

Manual of European Environmental Policy

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Monitoring and limiting greenhouse gases

Formal reference	
280/2004/EC (OJ L49	Decision concerning a mechanism for monitoring
19.2.2004)	Community greenhouse gas emissions and for
	implementing the Kyoto Protocol
<u>2005/166/EC</u> (OJ L55	Decision laying down rules implementing Decision
1.3.2005)	No 280/2004/EC
Legal base	Article 192 TFEU (originally Article 175 TEC)
Binding dates	
Notification date	11 February 2004 (280/2004/EC) and 10 February
	2005 (<u>2005/166/EC</u>)
National programmes	First time on 15 March 2005 and every two years
submitted to Commission	thereafter.
Commission report evaluating	Annually
national programme	
National inventories	15 January each year for CO ₂ for previous calendar
	year and for other gases final data for previous year
	but one and provisional data for previous year
Commission circulates EC	28 February annually
inventory	
Projected emissions for gases	15 March 2005
in Annex A of the Kyoto	
Protocol for 2008–2012 and as	
far as possible 2005	
Reports on assessment of	15 June 2005Note: Decision 280/2004/EC repealed
Member State progress	Decision <u>93/389/EEC</u> , as amended by Decision
	1999/296/EC, concerning a monitoring mechanism
	of Community CO ₂ and other greenhouse gas
	emissions.

Purpose of the Decisions

The titles of the Decisions do not convey their full importance. Not only is the Commission to evaluate data on greenhouse gases reported by the Member States but Member States are to devise, publish and implement national programmes for limiting their anthropogenic emissions of CO₂ and other greenhouse gases in order to contribute to commitments in the climate change Convention and Kyoto Protocol and to an EC target.

Summary of the Decisions

Decision 280/2004/EC repealed and replaced Decision 93/389/EC, including its amending Decision 1999/296/EC. Decision 2005/166/EC provides more detailed rules for various articles of Decision 280/2004/EC that require more explanation. The 2004 Decision is substantially different from the original 1993 legislation.

Decision 93/389/EC, as amended by Decision 1999/296/EC

The amended Decision extended the requirement of the original Decision to establish national programmes for limiting or reducing CO₂ to all other greenhouse gases not controlled by the Montreal Protocol in order to contribute to:

- Stabilizing CO₂ emission by 2000 at 1990 levels in the Community, qualified (as in the original Decision) by the requirement that other leading countries undertook commitments along similar lines and an understanding that Member States with low emission levels were entitled to have targets corresponding to their economic and social development, while improving the energy efficiency of their economic activities.
- Meeting the Community's commitments under the UNFCCC (Framework Convention on Climate Change) and the Kyoto Protocol.
- 'Transparent and accurate monitoring of the actual and projected progress of Member States, including the contribution made by Community measures, in meeting any agreed national contributions to the Community's commitments' under the FCCC and the Kyoto Protocol.

National programmes were to include:

• Estimates of the effects of policies and measures and incorporation of these in projections between the base year and 2000, in line with FCCC reporting requirements.

As a minimum, for the six gases in Annex A of the Kyoto Protocol:

- 1990 base year emissions of CO₂, CH₄ and N₂O; and 1990 or 1995 base year emissions for HFCs (hydrofluorocarbons), PFCs (perfluorocarbons) and SF6 (sulphur hexafluoride).
- Emissions inventories.
- Details of national policies and measures since the base year, which contribute significantly to efforts to reduce emissions and enhance sinks, by gas and by sector, including the objective, type of policy instrument, status of implementation and where possible 'intermediate indicators of progress'.
- Measures taken or envisaged for implementation of relevant Community legislation and policies.
- Estimates of effects of policies and measures and incorporation of these in projections for the gases covered in Annex A of the Kyoto Protocol, between the base year and the first commitment period 2008–2012 and between the base year and 2005, to the extent possible.
- An assessment of the economic impacts of the measures above, to the extent possible.

Information on carbon monoxide (CO), nitrogen oxides (NO $_x$), non-methane volatile organic compounds (NMVOCs) and sulphur oxides, in line with reporting requirements under the FCCC, including emissions data, description of policies and measures and estimates of emissions projections.

The Decision required Member States to submit CO₂ inventories each year to the Commission, by 31 December for the previous calendar year. As concerns gases other than CO₂, Member States were to report inventory data by 31 December, with their final data for the previous year but one and provisional data for the previous year. Member States were also to report, by 31 December, the most recent projected emissions of the gases covered by Annex A of the Kyoto Protocol for the first commitment period 2008–2012 and as far as possible for 2005, which is the year in which industrialized country Parties to the Kyoto Protocol must show 'demonstrable progress' towards their commitments.

A key point was that the Commission was to take steps to promote the comparability and transparency of national inventories and reporting. The Commission was to compile Community inventories, on the basis of the information provided by Member States, and circulate them by 1 March each year. Member States were to provide national programmes or updates to the Commission within three months of notification of the Decision, which the Commission is to forward to other Member States within one month. Future national programmes or updates were to be forwarded to the Commission within three months of adoption.

The Commission was to establish procedures and methods for evaluation of national programmes and the frequency of updating. The purpose of evaluation of national programmes was to assess whether progress in the Community as a whole is sufficient to ensure that the objectives of the Decision are fulfilled. The Commission was to report the results of its evaluation of national programmes to the European Parliament and the Council within six months of receipt of national programmes. The European Environment Agency was to assist in compiling the report. The Commission is to assess annually, in consultation with Member States, whether the actual and projected progress of Member States, including the contribution of Community measures, towards the Community's commitments under the FCCC and the Kyoto Protocol was sufficient.

Decisions 280/2004/EC and 2005/166/EC

Decision 280/2004/EC repeals Decision 93/389/EEC, as amended by Decision 1999/296/EC, to reflect the detailed rules to operationalize the agreements by the Parties to the UNFCCC in their conferences in Bonn and Marrakech in 2001. Decision 2005/166/EC provides more detail on the specific application of Decision 280/2004/EC. There are a number of differences to the previous Decisions, as set out below.

The reference to stabilizing CO₂ emissions by 2000 at 1990 levels as a requirement under the national and Community programmes has now been removed, as this date has now passed. Furthermore, the necessary information to be included in the national programmes has changed quite substantially to include:

Information on national policies and measures which limit and/or reduce greenhouse gas emissions by sources or enhance removals by sinks, presented on a sectoral basis for each greenhouse gas, including:

- the objective of policies and measures;
- the type of policy instrument;
- the status of implementation of the policy or measure;
- indicators to monitor and evaluate progress with policies and measures over time;

- quantitative estimates of the effect of policies and measures on emissions by sources and removals by sinks of greenhouse gases between the base year and subsequent years, including their economic impacts to the extent feasible; and
- the extent to which domestic action actually constitutes a significant element of the efforts undertaken at the national level as well as the extent to which the use of joint implementation and the clean development mechanism and international emissions trading.

National projections of greenhouse gas emissions by sources and their removal by sinks as a minimum for years 2005, 2010, 2015 and 2020, organized by gas and by sector, including:

- 'with measures' and 'with additional measures' projections such as mentioned in the guidelines of the UNFCCC;
- clear identification of the policies and measures included in the projections;
- results of sensitivity analysis performed for the projections; and
- descriptions of methodologies, models, underlying assumptions and key input and output parameters.

Member States must provide information regarding measures being taken or planned to implement the Kyoto Protocol, along with information on the institutional and financial arrangements to coordinate and support activities related to this end. With regard to reporting requirements under the Decision, Member States are still required to submit CO₂ inventories each year to the Commission, however these are now to be submitted by the 15 January, rather than 31 December. The inclusion of anthropogenic emissions of greenhouse gases listed in Annex A to the Kyoto Protocol remains the same; however, a new addition of emissions by sources and removals of CO₂ by sinks resulting from land use, land use change and forestry (LULUCF), for the previous year, is included. Member States are also required to supply provisional data on their emissions of various greenhouse gases not listed in Annex I, together with the final data for the previous three years.

The Commission's steps to promote the comparability and transparency of national inventories still features albeit with one small change in relation to the submission date for reports. The Commission's compilation of Community inventories, on the basis of the information provided by Member States, is to be circulated by the 28 February rather than the 1 March each year. Moreover, the Commission is to adopt by 30 June 2006 at the latest, a Community inventory system which will provide a quality assurance programme and a procedure for the estimation of data missing from a national inventory. To help aid the Commission with this requirement, Member States are to establish national inventory systems by 31 December 2005 at the latest. In relation to the evaluation of national programmes the Commission will continue to assess annually, in consultation with Member States, whether the actual and projected progress of Member States, including the contribution of Community measures, towards the Community's commitments under the FCCC and the Kyoto Protocol is sufficient. On the basis of the evaluation, the Commission, with assistance from the European Environment Agency, will submit a report to the European Parliament and the Council annually.

In accordance with the <u>emissions trading scheme</u> the Community and Member States are required to establish and maintain registries to ensure that accurate accounting of inter alia holding, transfer, acquisition, cancellation and withdrawal of assigned amounts occurs. Furthermore, the Community and Member States are also required, by 31 December 2006 at

the latest, to submit a report to the UNFCC Secretariat determining their assigned amount as equal to their respective emission levels in line with the Kyoto Protocol and Article 3 of Decision 2002/358/EC.

Development of the Decisions

The original Council Decision 93/389/EEC required Member States to 'devise, publish and implement' national programmes for limiting CO₂ emissions, with the objectives of contributing to the stabilization of CO₂ emissions by the year 2000 at 1990 levels in the Community and to meet the Community's commitment to limit CO₂ under the UNFCCC. National programmes were to include:

- Data on CO₂ emissions in 1990, the base year.
- Inventories of CO₂ sources and sinks.
- Details of national policies and measures which contribute to limiting CO₂ emissions.
- National emissions trajectories between 1994 and 2000.
- Measures taken or envisaged to implement relevant Community legislation and policies.
- A description of policies and measures to increase CO₂ sequestration.
- An assessment of the economic impact of the measures above.

Member States were to provide annual emissions inventories for the previous calendar year by 31 July. The Commission, in cooperation with Member States, was to compile these into Community-wide inventories and circulate them within three months of receipt of information from all Member States. The Decision also required Member States to provide information on emissions of other greenhouse gases than CO₂ (not controlled by the Montreal Protocol) and a description of measures being taken or envisaged to limit these. National programmes 'should' be established for other greenhouse gases.

The terms 'evaluation' and 'assessment' were used interchangeably, but the two components seemed distinguishable: evaluation of national programmes, updated 'periodically', on one hand, and an annual assessment (or evaluation) of progress in the Community on the other. Article 6, which stated that the Commission was to undertake annual assessments, seemed to foresee these assessments taking place independently of evaluations of national programmes, as it referred to the Commission reporting to the European Parliament and the Council on the basis of information received 'including where appropriate the updated national programmes'. In other words, the requirement to undertake annual assessments did not seem to depend on the availability of updates of national programmes (or even annual inventory data).

First and second evaluations of national programmes and assessments of progress

While Council Decision 93/389/EC on the CO₂ monitoring mechanism required the Commission to assess progress annually, only two evaluations of national programmes and assessments of progress had taken place by the middle of 1999.

The major conclusion of the first evaluation and assessment, published in 1994, was that there was 'no guarantee' that commitments would be achieved. The Commission found that the national programmes did not provide sufficient or sufficiently harmonized information. The second evaluation and assessment, published in 1996, was based on national communications under the FCCC, except in the case of Belgium, which had not yet ratified the FCCC. The Commission found that there had been considerable improvement in the quality of reports, but information was still insufficient to evaluate progress towards the stabilization target in a satisfactory way. Key uncertainty factors in the second evaluation and assessment included:

- As no Community CO₂ inventory was available for 1993, the review year, it was not possible to review the trend in emissions between 1990 (the base year) and the review year.
- It was not possible to produce a Community trajectory, based on Member State trajectories, for the year 2000 because of differences in assumptions and methodologies used by Member States (two alternatives were presented).
- There was insufficient reporting on implementation of measures from Member States, including Germany, France, Italy and the United Kingdom, which together represented 72 per cent of CO₂ emissions in 1990. The Commission found it generally impossible to assess the effectiveness of implementation of measures based on national programmes, because adequate information was not provided.

The report on the second evaluation stated that the shortcomings should be addressed in the third evaluation. The report also noted that the Council of June 1995 had invited the Commission to modify the 1993 Decision on the monitoring mechanism to extend monitoring beyond the year 2000. Adoption of the Kyoto Protocol made further modifications necessary.

Amendment of Decision 93/389/EC

The Commission produced its proposal in 1996. At the first reading under the cooperation procedure the European Parliament essentially endorsed it, tabling proposed amendments by the Committee on the Environment, Public Health and Consumer Protection in September 1997. The Commission produced an amended proposal in March 1998. In June 1998 the Council adopted a common position, which updated the monitoring mechanism to make it consistent with the Kyoto Protocol and incorporated several of Parliament's amendments. The Recommendation for a Second Reading in February 1999 retabled some of Parliament's original amendments, adding a few others. Parliament approved the common position with some amendments. The new Decision entered into force on 1 May 1999.

Decisions 280/2004/EC and 2005/166/EC

In its Communication of the first phase of the European Climate Change Programme (ECCP), the Commission announced its intention to bring forward a proposal to revise the monitoring mechanism in the second half of 2002 in light of the ratification of the Kyoto Protocol. The new Decision 280/2004/EC, and the more detailed text in 2005/166/EC, put in place strengthened mechanisms and imposed more detailed reporting requirements on Member States. One of the main discussions centred around whether the base year should be 1990 or 1995. The Kyoto Protocol allows a choice between 1990 and 1995 as a base year for the calculation of the initial assigned amount of a Party, for the three groups of fluorinated gases

that are within its scope. The Commission proposed a base year of 1995, which the majority of Member States showed a preference for. However, it was argued by the European Parliament that there should be flexibility, and in line with the flexibility set out in the Kyoto Protocol either 1990 or 1995 could be chosen by Member States. It argued this would give due credit to those sectors that had undertaken early action to reduce emissions before 1995. In the end, the reference to 1995 was rejected and the baseline remained at 1990. Other noticeable changes were reporting requirements on details of national inventory systems; the issue, transaction and cancellation of emission rights under the flexible mechanisms, and the accounting of emissions and removals resulting from land use changes and forestry.

Implementation of the Decisions

Decision 1999/296/EC

The first report under the amended Decision presented a none-too-encouraging picture of progress to date (COM(2000)749). While the figures suggested that the EU as a whole was on course to stabilize its emissions at 1990 levels by 2000, the attainment of the reduction required under Kyoto was a lot less certain. In relation to national progress, the report took as its reference point the reductions that the Member States agreed under the burden sharing agreement, rather than those that were allocated to the EC and its Member States in the original Kyoto Protocol.

Between 1990 and 1998, the EU's greenhouse gas emissions fell by 2.5 per cent. However, this was principally as a result of two one-off occurrences in two Member States – the collapse of the manufacturing industry in the eastern German Länder following reunification and the conversion of the United Kingdom power generation industry from coal to gas. With existing policies and measures, the Commission estimated that emissions would only be 1.4 per cent below 1990 levels by 2010, and even with additional policies that had already been identified, emissions were expected to be only 7 per cent below 1990 levels. Germany and the United Kingdom account for nearly one third of these additional savings.

By sector, transport emissions were the most problematic as by 1998 these were already more than 10 per cent higher than 1990 levels in all but Finland and Luxembourg and the United Kingdom. Ireland had the worst problem with transport emissions, as these are currently more than 75 per cent above 1990 levels, while emissions in Portugal, Spain and Greece were around 30 per cent higher than in 1990.

The second progress report (COM(2001)708) told much the same story. By 1999, the Community's greenhouse gas emissions were 4 per cent lower than 1990 levels, and that at best with current measures only a stabilization of emissions would have been achieved by 2010. The report estimated that further measures identified by Member States could reduce emissions to 5 per cent below 1990 levels by 2010, but that further measures would be needed to reduce emissions by the additional 3 per cent. The transport sector was again identified as the sector about which there was particular concern.

The third progress report (COM(2002)702) confirmed that the Community met its target under the UNFCCC of stabilizing greenhouse gas emissions at 1990 levels by 2000, as these were 3.5 per cent below the required level. As well as Germany and the United Kingdom, the Commission believed that Finland, Sweden and France were also now on course to meet their

Kyoto target. However, emissions rose between 1999 and 2000, reflecting the fact that six Member States were now even farther away from meeting their targets than they were the year before. Emissions from the transport sector continued to remain a particular concern. The report also covered the ten Candidate Countries that would join the Community in 2004 and concluded that emissions data from 1999 suggested that all but Slovenia were on course to meet their Kyoto targets.

The fourth progress report (COM(2003)735) recognized that while the Candidate Countries were still generally on course to meet their targets, it estimated that for the EU-15 existing domestic polices and measures would only achieve a reduction in EU emissions of 0.5 per cent from 1990 levels by 2010. This estimate was worse than reported the previous year, as a result of updated German projections that showed a slight shortfall on its national target rather than the previous large over-delivery. As a result, only two countries – Sweden and United Kingdom – were likely to meet their burden sharing targets.

Decision 280/2004/EC

The fifth report (COM(2004)818) which was the first under Decision 280/2004/EC, was also the first to report the emissions of 25 Member States. Reflecting data from 2002, the report noted a decrease of 0.5 per cent compared to 2001, after two years of increases. This reduced the distance above the linear path to Kyoto Compliance from 2.0 to 1.9 per cent. Projections showed that the Czech Republic, Estonia, France, Germany, Hungary, Latvia, Lithuania, Poland, Slovakia, Sweden and the United Kingdom were likely to meet their Kyoto and burden sharing agreement targets. Significantly, the report noted that the EU-15, with the additional policies and measures already under consideration, would be able to meet its collective target given use of Kyoto flexible mechanisms. Such credits were already important for the strategies of Austria, Denmark, Ireland and the Netherlands, with other Member States also developing efforts.

The 2005 report, entitled 'Progress Towards Achieving The Community's Kyoto Target' (COM(2005)655), showed that EU-25 emissions had risen 1.5 per cent from 2002, while remaining 5.5 per cent below 1990 levels. The EU-15, meanwhile, saw an increase of 1.3 per cent above 2002 levels, and emissions were 1.7 per cent below 1990 levels. Several countries had large gaps between their current emissions levels and their Kyoto targets. In terms of MT of CO₂, the tables were led by Italy with a gap of 92.7 MT and Spain with a gap of 73.3 MT. In percentage terms, Austria and Denmark had the largest gap, with 29.6 and 27.3 per cent, respectively.

The 2006 report (COM(2006)658) indicated that total GHG emissions in the EU-15, without LULUCF were 0.9 per cent lower, and with LULUCF 3.0 per cent lower, than the base year. Compared to 2003, EU-15 GHG emissions increased by 0.3 per cent in 2004. EU-25 greenhouse gas emissions rose in 2004 for the second consecutive year by 0.4 per cent compared to 2003. Emissions were 7.3 per cent below base year levels without emissions and removals by LULUCF. By 2010, total EU-25 GHG emissions were projected to be about 4.6 per cent below base year levels with current policy, or 8.1 per cent with additional domestic policies and measures which were already under discussion and 10.8 per cent when the Kyoto mechanisms and carbon sinks were accounted for.

The 2007 report (COM(2007)757) stated that EU-27 emissions fell 0.7 per cent between 2004 and 2005, after three years of increases. Projections to 2010 showed that the EU-27 could

meet its commitment period targets, achieving a possible aggregate cut of 10.7 per cent below 1990 levels through domestic action. Adding use of carbon sinks and Kyoto mechanisms could yield a total 13.2 per cent cut, while adding on measures still under discussion could yield a total reduction of 16.7 per cent. The EU-15 could achieve a 7.4 per cent aggregate reduction including Kyoto credits; additional measures could make this 11.4 per cent, while use of the EU emissions trading system could add a further 3.4 per cent reduction. In the EU-12 emissions could be 29 per cent below 1990 levels in 2010; additional measures could cut a further 2 per cent.

The 2008 report (COM(2008)651), based on 2006 data, showed that EU-15 emissions were 2.7 per cent below base year emissions, and decreased by 0.8 per cent compared to 2005. Projections indicated that the Community would reach its Kyoto target. By 2010, eight Member States, Belgium, Germany, Greece, Ireland, the Netherlands, Portugal, Sweden and the United Kingdom, were projected to achieve their targets using existing policies and measures, carbon sinks and the Kyoto mechanisms. In addition, four Member States (Austria, Finland, France and Luxembourg) were projected to reach their targets when also accounting for additional policies and measures planned. There were three Member States (Denmark, Italy and Spain) which were projected not to achieve their Kyoto target. Total EU-27 GHG emissions were, in 2006, 10.8 per cent below base year levels without emissions and removals by LULUCF and 0.3 per cent lower compared to 2005. New (EU-12) Member States were by and large expected to meet their targets without any additional measures, with the exception of Slovenia, which would enact additional measures.

The 2009 report (COM(2009)630), based on 2007 data, found that total greenhouse gas emissions in the EU-15 had fallen for the third consecutive year, and were 5.0 per cent below base year emissions without LULUCF. This reduction represented a decoupling of emissions from economic growth. For example, in 2007, EU-15 emissions decreased by 1.6 per cent compared to 2006 while the EU-15 GDP grew by 2.7 per cent. The report concluded that the EU-15 would reach its Kyoto target. Five Member States (France, Germany, Greece, Sweden and the United Kingdom) had projected emissions under existing policies and measures that would allow them to achieve their targets. Taking into account all measures, nine other Member States were projected to meet their burden sharing target. One Member State (Austria) was projected to have difficulties with achieving its greenhouse gas reduction commitment.

The 2010 report (COM(2010)569), based on 2008 data, found that EU-27 greenhouse gas emissions were 14.3 per cent below base year levels without emissions and removals by LULUCF. Emissions were 2 per cent lower compared to 2007 while during the same period the EU-27 economy grew by 0.7 per cent. The report concluded that the EU-15 would reach its Kyoto target. Six Member States (Finland, France, Germany, Greece, Sweden and the United Kingdom) were on track to achieve their GHG reduction targets domestically.

The 2011 report (COM(2011)624), based on 2009 data, found that EU-27 greenhouse gas emissions without emissions and removals from Land Use, Land Use Change and Forestry (LULUCF) were 17.4 per cent lower compared to 1990. Emissions decreased by 7.1 per cent compared to 2008 while during the same period the Gross Domestic Product in the EU-27 dropped by around 4 per cent as a result of the economic recession.

Enforcement and court cases

Two cases have been concluded by the European Court of Justice concerning Decision 280/2004/EC:

- <u>C-61/07</u> 18.07.2007. This was a judgement against Luxembourg that failed to communicate information required under Article 3(2) of Decision 280/2004/EC.
- <u>C-390/08</u> 14.05.2009. This was again a judgement against Luxembourg that failed to communicate information required under Article 3(2) of Decision 280/2004/EC.

Further developments

In March 2011 the Commission launched a <u>public consultation</u> on a potential revision to the Monitoring Mechanism Decision in light of developments and additions to 1) UNFCCC decisions, 2) EU legislation on climate change, and 3) broader EU policy framework (in particular the reporting requirements in the context of the <u>EU2020 Strategy</u>). The consultation closed at the end of April 2011. On 23 November 2011 the Commission published its proposal for a revised monitoring mechanism (<u>COM(2011)789</u>).

Related legislation

The monitoring and reporting of greenhouse gas emissions by Member States supports the full framework of EU climate policies. However, it is important to note the relationship with two policies which interact closely with Decision 280/2004/EC. These concern the gathering of data to support estimates to greenhouse gas emissions (under the emissions trading scheme) and legislation for which the implementation of Decision 280/2004/EC is a critical foundation (the effort sharing agreement). The related legislation is, therefore:

- Directive 2003/87/EC establishing the EU Emission Trading Scheme.
- Decision <u>406/2009/EC</u> 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.