-in will be gradual). For the manufacturing sector on the other hand, the phase-in of full auctioning will be gradual from 2013 to 2027 (with additional softening of the measure through provisions for sectors particularly at risk of carbon leakage). From 2013, the sector will be subject to 20 per cent auctioning, with the timescale for full auctioning being 2027. This means that over the next decade and a half there will a large, but decreasing, amount of allowances to be distributed for free. The Decision provides a harmonised approach for Member States to use for distributing these.

The approach is organised around the definition of a set of 'benchmarks' for the carbon intensity of the production of a set of specified product groups. 52 product benchmarks are thus set out in the annexes of the Decision. The benchmark is set on the basis of the

10 per cent most efficient installations (for the production of the product in question). This proportion was stipulated in Directive 2009/29/EC.

The proposed product benchmarks are expected to cover some 75 per cent of industry emissions under the ETS. Production of products not covered by a product benchmark will be allocated free allowances based on a heat benchmark for heat consumption (estimated to cover around 20 per cent of eligible emissions), and a fuel benchmark for fuel consumption (estimated to cover around 5 per cent of eligible emissions) if there is no measurable heat. A heat benchmark and a fuel benchmark are also provided in the annexes of the Decision. For process emissions, which are not related to energy (estimated to cover less than 1 per cent of eligible emissions) the allocation will be based on historical emissions.

In simplified terms, the number of allowances to be given to an existing installation (Article 10) is calculated by multiplying the relevant benchmark by the installation's historic production expressed as the median of the years 2005-08 or 2009-10, whichever is higher (Article 9). The use of the median ensures that the impact of special circumstances, such as temporary closure of installations and periods of economic contraction, is reduced. As the total number of free allowances is limited, a so-called cross-sectoral correction factor is foreseen in the ETS Directive to ensure that the total amount of free allowances does not exceed the maximum available. The allocation of allowances for new installations (Article 19) is calculated by multiplying a relevant benchmark by the installation's estimated capacity increase and a standard capacity utilisation factor (Article 18). Subsequently, an annual linear reduction factor of 1.74 per cent is applied, as required by the ETS Directive. The total number of allowances for new entrants is also limited.<sup>2</sup>

Installations that meet the benchmarks (and thus are among the 10 per cent most efficient in the EU) will in principle receive all the allowances they need. Installations that do not meet the benchmark will have a shortage of allowances and the option to either lower their emissions (through abatement) or to purchase additional allowances to cover their excess emissions.<sup>3</sup>

On the 30 June the Commission adopted Decision [2011/389/EU](#) setting the Union-wide quantity of allowances for the aviation sector. Under Art. 3e(3)(a) to (d) of the Directive, the European Commission may, before the start of each trading period, fix the total quantity of allowances to be created, auctioned, placed in the special reserve, and distributed for free to aircraft operators. The quantities concerned are to be determined arithmetically from the figure on historical aviation emissions of 219,476,343 tonnes of CO<sub>2</sub> set by Commission Decision 2011/149/EU. On that basis, this Decision sets the EU-wide total number of allowances in the various categories concerned for 1 January to 31 December 2012 and for each year of the period beginning on 1 January 2013.

## **Development of the legislation**

After the signature of the Kyoto Protocol by the EC in December 1997, the first reference to an ETS appeared in the Commission's Communication ([COM\(1998\)353](#)), asking the Council to inter alia 'endorse the introduction of the flexible mechanisms' and 'set up its own internal trading regime by 2005'. This idea was expanded in 'Preparing for the

Implementation of the Kyoto Protocol' ([COM\(1999\)230](#)) whereby the Commission agreed to adopt a Green Paper on emissions trading and organize a consultation on the issue in 2000. Accordingly the Green Paper was published in 2000 ([COM\(2000\)87](#)), alongside a Communication on EU Policies and Measures to Reduce Greenhouse Gas Emissions: Towards a European Climate Change Programme (ECCP) ([COM\(2000\)88](#)). In parallel to the Green Paper, stakeholder meetings were occurring under the ECCP. These meetings discussed inter alia various aspects of the development of the ETS, although these highlighted many differences of opinions between participants on the approach that should be taken. Towards the end of January 2001, the Commission began drafting the emissions trading proposal. On 23 October 2001, the proposal was published alongside two other documents to take forward EU climate policy: a Communication on the implementation of the first phase of the ECCP and a proposal for a Council Decision to ratify [the Kyoto Protocol](#). The proposal was originally due to be published prior to the resumption of COP6 in Bonn in July 2001. However, it was held up at the time as a result of various concerns, notably those of European employers' association UNICE and various concerns from Germany and the United Kingdom. However, discussions on the proposed Directive at the ECCP conference in July helped to clarify views and, after further consultation, the proposal was published.

Following publication of the proposal various Member States raised a number of issues. A divide emerged immediately between those that thought the scheme should be mandatory and those that believed it should be voluntary. Germany and the United Kingdom in particular, were opposed to the scheme being mandatory. The United Kingdom's main concern was the potential incompatibility of the European scheme with its domestic scheme. Germany faced strong opposition from industry groups and prior to the publication of the Commission's proposal had originally decided to stay away from any trading before 2012. However, Germany changed its view and rejoined negotiations. Although Germany and the United Kingdom were the most vocal in opposition to a mandatory scheme, Finland, Greece, Italy and Luxemburg were also opposed. To appease these Member States a number of concessions were made. These included the option to exclude certain installations during the first phase of the scheme and to grant exceptions for certain installations in the case of force majeure.

Debates on how best to allocate emission allowances were also a source of contention. Two main issues arose: the first concerned whether individual Member States should allocate allowances or whether it should be done at EU level; the second related to the cost of allowances. Earlier drafts had proposed that Member States should be left to decide how they allocate emissions to businesses in compliance with EU state aid rules. However, it was thought that this might lead to industries in some countries gaining unfair competitive advantage. The European Parliament, however, backed calls to allow individual countries to allocate allowances themselves, but with a limit on distribution to prevent over allocation which may distort the market. The final agreement allows Member States to choose how to allocate allowances, these being set out in their NAPs. The United Kingdom was vehemently against the Commission's right to veto allocation of emissions; however this aspect did remain in the final agreement. In relation to the second point on the cost of allowances, this issue was also highly contentious. The Commission had originally proposed that allowances should be allocated free of charge, known as grandfathering, in the first period, but that another method of allocation, possibly auctioning, would be used in the second phase. The majority of Member States wanted allowances to be free in both phases, to help encourage businesses to take part.



The European Parliament suggested a system whereby allowances would be allocated free of charge for the first three years (from the start date in 2005), and then recommended a hybrid scheme with 15 per cent for auctioning and 85 per cent remaining free of charge. Some NGOs argued for a higher proportion of the allowances to be auctioned arguing that this would be in line with the polluter pays principle. The final compromise was for 95 per cent of emission quotas to be free of charge during the first phase (2005–2007) with the remaining 5 per cent being auctioned off. During the second phase (2008–2012), the amount available for auctioning will raise to 10 per cent.

One other concession which was made, in many ways to help garner the support of Germany, related to pooling, although the idea was initially opposed by the Commission because it thought that it might curtail external trading by firms in pools and reduce the liquidity of the market. Germany's insistence on this mechanism, to allow it to preserve its sectoral climate change agreements, was eventually accepted. An issue that generated substantial controversy during debate of the Directive was whether to allow credits from the Kyoto flexible mechanisms (Joint implementation and the clean development mechanism) to be used for compliance. In order not to jeopardize progress on the main Directive, this issue was left to a separate discussion that led an amendment of the main Directive, in Directive 2004/101/EC. The 'linking Directive' allows CDM credits to be used from 2005 and JI credits from 2008; Member States may establish limits on allowable quantities. Credits from nuclear and sinks projects are excluded, and dams larger than 20 MW must meet criteria outlined by the World Commission on Dams.

The final piece of the initial round of EU emissions trading legislation was the Regulation on a 'standardized and secure system of registries' (Regulation (EC) No 2216/2004). This forms an essential piece of the practical engineering behind a trading system. The computerized system tracks all of the transactions among the approximately 12,000 covered installations in Europe. Installations open trading accounts in national registries, which are linked to a Europe-wide transaction log, available on the web.

## **Including aviation**

In a Communication ([COM\(676\)2006](#)) 'Building a Global Carbon Market', the Commission reviewed progress in the ETS to date, and indicated options for the future. On 20 December 2006 the Commission proposed inclusion of aviation in the ETS in two steps. From the start of 2011, emissions from all domestic and international flights between EU airports would be covered. One year later, at the start of 2012, the scope would be expanded to cover emissions from all international flights – from or to anywhere in the world – that arrive at or depart from an EU airport. A public consultation between March and July 2005 showed that such a measure was likely the most politically acceptable measure to curb emissions from the sector, the United Kingdom was particularly supportive. The proposal was subject to co-decision, and on 12 November 2007 the European Parliament adopted amendments on first reading which were designed to make the system somewhat more demanding – including a tighter cap, more auctioning, a multiplier to account for non-CO<sub>2</sub> impacts, and a start to international coverage in 2011 rather than having a year's delay. The Environment Council rejected most of the amendments in December 2007, but most of these were re-tabled in Parliament's second reading starting in April 2008. A political agreement between Council and Parliament was brokered in June and approved by Parliament in July 2008 in

which most of the Council's preferences were retained. The Directive was adopted as Directive 2008/101/EC and published on 13 January 2009.

## **Revising the Directive**

Commission proposals for changes to the design of the post-2012 ETS were included in the [package of measures](#) (the 'climate and energy package') released in January 2008, in December 2007 ([COM\(2008\)16](#)). The proposal aimed to strengthen the EU-wide carbon market for its third phase from 2013 to 2020. Proposed measures included: extending the scope of the ETS to all major industrial emitters; the inclusion of other GHGs other than CO<sub>2</sub>; allowances to be centrally allocated by the Commission (rather than through 27 NAPs); the power sector to face full auctioning of permits from 2013 while auctioning in other sectors was to be phased in from 2013 with the aim of achieving full auctioning by 2020. By 2010, the Commission was to identify sectors at risk of 'carbon leakage' (especially relocating due to competitive pressures). Based on this analysis and the state of international negotiations; in 2011 the Commission could propose measures to compensate for competitive pressures, either by increasing the free allocation of permits to identified sectors or requiring importers to buy permits to neutralize their competitive advantage.

In preparation for the 3 March Environment Council, the Slovenian Council Presidency gathered written views from the Member States on the proposed revision to the EU ETS. Many raised the issue that, due to the stringency of the cap there should be greater flexibility in terms of reductions from within and outside the EU ETS. Some Member States called for a system whereby, if a country exceeds its projected target for a particular year, for the sectors outside the EU ETS they could trade the excess reductions on the market to gain a financial benefit, rewarding elevated reductions. Several highlighted the importance of using flexible mechanisms to meet their targets, for example Finland stated there was a need to ensure flexibility in terms of the ability to reduce emissions and that rules on the use of the mechanisms must be clear. Others, for example Portugal, raised concerns about the proposed linear annual emissions reductions pathway as this would essentially amount to an annual cap and that flexibility to carry forward and use other credits would be limited. The United Kingdom also highlighted the need for 'appropriate' flexibility to allow Member States to meet their targets in a cost effective manner.

There was a clear area of division between those that supported the ring fencing of profits from auctioning for energy efficiency and climate mitigation activities, commenting that this was essential, and those who saw specifying how funds can be used as totally unacceptable, for example Finland and the United Kingdom. Another key area where opinion was divided was the use of 10 per cent of revenues generated at auction to support newer Member States in meeting the costs of emission reduction in order to aid convergence between older, generally wealthier Member States, and newer entrants to the EU. Several of the newer Member States expressed significant concern at the costs associated with meeting the targets proposed and considered that this was insufficient to support the level of changes needed. Meanwhile others, particularly the United Kingdom, commented that the EU ETS was not the appropriate mechanism to use to bring about European convergence and that there were other better suited approaches.

Many Member States, especially newer entrants, were also particularly concerned about the choice of 2005 as the base year for the proposed reduction targets proposed. 1990 is the base year for the definition of reductions internationally, enshrined in the Kyoto Protocol. While EU level targets still apply to emissions from this year, the calculations for ‘effort sharing’, that is Member State level targets, proposed in the package, were based on 2005. The year 2005 was selected as this was the first year for which there was verified emission data under the EU ETS. Many commented that this was confusing and made the level of effort on the part of the EU less transparent and comparable internationally. Additionally, many new Member States were concerned that defining national targets at 2005 levels would mask the varying degree of effort, or lack of it, undertaken by the different Member States.

The majority, while commenting that the use of auctioning was a good approach, raised reservations about the very high levels. The United Kingdom called for lower minimum levels of auctioning with Member States allowed discretion to auction up to 100 per cent. There were differences of opinion regarding which sectors were at threat from international competition and hence the extent of potential carbon leakage and industrial relocation. Importantly, it was repeatedly commented that there needed to be a rapid Decision as to exactly how the issue of carbon leakage was to be dealt with and what sectors could be deemed to be at risk from competition, leading to a clear message about the level of auctioning expected for different sectors. Hungary in particular also raised concerns about whether increased levels of auctioning would deliver a level playing field. It was felt that companies in different parts of the EU or of different sizes would have very different resources available to them and that SMEs and those with more limited assets would have difficulty competing on the open market.

At the March Environment Council meeting, ministers welcomed the proposed revisions to the EU ETS. The Spring European Summit between EU Heads of State and Government of 13–14 March also called for the proposal to be adopted by the end of 2008. The 5 June 2008 Environment Council further discussed the proposal. The main outstanding issues included: the immediate introduction of auctioning in 2013 for electricity generation, and the level of auctioning in the district heating, industrial combined heat and power production sectors; the redistribution and use of auctioning proceeds; and rules for auctioning. The issue of carbon leakage continued to be a significant point of contention among Member States, in particular Germany insisted that the Commission identify those industries that would be granted exemptions after 2013 to ensure they would not relocate to other countries, while France favoured the introduction of special import duties on products from third countries in which climate change regulations are less stringent than in the EU. The Commission was adamant that it would only decide specific safeguard measures and eligible industries in 2010, so as not to preclude the outcome of the international climate change negotiations in Copenhagen in 2009.

In the European Parliament Environment Committee there was significant disagreement on the proposal. Rapporteur Avril Doyle overcame a defection by her own party to pass the main components of her compromise amendments on the ETS. A faction of Christian Democrat MEPs led by Karl-Heinz Florenz (Germany) and Eija-Rita Korhola (Finland) attempted to postpone the vote. Failing that, the group proposed amendments favourable to industry. Ms. Doyle acknowledged that the economic environment made pushing for strong goals harder, but cautioned that legislators could not put aside long-term goals due

to a short-term crisis. Some of the concessions made lowered the amount of credits auctioned from 15 per cent auctioning instead of the original 20 per cent for select energy-intensive sectors that were subject to carbon leakage in 2013 but still required full auctioning by 2020. The Committee also expanded the number of ‘small’ installations exempted from the scheme: raising the threshold for installations up to 35 MW rated thermal input, from the original 25 MW and reported emissions of less than 25,000 tonnes of CO<sub>2</sub> equivalent, up from the original 10,000 tonnes in each of the preceding three years. The Committee also backed plans to introduce a harmonized single EU-wide cap of emission allowances reduced annually for the third phase of the ETS (2013–2020) instead of the current 27 national caps. The amendments also mandated that all auction revenues be directed to climate change action or to fund research and development<sup>4</sup>.

MEPs adopted their legislative resolution on the proposal on 17 December 2008 ([link](#)). The agreed text allowed several derogations related to the auctioning of emissions allowances in certain sectors and Member States. In particular, a transitional free allocation of allowances would apply to certain power plants in new Member States from 30 per cent auctioning in 2013 increasing to 100 per cent in 2020; auctioning in the manufacturing sector would be phased in gradually – in 2013 the sector would be subject to 20 per cent auctioning, increasing to 70 per cent by 2020, ‘with a view to’ reaching full auctioning in 2027; a broad exception was inserted for industrial sectors at risk of carbon leakage which might be eligible to receive up to 100 per cent of their allowances for free from 2013. The Commission was to identify sectors at risk of carbon leakage by December 2009, and by June 2010 the Commission was to report on the carbon leakage implications of an international agreement and put forward proposals accordingly. While the report adopted by the Environment Committee in October had sought to ring fence all auction revenues towards climate action or research and development, this requirement was toned down in the final agreement to state that ‘at least 50 per cent’ of the proceeds from auctioning would be used for climate-related adaptation and mitigation purposes.

The resolution also called on the Commission to put forward a proposal to include emissions from international maritime transport in the EU reduction commitment from 2013, should the IMO fail to agree an appropriate method by December 2011.

Following intense negotiations, the European Parliament and Council reached a first reading compromise agreement on the proposal in December 2008. The Council formally approved the package on 6 April 2009 and the Presidents of the Parliament and the Council formally signed it into law on 22 April 2009. Directive 2009/29/EC was published in the Official Journal on 5 June 2009.

## **Implementation of the Directive**

Information on the measures taken by the Member States to transpose Directive 2003/87/EC can be found in their national [execution measures](#).

Information on the measures taken by the Member States to transpose Directive 2004/101/EC can be found in their national [execution measures](#).

Information on the measures taken by the Member States to transpose Directive 2008/101/EC can be found in their national [execution measures](#).

Information on the measures taken by the Member States to transpose Directive 2009/29/EC can be found in their national [execution measures](#).

Emission allowances under the scheme are allocated at the national level by Member States in NAPs, the first of which, for the 2005–2007 period, were to have been submitted to the Commission for approval by the end of March 2004; in fact, submissions were not complete until the end of the year. Assessment of three plans – from the Czech Republic, Greece and Italy – continued well into 2005, with acceptance of the Greek plan on 20 June finally ending the process. Although in the end the Commission did not reject any plans outright, several were approved under the condition that changes were made. In total, the Commission approved the allocation of about 6.57 billion allowances to just over 11,400 installations for the trading period 2005–2007. It demanded cuts in the number of allowances to be allocated in 14 of the 25 plans. These cuts total over 290 million allowances, or about 4 per cent of the proposed number of allowances. In addition, the Commission disallowed intended ex-post adjustments in 13 plans. Still, the process was not without controversy. Many Member States handed their industry emissions rights that were in line with business as usual emissions – and in some cases more. Predictably, when first-year emissions were verified in 2006, over allocation was made clear and the market price collapsed. Other Member States also ran foul of requirements and were subject to legal proceedings for late submission of NAPs and late transposition of the Directive. Despite delays and disagreements between Member States and the Commission, the system began functioning on 1 January 2005.

NAPs for the 2008–2012 period were due in June 2006 – a year and a half before the commitment period, rather than the half-year gap between first period NAPs and commencement of trading on 1 January 2005. Early NAP completion was seen as an important way to avoid another last-minute scramble. On 22 December 2005 the European Commission published a Communication entitled ‘Further guidance on allocation plans for the 2008–2012 trading period of the EU Emission Trading Scheme’ ([COM\(2005\)703](#)). It was intended to avoid the troublesome delays in NAP submittal and approval seen in the first trading period (2005–2007); to help Member States produce more homogenous plans; and to encourage development of plans that will ensure Member States meet their targets. The document implied that second-period approvals would not be as lenient as the first with regard to the stringency of the allocation – as 2008–2012 is the Kyoto Protocol's first commitment period, and the ETS has to fit into the plan to meet Kyoto targets. It would then be fairly obvious if the system leaves too much to other sectors or the other flexible mechanisms (CDM and JI) to achieve. The document attempts to give some generic guidance about how allocation should be done, pre-empting the tendency to overestimate future needs. Second NAP approvals were finalized with the Commission's decisions of the Bulgarian and Romanian NAPs on 26 October 2007. The Commission demanded changes in almost all plans, including significant reductions in the total allocations – overall a reduction of 10.5 per cent below that requested by all 27 Member States. Only Denmark, France, Slovenia and the United Kingdom avoided cuts from their proposed allocations. Total annual allocation in the 2008–2012 period was thus set at 2080.93 Mt CO<sub>2</sub>, which is significantly below the 2005–2007 cap of 2298.5 Mt.

## Enforcement and court cases

There have been a number of cases decided in the European Court of Justice concerning Directive 2003/87/EC. Eleven cases concerned the NAPs:

- [T-263/07](#) 23.09.2009. This was a judgement in favour of Estonia. The Court annulled the Commission's Decision of 04.05.2007 that the emission allowances proposed by Estonia as part of its national GHG allocation plan must be reduced by 47.8 per cent.
- [T-183/07](#) 23.09.2009. This was a judgement in favour of Poland. Poland had brought a case against the Commission to have the Commission's Decision regarding Poland's NAP under Directive 2003/87/EC annulled. In the Decision (C(2007)1295 final), the Commission had concluded that several criteria in Annex III of the Directive, which sets out the criteria for the NAPs, had been infringed. The Decision reduced the total annual ceiling in Poland's NAP for CO<sub>2</sub> emission allowances for 2008–2012 from 284.6 to 208.5 million tonnes of CO<sub>2</sub> equivalent, reducing the limit set by Poland by nearly 27 per cent. The Court dismissed Poland's plea that the contested Decision had been illegally adopted after the expiry of the three-month period prescribed by Article 9(3) of the Directive. Poland also accused the Commission of infringing the duty to state reasons under Article 253 EC and of infringing the provisions of Article 9(1) and (3) of the Directive by setting aside the method of economic analysis which Poland had used in its NAP and replacing it with its own method and data, and by imposing a ceiling for the total quantity of allowances to be allocated. The Court upheld both these arguments and found that the contested Decision must be annulled in its entirety.
- [T-208/07](#) 20.10.2008. This was a judgement in favour of the Commission and against a group of electricity and/or heating companies incorporated under Polish law. These had applied to the Court for an annulment of Decision 2007/1295/EC in relation to Poland's NAP. The case concerned whether or not the action brought by the companies was admissible. The fourth paragraph of Article 230 EC provides that '[a]ny natural or legal person may ... institute proceedings against a decision ... which, although in the form of ... a Decision addressed to another person, is of direct and individual concern to the former'. The case therefore revolved around whether the Decision was of direct concern to the applicants as defined in law. The Court ruled that this was not the case.
- [C-6/08 P](#) 19.06.2008. This was an order of the Court (Sixth Chamber) dismissing an appeal by US Steel Košice s.r.o. in Slovakia asking the Court to set aside the order of the Court of First Instance of the 1 October 2007 in Case T-27/07 US Steel Košice v Commission by which it dismissed as inadmissible the appellant's application for the annulment of the Commission Decision of 29 November 2006 concerning Slovakia's NAP for 2005–2007. The Court of Justice upheld the judgement of the Court of First Instance, agreeing inter alia with the Court of First Instance that the applicant did not meet the conditions of direct concern as defined in the fourth paragraph of Article 230 EC.
- [C-503/07 P](#) 08.04.2008. This was order by the Court (Sixth Chamber) dismissing an appeal by Saint-Gobain Glass Deutschland Gmbf. The company had asked the Court to set aside the order of the Court of First Instance of the European Communities of 11 September 2007 in Case T-28/07 Fels-Werke and Others v

Commission. The Order of the Court of First Instance had dismissed as inadmissible an application for annulment in part of Commission Decision K(2006) 5609 of 29 November 2006 concerning the national plan for the allocation of GHG emission allowances notified by the Federal Republic of Germany for the period 2008–2012. In line with the Court of First Instance, the Court (Sixth Chamber) found that the contested Decision was of general application and therefore not of individual concern to the applicant, and that the Court of First Instance had thus not erred in its application of Article 230 EC.

- [T-374/04](#) 07.11.2007. This was judgement in favour of Germany against the Commission in relation to the Commission's Decision (C(2004) 2515/2 final) on Germany's NAP for 2005–2007. Germany had sought to have annulled the parts of the Decision which rejected certain measures for the ex-post adjustment of allowances on the grounds that they were incompatible with criterion 5 (non-discrimination between companies or sectors) and 10 (list of installations covered with quantities of allowances allocated to each) of Annex III to the Directive.
- [T-13/07](#) 06.11.2007. This was an order by the Court of First Instance (First Chamber) finding in favour of the Commission against Cemex UK Cement Ltd. The company had sought the annulment of Commission Decision C(2006)5618/4 of 29 November 2006 concerning the United Kingdom's NAP for 2008–2012. The Commission's Decision had, subject to certain matters which did not concern the applicant's situation, taken the view that the NAP notified by the United Kingdom was substantially compatible with the Directive. Again this was a case which was dismissed with reference to Article 230 EC. The Court found that the applicant could not be considered to be directly concerned by the contested Decision for the purposes of the fourth paragraph of Article 230 EC. The Court therefore dismissed the action in its entirety.
- [T-489/04](#) 01.10.2007. This was an order by the Court of First Instance (Third Chamber) finding in favour of the Commission against US Steel Košice s.r.o. in relation to an application for the annulment of the Commission's Decision concerning the NAP for GHG emission allowances notified by Slovakia for the period from 2005 to 2007. The action was dismissed as inadmissible on the grounds that the applicant did not meet the conditions of direct concern as defined in the fourth paragraph of Article 230 EC.
- [T-130/06](#) 25.06.2007. This was an order by the Court of First Instance (First Chamber) regarding the application for annulment of Commission Decision C(2006)426 of 22 February 2006 concerning the proposed amendment to the NAP for the allocation of GHG emission allowances (2005–2007) notified by the United Kingdom. The action had been brought against the Commission by seven United Kingdom based power companies. The Court of First Instance dismissed the action as inadmissible on the ground that the applicants were not directly concerned in the sense of the fourth paragraph of Article 230 EC.
- [T-178/05](#) 23.11.2005. This was a judgement of the Court of First Instance (First Chamber) regarding an application for annulment of Commission Decision C(2005)1081 of the 12 April 2005 concerning the proposed amendment to the NAP for the allocation of allowances (2005–2007) notified by the United Kingdom. In the decision, the Commission had concluded that the United Kingdom was not entitled to submit a provisional plan, that the United Kingdom was only able to amend its NAP to address the incompatibilities identified in an earlier Decision by the Commission (of 7 July 2004), and that it was inadmissible for the revised plan to contain an increase in emission allowances. The Court

found that the Commission had made an error of law in rejecting the amendments proposed by the United Kingdom as inadmissible and declared the plea raised by the United Kingdom to be well founded, and therefore that the contended Decision must be annulled.

Two cases are concerned with late transposition:

- [C-122/05](#) 18.05.2006. This was a judgement against Italy for failure to ensure transposition of Directive 2003/87/EC by the required timetable.
- [C-107/05](#) 12.01.2006. This was a judgement against Finland for failure to ensure transposition of Directive 2003/87/EC by the required timetable in the province of Åland.

Other relevant cases and preliminary rulings include:

[C-366/10](#) 21.12.2011 A case was brought before the ECJ by the High Court of Justice of England and Wales for preliminary ruling. The UK High Court was facing a case in which a group of American airlines challenged the inclusion of the aviation sector in the EU ETS and claimed that Directive 2008/101/EC was breaching firstly, the Chicago Convention, the Kyoto Protocol and the Open Skies Agreement Judges and certain principles of customary international law in that it sought to apply the allowance trading scheme beyond the European Union's territorial jurisdiction. The UK High Court of Justice declared itself incompetent to answer this question and referred it to the ECJ. The judges answered that Directive 2008/101/EC, which provides that aviation activities will be included in that scheme from 1 January 2012, was valid. The judges found that the EU was not bound by the Chicago Convention, as it is not a party to this Convention. On the Kyoto Protocol, the Court found that the parties to the protocol may comply with their obligations in the manner and at the speed upon which they agree and that, in particular, the obligation to pursue limitation or reduction of emissions of certain greenhouse gases from aviation fuels, working through the International Civil Aviation Organisation (ICAO), was not unconditional and sufficiently precise to be capable of being relied upon. The Court also responded to the assertion that the emissions trading scheme constitutes a tax, fee or charge on fuel in breach of the Open Skies Agreement. Indeed and in contrast to the defining feature of obligatory levies on the consumption of fuel, in the case of the scheme in question there is no link between the quantity of fuel held or consumed by an aircraft and the amount of the financial burden on the aircraft's operator. The actual cost for the operator depends on the number of allowances initially allocated to the operator and their market price when the purchase of additional allowances proves necessary in order to cover emissions. As such the Directive does not infringe the obligation to exempt fuel from taxes, duties, fees and charges. Finally, three customary international law principles were raised: the sovereignty of states over their air space; the illegitimacy of claims to sovereignty over the high seas; and the freedom to fly over the high seas. According to the ECJ these principles are not breached as the Directive only applies to aircraft arriving or departing from an airport situated in the EU. At which points the aircrafts are already subject to the jurisdiction of the EU.

[C-127/07](#) 16.12.2008. This was a preliminary ruling which found in favour of the French government against the Société Arcelor Atlantique et Lorraine and Others. The case concerned the inclusion in the EU ETS of the steel sector and the difference it would create with the chemical treatment sector from the point of view of equal treatment. The



French Conseil d'Etat had referred it to the ECJ for clarification on whether by excluding plastics and aluminium from the scope of Directive 2003/87/EC, the Community legislature had breached the principle of equal treatment (a general principle of Community law). The Court found that this was not the case. It found that the difference in treatment between the chemical sector and the steel sector was justified in the light of the experimental nature of the scheme (and therefore the need to keep the complexity low) and the large number of chemical installations overall (about 34,000) in comparison with the number of installations included in the scope of the Directive (about 10,000). As far as the non-ferrous metal sector was concerned, the Court found that the difference in the levels of direct emissions between the two sectors was so substantial (16.2 versus 174.8 Mt CO<sub>2</sub>) that the different treatment of those sectors would in the first stage of implementation and in view of the step by step approach on which the Directive is based is justified.

[C-16/04](#) 02.03.2010. Arcelor brought an action before the Court of First Instance (now the General Court) seeking, firstly, annulment of certain Articles of Directive 2003/87/EC and, secondly, damages in respect of the harm suffered as a result of the adoption of that Directive. Arcelor claimed that the application of those provisions to installations for the production of pig iron or steel infringes several principles of Community law, in particular the right of property, the freedom to pursue an economic activity, the principle of proportionality, the principle of equal treatment, freedom of establishment and the principle of legal certainty. The General Court dismissed the action for annulment as inadmissible on the grounds that Arcelor is neither individually nor directly concerned by the Directive. The General Court also rejected Arcelor's application for damages on the grounds that Arcelor had not shown that, in adopting the Directive, the Community legislature committed a sufficiently serious breach of the right of property, the freedom to pursue an economic activity, the principle of proportionality, the principle of equal treatment, freedom of establishment or the principle of legal certainty to give rise to non-contractual liability on the part of the Community. The General Court pointed out that the European Court of Justice had already held, in Case C-127/07 (Arcelor Atlantique et Lorraine and Others), that the Directive does not infringe the principle of equal treatment, since the difference in treatment brought about by the exclusion of the chemicals and non-ferrous metals sectors from the scope of the Directive is justified by objective criteria.

## **Further developments**

On 27 May 2010 the Commission published an important Communication analysing the options for moving beyond the existing 20 per cent green house gas reduction commitment as well as the risk of carbon leakage (see [Overview of EU policy: climate change](#) for an overview in relation to the overall target for emission reductions) ([COM\(2010\)265](#)). The Communication had been preceded on 24 December 2009 by the adoption by the Commission of Decision [2010/2/EU](#) determining a list of sectors and subsectors deemed to be exposed to a significant risk of carbon leakage.

While the EU-ETS legislation required the Commission to examine (by June 2010) carbon leakage in the light of the outcome of the international negotiations and to put forward proposals as appropriate, the fact that negotiations were in effect continuing, made a definitive assessment difficult. Nevertheless, the Communication did make several observations which suggested that the risk of carbon leakage has been reduced compared to 2008:

- The carbon price has been lower than foreseen.
- Energy-intensive sectors are likely to end up with a very considerable number of unused freely allocated allowances which can be carried over into phase 2013-2020.
- The key competitors of the EU's energy-intensive industries have, under the Copenhagen Accord, officially promised to undertake actions to reduce emissions.
- There are already measures in place to help energy intensive industries: free allocation and access to international credits.
- Unused free allowances have been monetised.
- Investment in low-carbon technology in energy-intensive sectors has strengthened their overall productivity.

Most impacts of the EU's 20 per cent target, when negotiation partners implement their low pledges, were estimated to be less than one per cent in terms of production losses. For some, implementation of the low end of the Copenhagen Accord pledges will mean that they are in a slightly better position, for others it will make no difference at all. The analysis shows that the *additional* impact of stepping up EU efforts to 30 per cent (while others remain at their low pledges) would be limited (mostly around one per cent), as long as the measures already agreed to help energy-intensive industries stay in place. In addition, the more major trading partners implement their high-end pledges, the lower the risk of carbon leakage. Overall the Communication seemed a little sceptical about the extent to which carbon leakage had already occurred and whether it is likely to happen in the future. Nevertheless, it did outline some options for how carbon leakage could be tackled 'if it can be demonstrated': giving further support to energy-intensive industries through continued free allowances; adding to the cost of imports to compensate for the advantage of avoiding low-carbon policies; and taking measures to bring the rest of the world closer to EU levels of effort (e.g. sectoral crediting, multipliers, technology transfer).

## Related legislation

There are a number of other EU Directives which have a strong interaction with the Directive on EU emission trading. These include:

- The Integrated Pollution Prevention and Control Directive ([2008/1/EC](#)).
- Carbon Dioxide Capture and Storage Directive ([2009/31/EC](#)).
- Effort sharing to reduce GHG emissions (Decision [406/2009/EC](#)).
- Monitoring and limiting GHGs (Decision [280/2004/EC](#)).

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