

# COMMISSION

## COMMISSION DECISION

of 10 February 2005

### laying down rules implementing Decision No 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

(notified under document number C(2005) 247)

(2005/166/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to 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<sup>(1)</sup>, and in particular Articles 3(3), 4(2), 5(6) and 8(3) thereof,

Whereas:

- (1) The information reported annually to the Commission is necessary to enable the assessment of actual progress towards meeting the Community's and its Member States' commitments relating to the limitation or reduction of all greenhouse gas emissions under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol and enable the preparation of annual reports by the Community in accordance with obligations under the UNFCCC and the Kyoto Protocol.
- (2) The Commission should review the elements listed in Article 4(1) of this Decision if additional elements are requested pursuant to the UNFCCC review of the Community inventory and adopt the necessary amendments in accordance with the procedure referred to in Article 9(2) of Decision No 280/2004/EC to require Member States to report on these elements in their subsequent reports pursuant to Article 3(1) of Decision No 280/2004/EC.

- (3) The information reported to the Commission every two years is necessary to enable the assessment of projected progress of the Community and its Member States towards fulfilling their commitments under the UNFCCC and the Kyoto Protocol.

- (4) The Commission should review Annex II and Annex III and adopt, by 1 January 2007, any necessary amendments in accordance with the procedure referred to in Article 9(2) of Decision No 280/2004/EC.

- (5) The Commission will prepare estimates for data missing in a Member State inventory, following consultation with the Member State concerned and in accordance with the principles set out in this Decision, to ensure completeness of that Member State's and the Community's inventory in accordance with the UNFCCC reporting guidelines for annual inventories and the revised 1996 IPCC guidelines for national greenhouse gas inventories.

- (6) The Member States and the Commission should prepare their reports on the demonstration of progress achieved by 2005 in accordance with the UNFCCC reporting guidelines for national communications and the guidelines under Article 7 of the Kyoto Protocol.

- (7) The Member States and the Commission should prepare their reports on the additional period set in the Marrakech Accords for fulfilling commitments upon the expiry of that period in accordance with the guidelines under Article 7 of the Kyoto Protocol.

<sup>(1)</sup> OJ L 49, 19.2.2004, p. 1.

- (8) The procedures and timescales for cooperation and coordination between Member States and the Community in relation to obligations under Decision No 280/2004/EC set out in this Decision will ensure the timely and effective implementation of these obligations.
- (9) The measures provided for in this Decision are in accordance with the opinion of the Committee referred to in Article 9 of Decision No 280/2004/EC,

- (a) the revised 1996 Intergovernmental Panel on Climate Change (IPCC) guidelines for national greenhouse gas inventories, hereinafter referred to as 'the revised 1996 IPCC guidelines for national greenhouse gas inventories';
- (b) the IPCC good practice guidance and uncertainty management in national greenhouse gas inventories, hereinafter referred to as 'the IPCC good practice guidance';

HAS ADOPTED THIS DECISION:

#### CHAPTER I

##### **Subject matter**

##### *Article 1*

##### **Subject matter**

This Decision establishes rules implementing Decision No 280/2004/EC as regards the following:

- (a) the reporting of information referred to in Article 3(1) and (2) of Decision No 280/2004/EC, in accordance with Article 3(3) of that Decision;
- (b) the establishment of a Community inventory system in accordance with Article 4(2) of Decision No 280/2004/EC;
- (c) the requirements for reporting on the demonstration of progress as required by Article 3(2) of the Kyoto Protocol and for reporting in relation to the additional period set in the Marrakech Accords for fulfilling commitments in accordance with Article 5(6) of Decision No 280/2004/EC;
- (d) the procedures and timescales for the cooperation and coordination of the obligations listed in Article 8(1) of Decision No 280/2004/EC, in accordance with Article 8(3) of that Decision.

#### CHAPTER II

##### **Reporting by Member States**

##### Section 1

##### **Annual reports**

##### *Article 2*

##### **Determination and reporting guidance**

1. Member States shall determine the information reported pursuant to Article 3(1) of Decision No 280/2004/EC in accordance with:

- (c) the IPCC good practice guidance for land use, land-use change and forestry (LULUCF), hereinafter referred to as 'the IPCC good practice guidance for LULUCF'.

2. Member States shall report the information reported pursuant to Article 3(1) of Decision No 280/2004/EC to the Commission with a copy to the European Environment Agency in accordance with:

- (a) the guidelines for the preparation of national communications by Parties included in Annex I to the Convention, part I: UNFCCC reporting guidelines on annual inventories, hereinafter referred to as 'the UNFCCC reporting guidelines for annual inventories';
- (b) the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol, hereinafter referred to as 'the guidelines under Article 7 of the Kyoto Protocol'.

3. The complete national inventory report referred to in Article 3(1) second subparagraph of Decision No 280/2004/EC, shall be drafted using the national inventory report structure set out in the UNFCCC reporting guidelines for annual inventories.

##### *Article 3*

##### **Reporting under Article 3(1)(d) of Decision No 280/2004/EC**

1. Member States shall, in accordance with Article 3(3) of the Kyoto Protocol and the relevant decisions adopted thereunder, for the purpose of Article 3(1)(d) of Decision No 280/2004/EC report their anthropogenic greenhouse gas emissions by sources and removals by sinks from land-use change and forestry activities under Article 3(3) of the Kyoto Protocol for the years between 1990 and the year before last.

Member States that elect forest management, cropland management, grazing land management or revegetation under Article 3(4) of the Kyoto Protocol shall in addition report anthropogenic greenhouse gas emissions by sources and removals by sinks for each elected activity for the years between 1990 and the year before last.

Member States shall clearly distinguish this information from estimates of anthropogenic emissions from the sources listed in Annex A to the Kyoto Protocol.

2. Member States shall provide the information in paragraph 1 in their reports submitted from 15 January 2010 onwards.

#### Article 4

##### **Reporting under Article 3(1)(f) of Decision No 280/2004/EC**

1. Member States shall for the purpose of Article 3(1)(f) of Decision No 280/2004/EC report:

- (a) a description of the Member State's institutional arrangements for inventory preparation and the process of inventory preparation;
- (b) a description of methodologies and data sources used, including information on methods used, and types of activity data and emission factors used for the Community's key sources as annually determined by the Commission by 31 October in accordance with Chapter 7 of the IPCC good practice guidance and Chapter 5 of the IPCC good practice guidance for LULUCF. Member States shall provide this information by referring to sections of the national inventory report or in the tabular format provided in Annex I to this Decision;
- (c) information on the Member State's quality assurance and quality control programme, including its quality objectives and inventory quality assurance and quality control plan;
- (d) a general uncertainty assessment;
- (e) a general assessment of completeness, addressing the geographical coverage of that Member State and any gaps in the inventory submission;
- (f) the comparison of the sectoral approach with the reference approach;
- (g) any responses to the UNFCCC review of previous national inventories received since the submission of the previous national inventory and information on any recalculations performed;

(h) the description and interpretation of past emission trends.

2. For the information to be provided pursuant to points (a) to (e) in paragraph 1, Member States may indicate that no changes occurred to those sections of the national inventory report.

#### Article 5

##### **Reporting under Article 3(1)(g) of Decision No 280/2004/EC**

The information from the national registry referred to in Article 3(1)(g) of Decision No 280/2004/EC shall include the information required pursuant to the guidelines under Article 7 of the Kyoto Protocol.

#### Article 6

##### **Reporting under Article 3(1)(h) of Decision No 280/2004/EC**

The information on legal entities referred to in Article 3(1)(h) of Decision No 280/2004/EC shall include a list of legal entities authorised by the Member State to hold assigned amount units (AAUs), removal units (RMUs), emission reduction units (ERUs) and certified emission reductions (CERs), including temporary CERs (tCERS) and long-term CERs (lCERS).

#### Article 7

##### **Reporting under Article 3(1)(j) of Decision No 280/2004/EC**

The information on indicators referred to in Article 3(1)(j) of Decision No 280/2004/EC:

- (a) shall include, by 15 January 2005 and each year thereafter, the values for the priority indicators listed in table II-1 in Annex II;
- (b) should include, by 15 January 2005, and shall include, by 15 January 2006 and each year thereafter, the values for the additional priority indicators listed in table II-2 in Annex II;
- (c) should include, by 15 January 2005 and each year thereafter, the values for the supplementary indicators listed in table II-3 in Annex II.

## Section 2

**Biennial reports**

## Article 8

**Reporting guidance**

Member States shall report the information listed in Article 3(2) of Decision No 280/2004/EC in accordance with the guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications, hereinafter referred to as 'the UNFCCC reporting guidelines for national communications', and the Guidelines under Article 7 of the Kyoto Protocol.

## Article 9

**Reporting under Article 3(2)(a) of Decision No 280/2004/EC**

The information on national policies and measures referred to in Article 3(2)(a) of Decision No 280/2004/EC shall include:

- (a) a list of those policies and measures which expired or were repealed during the reporting period;
- (b) a description of the actual and expected interaction with other relevant policies and measures and with relevant Community policies and legislation;
- (c) indicators for projections for the years 2005, 2010, 2015 and 2020 as listed in Annex III to this Decision.

## Article 10

**Reporting under Article 3(2)(b) of Decision No 280/2004/EC**

1. For the purpose of Article 3(2)(b) of Decision No 280/2004/EC Member States shall clearly identify their 'with measures' and 'with additional measures' projections and the policies and measures included therein.

A 'with measures' projection shall include implemented and adopted policies and measures. A 'with additional measures' projection shall include planned policies and measures.

Member States may include information on 'without measures' projections as part of their 'with measures' and 'with additional measures' projections. A 'without measures' projection shall exclude all policies and measures implemented, adopted or planned after the year chosen as the starting year for this projection.

2. The descriptions of methodologies, models, underlying assumptions and key input and output parameters referred to in Article 3(2)(b)(iv) of Decision No 280/2004/EC, shall include, if used, the mandatory parameters set out in point 1 of Annex IV to this Decision.

Member States are encouraged to report the parameters on projections included in the list of recommended parameters set out in point 2 of Annex IV to this Decision.

Member States shall undertake a sensitivity analysis of their projections, focused on the key input variables in their projection models.

Member States are encouraged to define a high, central and low scenario for the key input variables and to quantify projected emissions for these scenarios. Member States are furthermore encouraged to include a measure of robustness of their predictive model and its methods used for their assessments. Member States may consider the use of multi-variant scenarios, using combinations of input variables.

## Article 11

**Reporting under Article 3(2)(a)(vi) and Article 3(2)(d) of Decision No 280/2004/EC**

Member States shall provide information on their use of joint implementation, the clean development mechanism and international emissions trading, pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, to meet their quantified emission limitation or reduction commitments pursuant to Article 2 of Council Decision 2002/358/EC<sup>(1)</sup> and the Kyoto Protocol on the basis of the questionnaire set out in Annex V to this Decision. Member States are encouraged to provide this information on an annual basis as part of their report pursuant to Article 3(1) of Decision No 280/2004/EC.

Member States may limit this information to changes or additions to the information reported on the basis of the questionnaire for the previous year.

<sup>(1)</sup> OJ L 130, 15.5.2002, p. 1.

## CHAPTER III

**The Community inventory system**

## Section 1

**The Community inventory system**

## Article 12

**Quality and exchange of information and data in the Community inventory system**

1. Member States shall ensure the quality of activity data, emission factors and other parameters used for their national greenhouse gas inventory in accordance with the IPCC good practice guidance and the IPCC good practice guidance for LULUCF.

2. Member States shall submit their annual inventory in an electronic format to the Commission and send a copy to the European Environment Agency.

## Section 2

**Estimates for data missing from a national inventory pursuant to Article 4(1) of Decision No 280/2004/EC**

## Article 13

**Estimates for data missing from a national inventory pursuant to Article 4(1) of Decision No 280/2004/EC**

If a Member State does not submit all data required pursuant to Article 3(1) of Decision No 280/2004/EC by 15 March of a reporting year, the Commission shall prepare estimates for data missing for that Member State to be included in the Community greenhouse gas inventory for that reporting year and source category, in accordance with the UNFCCC reporting guidelines for annual inventories and the revised 1996 IPCC guidelines for national greenhouse gas inventories.

## Article 14

1. The Commission estimates for missing data shall be based on the principles set out in paragraphs 2, 3 and 4.

2. If a consistent time series of reported estimates for the relevant source category is available from the Member State for previous years that has not been subject to adjustments under Article 5(2) of the Kyoto Protocol, extrapolation of that time series shall be used to obtain the emission estimate.

For carbon dioxide emissions from the energy sector, extrapolation of emissions should be based on the percentage change of Eurostat carbon dioxide emission estimates.

3. If the estimate for the relevant source category was subject to adjustments under Article 5(2) of the Kyoto Protocol in previous years and the Member State has not submitted a revised estimate, the basic adjustment method used by the expert review team as set out in the technical guidance on methodologies for adjustments under Article 5(2) of the Kyoto Protocol, hereinafter referred to as 'the technical guidance for adjustments', shall be used, without application of the conservativeness factor defined in that guidance.

4. If a consistent time series of reported estimates for the relevant source category is not available and if the estimate of the source category has not been subject to adjustments under Article 5(2) of the Kyoto Protocol, the estimation shall be based on the technical guidance for adjustments, without application of the conservativeness factor defined in that guidance.

## Article 15

The Commission shall prepare the estimates referred to in Article 14 by 31 March of the reporting year, following consultation with the Member State concerned, and communicate those estimates to the other Member States.

## Article 16

The Member State concerned shall use the estimates referred to in Article 14 for its national submission to the UNFCCC to ensure consistency between the Community inventory and Member States' inventories.

## CHAPTER IV

**Reporting on the demonstration of progress by 2005 and the additional period for fulfilling commitments**

## Section 1

**Reports on the demonstration of progress by 2005**

## Article 17

**Member State reporting on the demonstration of progress achieved by 2005 under Article 5(4) of Decision No 280/2004/EC**

1. Member States shall prepare the report on the demonstration of progress achieved by 2005 in accordance with the UNFCCC reporting guidelines for national communications and the Guidelines under Article 7 of the Kyoto Protocol. The report shall include:

- (a) a description of domestic measures, including any legal and institutional steps, adopted for the purpose of meeting that Member State's commitments pursuant to Article 2 of Decision 2002/358/EC and the Kyoto Protocol, and any programmes for domestic compliance and enforcement;
- (b) information on trends in, and projections of, greenhouse gas emissions at national level, where the trends shall be based on the inventory data submitted by the Member States to the UNFCCC by 15 April 2005;
- (c) an evaluation of how the domestic measures referred to in point (a), in the light of the trends and projections referred to in point (b), will contribute to the Member State meeting its commitments pursuant to Article 2 of Decision 2002/358/EC and the Kyoto Protocol;
- (d) a description of the activities, actions and programmes undertaken by the Member State for the purpose of meeting its commitments under Articles 10 and 11 of the Kyoto Protocol.

2. Member States shall submit the report as a single document including four chapters containing the information listed in paragraph 1, points (a) to (d).

The information on projections referred to in paragraph 1(b) shall be consistent with the information submitted to the Commission by 15 June 2005 pursuant to Article 5(3) of Decision No 280/2004/EC.

## Section 2

### Reports upon expiration of the additional period for fulfilling commitments

#### Article 18

#### Member State reporting upon expiration of the additional period for fulfilling commitments under Article 5(5) of Decision No 280/2004/EC

Each Member State's report shall, in accordance with the modalities for the accounting of assigned amounts under Article 7(4) of the Kyoto Protocol, contain the following information:

- (a) for the current calendar year until the end of the additional period for fulfilling commitments (defined according to Greenwich Mean Time), the total quantity of:

- (i) ERUs, CERs (including ICERs and tCERs), AAUs and RMUs in each Member State holding, cancellation, replacement and retirement account and in all operator and person holding accounts on 1 January each year,
- (ii) AAUs issued on the basis of the assigned amount pursuant to Article 3(7) and 3(8) of the Kyoto Protocol,
- (iii) ERUs issued on the basis of projects undertaken pursuant to Article 6 of the Kyoto Protocol,
- (iv) ERUs, CERs (including ICERs and tCERs), AAUs and RMUs acquired from other registries and a separate list providing the identity of the transferring accounts and registries,
- (v) RMUs issued on the basis of each activity under Article 3(3) and (4) of the Kyoto Protocol,
- (vi) ERUs, CERs (including ICERs and tCERs), AAUs and RMUs transferred to other registries and a separate list providing the identity of the acquiring accounts and registries,
- (vii) ERUs, CERs, AAUs and RMUs cancelled on the basis of activities under Article 3(3) and (4) of the Kyoto Protocol,
- (viii) ERUs, CERs, AAUs and RMUs cancelled following determination by the Compliance Committee that the Member State is not in compliance with its commitment under Article 3(1) of the Kyoto Protocol,
- (ix) other ERUs, CERs (including ICERs and tCERs), AAUs and RMUs cancelled,
- (x) ERUs, CERs (including ICERs and tCERs), AAUs and RMUs retired,
- (xi) AAUs, CERs, ERUs, RMUs and tCERs transferred into the tCER replacement account for the commitment period,
- (xii) AAUs, CERs, ERUs, RMUs and ICERs transferred into the ICER replacement account for the first commitment period of the Kyoto Protocol;

(b) the total quantity and serial numbers of ERUs, AAUs, RMUs, CERs (including ICERs and tCERs) in the Member State's retirement account at the end of the reporting period;

(c) the total quantity and serial numbers of ERUs, CERs and AAUs which the Member State requests to be carried over to the subsequent commitment period.

That information shall only include ERUs, AAUs, RMUs, CERs (including ICERs and tCERs) valid for the commitment period in question. It shall be determined on the basis of the information made available pursuant to Article 9 of Commission Regulation (EC) No 2216/2004<sup>(1)</sup> and shall be submitted in electronic format.

#### Article 19

#### **Community reporting upon expiration of the additional period for fulfilling commitments under Article 5(5) of Decision No 280/2004/EC**

The Community report shall contain the following information:

(a) the total quantities of the units listed in Article 18(a) reported by the Member States and the total quantities of those units held in the Community registry;

(b) the total quantity and serial numbers of ERUs, AAUs, RMUs, CERs (including ICERs and tCERs) in Member States' and in the Community's retirement accounts at the end of the reporting period;

(c) the total quantity and serial numbers of ERUs, CERs and AAUs which each Member State and the Community request to be carried over to the subsequent commitment period in accordance with the modalities for the accounting of assigned amounts under Article 7(4) of the Kyoto Protocol.

#### CHAPTER V

#### **Procedures and time scales for cooperation and coordination**

#### Article 20

#### **The compilation of the Community greenhouse gas inventory and inventory report pursuant to Article 8(1)(a) of Decision No 280/2004/EC**

1. Member States shall use the ReportNet tools of the European Environment Agency, provided pursuant to Regu-

lation (EC) No 1641/2003 of the European Parliament and of the Council<sup>(2)</sup>, for the submission of annual information under Article 3(1) of Decision No 280/2004/EC.

2. Any updated data provided by Member States in accordance with Article 4(1) of Decision No 280/2004/EC shall be limited to providing missing data and removing inconsistencies.

3. The procedures and timetable for the compilation of the Community inventory and the inventory report are set out in Annex VI.

#### Article 21

#### **The review, adjustment and compliance procedures under the UNFCCC and the Kyoto Protocol pursuant to Article 8(1)(b) and (c) of Decision No 280/2004/EC**

1. If on 1 June a Member State has not submitted its annual inventory report to the UNFCCC, it shall immediately notify the Commission.

2. Member States shall notify the Commission within one week of receiving any of the following information from the UNFCCC:

(a) indications by an expert review team of problems related to the Member State's inventory which would need an adjustment;

(b) corrections to the inventory estimates applied in agreement between the Member State and the expert review team to the inventory submission concerned;

(c) adjusted estimates contained in a draft individual inventory review report applied where the Member State did not correct the problem to the satisfaction of the expert review team;

(d) questions of implementation that have been submitted to the Compliance Committee under the Kyoto Protocol, the notification by the Compliance Committee to proceed with a question of implementation, and all preliminary findings and decisions of the Compliance Committee and its branches concerning the Member State.

<sup>(1)</sup> OJ L 386, 29.12.2004, p. 1.

<sup>(2)</sup> OJ L 245, 29.9.2003, p. 1.

With regard to point (a) the Member State shall notify the Commission on how it plans to address the problems identified by the expert review team.

With regard to point (c) the Member State shall notify the Commission whether it accepts or rejects the proposed adjustments.

The Commission shall inform the other Member States within one week of receipt of the information in points (a) to (d) from the Member State concerned.

3. The Commission shall inform all Member States within one week of the receipt of the following information from the UNFCCC:

- (a) indications by an expert review team of problems related to the Community's inventory which would need an adjustment;
- (b) corrections to the inventory estimates applied in agreement between the Community and the expert review team to the inventory submission concerned;
- (c) adjusted estimates contained in a draft individual inventory review report applied where the Community did not correct the problem to the satisfaction of the expert review team;
- (d) questions of implementation that have been submitted to the Compliance Committee under the Kyoto Protocol, the notification by the Compliance Committee to proceed with a question of implementation, and all preliminary findings and decisions of the Compliance Committee and its branches concerning the Community.

4. Member States shall coordinate their response to the review process in relation to obligations under Decision No 280/2004/EC with the Commission:

- (a) within the timeframes provided pursuant to the Kyoto Protocol, if the adjusted estimates in a single year or the cumulative adjustments in subsequent years of the commitment period for one or more Member States would imply adjustments of the Community inventory to an amount leading to a failure to meet the methodological and reporting requirements under Article 7(1) of the Kyoto Protocol for the purpose of the eligibility requirements as

set out in the guidelines under Article 7 of the Kyoto Protocol;

- (b) within two weeks prior to the submission to the relevant bodies under the Kyoto Protocol of the following:

- (i) a request to revise an adjustment;

- (ii) a request for reinstatement of eligibility;

- (iii) a response to a decision to proceed with a question of implementation or to preliminary findings of the Compliance Committee.

5. Member States shall inform the Commission and other Member States on adjustments calculated for their inventory estimates during the voluntary adjustment procedure applied pursuant to the technical guidance for adjustments.

#### Article 22

#### **The preparation of the reports on demonstration of progress pursuant to Article 8(1)(d) of Decision No 280/2004/EC**

1. The Commission draft report on the demonstration of progress achieved by 2005 by the Community shall be circulated to Member States by 30 July 2005. Member States shall provide any comments by 31 August 2005 at the latest.

2. Member States shall submit their reports on the demonstration of progress achieved by 2005 to the UNFCCC secretariat by 1 January 2006 and shall on the same date provide the Commission with an electronic copy of that submission.

#### Article 23

#### **Reporting on the determination of the assigned amount pursuant to Article 8(1)(e) of Decision No 280/2004/EC**

1. Each Member State shall, by 15 January 2006, submit the following information to the Commission:

- (a) the complete time series of inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol as reported to the UNFCCC;



- (b) the identification of its selected base year for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride as reported to the UNFCCC;
- (c) its proposal for its emission level in terms of tonnes of carbon dioxide equivalent pursuant to Article 3 of Decision 2002/358/EC and Article 3(7) and (8) of the Kyoto Protocol, following the establishment of definitive base-year emission figures and on the basis of the quantified emission limitation or reduction commitments set out in Annex II to Decision 2002/358/EC and the Kyoto Protocol, taking into account the methodologies for estimating anthropogenic emissions by sources and removals by sinks referred to in Article 5(2) of the Kyoto Protocol and the modalities for the calculation of assigned amount pursuant to Article 3(7) and (8) of the Kyoto Protocol.
- (d) the calculation of its commitment period reserve as 90 % of its proposed assigned amount or 100 % of five times its most recently reviewed inventory, whichever is the lowest;
- (e) the identification of its selection of single minimum values for tree crown cover, land area and tree height for use in accounting for its activities under Article 3(3) and (4) of the Kyoto Protocol, together with a justification of the consistency of those values with the information that has been historically reported to the Food and Agriculture Organisation of the United Nations or other international bodies, and in the case of difference, an explanation of why and how such values were chosen, in accordance with definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol;
- (f) the identification of its election of activities under Article 3(4) for inclusion in its accounting for the first commitment period, together with information on how its national system under Article 5(1) of the Kyoto Protocol will identify land areas associated with the activities, in accordance with definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol;
- (g) the identification of whether, for each activity under Article 3(3) and (4) of the Kyoto Protocol it intends to account annually or for the entire commitment period;
- (h) a description of its national system in accordance with Article 5(1) of the Kyoto Protocol, in accordance with the guidelines under Article 7 of the Kyoto Protocol;
- (i) a description of its national registry, in accordance with the guidelines under Article 7 of the Kyoto Protocol.

Member States not listed in Annex II to Decision 2002/358/EC shall submit this information by 15 June 2006.

2. The timetable for the preparation and submission of the reports referred to in Article 7(1) of Decision No 280/2004/EC and submitted in accordance with the modalities for the accounting of assigned amounts under Article 7(4) of the Kyoto Protocol is set out in Annex VII.

#### Article 24

#### **Reporting in relation to the additional period for fulfilling commitments pursuant to Article 8(1)(f) of Decision No 280/2004/EC**

1. The Member State reports upon expiration of the additional period for fulfilling commitments shall be submitted to the UNFCCC Secretariat and the Commission within one month after the expiration of the additional period for fulfilling commitments.

2. The Community report upon expiration of the additional period for fulfilling commitments shall be submitted to the UNFCCC Secretariat within one month after the receipt of the Member State reports referred to in paragraph 1.

#### CHAPTER VI

#### **Final provisions**

#### Article 25

#### **Entry into force**

This Decision shall enter into force on the day following its publication in the *Official Journal of the European Union*.

#### Article 26

#### **Addressees**

This Decision is addressed to the Member States.

Done at Brussels, 10 February 2005.

For the Commission

Stavros DIMAS

Member of the Commission

















*Legend for tables I-1 to I-4*

(1) Key sources of the Community. To be completed by Commission/EEA with results from key category analysis from previous inventory submission.

(2) Use the following notation keys to specify the method applied:

<b>D</b> (IPCC default),	<b>T1a, T1b, T1c</b> (IPCC Tier 1a, Tier 1b and Tier 1c, respectively),	<b>COPERT X</b> (Copert model X = Version)
<b>RA</b> (reference approach),	<b>T2</b> (IPCC Tier 2),	<b>C</b> (CORINAIR),
<b>T1</b> (IPCC Tier 1),	<b>T3</b> (IPCC Tier 3),	<b>CS</b> (country specific),
		<b>M</b> (model)

If using more than one method within one source category, enumerate the relevant methods. Explanations regarding country-specific methods or any modifications to the default IPCC methods, as well as information regarding the use of different methods per source category where more than one method is indicated, should be provided in the documentation box.

(3) Use the following notation keys to specify the sources of activity data used:

<b>NS</b> (national statistics),	<b>IS</b> (international statistics),	<b>AS</b> (associations, business organisations),
<b>RS</b> (regional statistics),	<b>PS</b> (plant specific data),	<b>Q</b> (specific questionnaires, surveys)

If keys above are not appropriate for national circumstances, use additional keys and explain those in the documentation box. Where a mix of AD sources has been used, use different notations in one and the same cells with further explanations in the documentation box.

(4) Use the following notation keys to specify the emission factor used:

<b>D</b> (IPCC default),	<b>CS</b> (country specific),
<b>C</b> (CORINAIR),	<b>PS</b> (plant specific).

Where a mix of emission factors has been used, use different notations in one and the same cells with further explanations in the documentation box.

Documentation box:

\* The full information on methodological issues, such as methods, activity data and emission factors used, can be found in the relevant sector sections of chapter 5 of the NIR. If any additional information is needed to understand the content of this table, use this documentation box to provide references to the relevant section of the NIR where further details can be found.

\* Where a mix of methods/emission factors has been used within one source category, use this documentation box to specify those methods/emission factors for the various sub-sources where they have been applied (see also footnotes 2 to 4 to this table).

## ANNEX II

## LIST OF ANNUAL INDICATORS

TABLE II-1

List of priority indicators <sup>(1)</sup>

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions <sup>(2)</sup> <sup>(3)</sup>
1	MACRO	Total CO <sub>2</sub> intensity of GDP, t/Mio EUR	Total CO <sub>2</sub> emissions, kt	Total CO <sub>2</sub> emissions (excluding LUCF) as reported in the CRF
			GDP, Bio Euro (EC95)	Gross domestic product at constant 1995 prices (source: National Accounts)
2	MACRO B0	Energy related CO <sub>2</sub> intensity of GDP, t/Mio EUR	CO <sub>2</sub> emissions from energy consumption, kt	CO <sub>2</sub> emissions from combustion of fossil fuels (IPCC source category 1A, sectoral approach)
			GDP, Bio Euro (EC95)	Gross domestic product at constant 1995 prices (source: National Accounts)
3	TRANSPORT C0	CO <sub>2</sub> emissions from passenger cars, kt		CO <sub>2</sub> emissions from the combustion of fossil fuels for all transport activity with passenger cars (automobiles designated primarily for transport of persons and having capacity of 12 persons or fewer; gross vehicle weight rating of 3 900 kg or less — IPCC source category 1A3bi)
			Number of kilometres by passenger cars, Mkm	Number of vehicle kilometres by passenger cars. (source: transport statistics)
4	INDUSTRY A1	Energy related CO <sub>2</sub> intensity of industry, t/Mio EUR		Note: Activity data should be consistent with the emission data, if possible.
			CO <sub>2</sub> emissions from industry, kt	Emissions from combustion of fossil fuels in manufacturing industries, construction and mining and quarrying (except coal mines and oil and gas extraction) including combustion for the generation of electricity and heat (IPCC source category 1A2). Energy used for transport by industry should not be included here but in the transport indicators. Emissions arising from off-road and other mobile machinery in industry should be included in this sector
			Gross value-added total industry, Bio Euro (EC95)	Gross value added at constant 1995 prices in manufacturing industries (NACE 15-22, 24-37), construction (NACE 45) and mining and quarrying (except coal mines and oil and gas extraction) (NACE 13-14) (source: National Accounts)

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions <sup>(2)</sup> (1)
5	HOUSEHOLDS A.1	Specific CO <sub>2</sub> emissions of households, t/dwelling	CO <sub>2</sub> emissions from fossil fuel consumption households, kt Stock of permanently occupied dwellings, 1 000	CO <sub>2</sub> emissions from fossil fuel combustion in households (IPCC source category 1A4b) Stock of permanently occupied dwellings
6	SERVICES A0	CO <sub>2</sub> intensity of the commercial and institutional sector, t/Mio EUR	CO <sub>2</sub> emissions from fossil fuel consumption in commercial and institutional sector, kt Gross value-added services, Bio Euro (EC95)	CO <sub>2</sub> emissions from fossil fuel combustion in commercial and institutional buildings in the public and private sectors (IPCC source category 1A4a). Energy used for transport by services should not be included here but in the transport indicators Gross value added at constant 1995 prices in services (NACE 41, 50, 51, 52, 55, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 80, 85, 90, 91, 92, 93, 99) (source: National Accounts)
7	TRANSFORMATION B0	Specific CO <sub>2</sub> emissions of public and autoproducer power plants, t/TJ	CO <sub>2</sub> emissions from public and autoproducer thermal power stations, kt All products — output by public and autoproducer thermal power stations, PJ	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by public and autoproducer thermal power and combined heat and power plants. Emissions from heat only plants are not included Gross electricity produced and any heat sold to third parties (combined heat and power plants — CHP) by public and autoproducer thermal power and combined heat and power plants. Output from heat only plants is not included. Public thermal plants generate electricity (and heat) for sale to third parties, as their primary activity. They may be privately or publicly owned. Autoproducer thermal power stations generate electricity (and heat) wholly or partly for their use as an activity, which supports their primary activity. The gross electricity generation is measured at the outlet of the main transformers, i.e. the consumption of electricity in the plant auxiliaries and in transformers is included (source: energy balance)

(1) MS shall report numerator and denominator, if not included in the CRF.

(2) MS should follow this guidance, if they cannot follow exactly this guidance or if numerator and denominator are not entirely consistent. MS should clearly indicate this.

(3) The references to IPCC source categories refer to IPCC (1996) Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

TABLE II-2  
List of additional priority indicators (1)

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions (2)
1	TRANSPORT D0	CO <sub>2</sub> emissions from freight transport on road, kt		CO <sub>2</sub> emissions from the combustion of fossil fuel for all transport activity with light duty trucks (vehicles with a gross vehicle weight of 3 900 kg or less designated primarily for transportation of light-weight cargo or which are equipped with special features such as four-wheel drive for off-road operation — IPCC source category 1A3bii) and heavy duty trucks (any vehicle rated at more than 3 900 kg gross vehicle weight designated primarily for transportation of heavy-weight cargo — IPCC source category 1A3biii excluding buses)
		Freight transport on road, Mtkm		Number of tonne-kilometres transported in light and heavy duty trucks on road: one tonne-kilometre represents the transport of one tonne by road over one kilometre (source: transport statistics)
				Note: Activity data should be consistent with the emission data, if possible.
2	INDUSTRY A1.1	Total CO <sub>2</sub> intensity — iron and steel industry, t/Mio EUR	Total CO <sub>2</sub> emissions from iron and steel, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of iron and steel including combustion for the generation of electricity and heat (IPCC source category 1A2a), from the iron and steel production process (IPCC source category 2C1) and from ferroalloys production process (IPCC source category 2C2)
			Gross value-added — iron and steel industry, Bio Euro (EC95)	Gross value added at constant 1995 prices in manufacture of basic iron and steel and of ferro-alloys (NACE 27.1), manufacture of tubes (NACE 27.2), other first processing of iron and steel (NACE 27.3), casting of iron (NACE 27.51) and casting of steel (NACE 27.52) (source: National Accounts)
3	INDUSTRY A1.2	Energy related intensity — chemical industry, t/Mio EUR	Energy related CO <sub>2</sub> emissions chemical industries, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of chemicals and chemical products including combustion for the generation of electricity and heat (IPCC source category 1A2c)
			Gross value-added chemical industry, Bio Euro (EC95)	Gross value added at constant 1995 prices in manufacture of chemicals and chemical products (NACE 24) (source: National Accounts)

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions <sup>(2)</sup>
4	INDUSTRY A1.3	Energy related CO <sub>2</sub> intensity — glass, pottery and building materials industry, t/Mio EUR	Energy related CO <sub>2</sub> emissions glass, pottery and building materials, kt  Gross value-added — glass, pottery and buildings materials industry, Bio Euro (EC95)	CO <sub>2</sub> emissions from combustion of fuels in manufacture of non-metallic mineral products (NACE 26) including combustion for the generation of electricity and heat  Gross value added at constant 1995 prices in manufacture of non-metallic mineral products (NACE 26) (source: National Accounts)
5	INDUSTRY C0.1	Specific CO <sub>2</sub> emissions of iron and steel industry, t/t	Total CO <sub>2</sub> emissions from iron and steel, kt  Production of oxygen steel, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of iron and steel including combustion for the generation of electricity and heat (IPCC source category 1A2a), from the iron and steel production process (IPCC source category 2C1) and from ferroalloys production process (IPCC source category 2C2)  Production of oxygen steel (NACE 27) (source: production statistics)
6	INDUSTRY C0.2	Specific energy related CO <sub>2</sub> emissions of cement industry, t/t	Energy related CO <sub>2</sub> emissions from glass, pottery and building materials, kt  Cement production, kt	CO <sub>2</sub> emissions from combustion of fuels in manufacture of non-metallic mineral products (NACE 26) including combustion for the generation of electricity and heat  Cement production (NACE 26) (source: production statistics)

<sup>(1)</sup> MS shall report numerator and denominator, if not included in the CRF.

<sup>(2)</sup> MS should follow this guidance. If they cannot follow exactly this guidance or if numerator and denominator are not entirely consistent, MS should clearly indicate this.

TABLE II-3  
List of supplementary indicators

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions
1	TRANSPORT B0	Specific diesel related CO <sub>2</sub> emissions of passenger cars, g/100 km	CO <sub>2</sub> emissions of diesel-driven passenger cars, kt  Number of kilometres of diesel-driven passenger cars, Mio km	CO <sub>2</sub> emissions from the combustion of diesel for all transport activity with passenger cars (automobiles designated primarily for transport of persons and having capacity of 12 persons or fewer; gross vehicle weight rating of 3 900 kg or less — IPCC source category 1A3bi only diesel)  Number of vehicle kilometres of total diesel-driven passenger cars licensed to use roads open to public traffic (source: transport statistics)
2	TRANSPORT B0	Specific petrol related CO <sub>2</sub> emissions of passenger cars, g/100 km	CO <sub>2</sub> emissions of petrol-driven passenger cars, kt  Number of kilometres of petrol-driven passenger cars, Mio km	CO <sub>2</sub> emissions from the combustion of petrol for all transport activity with passenger cars (automobiles designated primarily for transport of persons and having capacity of 12 persons or fewer; gross vehicle weight rating of 3 900 kg or less — IPCC source category 1A3bi only petrol)  Number of vehicle kilometres of total petrol-driven passenger cars licensed to use roads open to public traffic (source: transport statistics)
3	TRANSPORT C0	Specific CO <sub>2</sub> emissions of passenger cars, t/pkm	CO <sub>2</sub> emissions from passenger cars, kt  Passenger transport by cars, Mpkm	CO <sub>2</sub> emissions from the combustion of fossil fuels for all transport activity with passenger cars (automobiles designated primarily for transport of persons and having capacity of 12 persons or fewer; gross vehicle weight rating of 3 900 kg or less — IPCC source category 1A3bi)  Number of passenger-kilometres travelled in passenger cars; one passenger-kilometre is the transport of one passenger over one kilometre (source: transport statistics)  Note: Activity data should be consistent with the emission data, if possible.
4	TRANSPORT E1	Specific air-transport emissions, t/passenger	CO <sub>2</sub> emissions from domestic air transport, kt  Domestic air-passengers, Mio	CO <sub>2</sub> emissions from domestic air transport (commercial, private, agricultural, etc.), including take-offs and landings (IPCC source category 1A3aii). Exclude use of fuel at airports for ground transport. Also exclude fuel for stationary combustion at airports  Number of persons, excluding on-duty members of the flight and cabin crews, making a journey by air (domestic aviation only) (source: transport statistics)  Note: Activity data should be consistent with the emission data, if possible.

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions
5	INDUSTRY A1.4	Energy related CO <sub>2</sub> intensity — food, drink and tobacco industry, t/Mio EUR	Energy related CO <sub>2</sub> emissions food industries, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of food products and beverages and tobacco products including combustion for the generation of electricity and heat (IPCC source category 1A2e)
			Gross value-added — food, drink and tobacco industry, Mio EUR (EC95)	Gross value added at constant 1995 prices in manufacture of food products and beverages (NACE 15) and tobacco products (NACE 16) (source: National Accounts)
6	INDUSTRY A1.5	Energy related CO <sub>2</sub> intensity — paper and printing industry, t/Mio EUR	Energy related CO <sub>2</sub> emissions paper and printing, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of pulp, paper and paper products and publishing, printing and reproduction of recorded media including emissions from combustion for the generation of electricity and heat (IPCC source category 1A2d)
			Gross value-added — paper and printing industry, Mio EUR (EC95)	Gross value added at constant 1995 prices in manufacture of pulp, paper and paper products (NACE 21) and publishing, printing and reproduction of recorded media (NACE 22) (source: National Accounts)
7	HOUSEHOLDS A0	Specific CO <sub>2</sub> emissions of households for space heating, t/m <sup>2</sup>	CO <sub>2</sub> emissions for space heating in households, kt	CO <sub>2</sub> emissions from fuel combustion for space heating in households
			Surface area of permanently occupied dwellings, Mio m <sup>2</sup>	Total surface area of permanently occupied dwellings
8	SERVICES B0	Specific CO <sub>2</sub> emissions of commercial and institutional sector for space heating, kg/m <sup>2</sup>	CO <sub>2</sub> emissions from space heating in commercial and institutional, kt	CO <sub>2</sub> emissions from fossil fuel combustion for space heating in commercial and institutional buildings in the public and private sectors
			Surface area of services buildings, Mio m <sup>2</sup>	Total surface area of services buildings (NACE 41, 50, 51, 52, 55, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 80, 85, 90, 91, 92, 93, 99)
9	TRANSFORMATION D0	Specific CO <sub>2</sub> emissions of public power plants, t/TJ	CO <sub>2</sub> emissions from public thermal power stations, kt	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by public thermal power and combined heat and power plants (IPCC source categories 1A1ai and 1A1aii). Emissions from heat only plants are not included
			All products output by public thermal power stations, PJ	Gross electricity produced and any heat sold to third parties (combined heat and power plants — CHP) by public thermal power and combined heat and power plants. Output from heat only plants is not included. Public thermal plants generate electricity (and heat) for sale to third parties, as their primary activity. They may be privately or publicly owned. The gross electricity generation is measured at the outlet of the main transformers, i.e. the consumption of electricity in the plant auxiliaries and in transformers is included (source: energy balance)

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions
10	TRANSFORMATION E0	Specific CO <sub>2</sub> emissions of autoproducer plants, t/TJ	CO <sub>2</sub> emissions from autoproducers, kt  All products output by autoproducer thermal power stations, PJ	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by autoproducer thermal power and combined heat and power plants  Gross electricity produced and any heat sold to third parties (combined heat and power — CHP) by autoproducer thermal power and combined heat and power plants. Autoproducer thermal power stations generate electricity (and heat) wholly or partly for their use as an activity, which supports their primary activity. The gross electricity generation is measured at the outlet of the main transformers, i.e. the consumption of electricity in the plant auxiliaries and in transformers is included (source: energy balance)
11	TRANSFORMATION	Carbon intensity of total power generation, t/TJ	CO <sub>2</sub> emissions from classical power production, kt  All products output by public and autoproducer power stations, PJ	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by public thermal power and combined heat and power plants and by autoproducer thermal power and combined heat and power plants. Emissions from heat only plants are not included  Gross electricity produced and any heat sold to third parties (combined heat and power — CHP) by public and autoproducer power and combined heat and power plants. Includes electricity production from renewable sources and nuclear power (source: energy balance)
12	TRANSPORT	Carbon intensity of transport, t/TJ	CO <sub>2</sub> emissions from transport, kt  Total final energy consumption from transport, PJ	CO <sub>2</sub> emissions from fossil fuels for all transport activity (IPCC source category 1A3)  Includes total final energy consumption of transport from all energy sources (including biomass and electricity consumption) (source: energy balance)
13	INDUSTRY C0.3	Specific energy related CO <sub>2</sub> emissions of paper industry, t/t	Energy related CO <sub>2</sub> emissions paper and printing industries, kt  Physical output of paper, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of pulp, paper and paper products and publishing, printing and reproduction of recorded media including emissions from combustion for the generation of electricity and heat (IPCC source category 1A2d)  Physical output of paper (NACE 21) (source: production statistics)



No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator/denominator	Guidance/definitions
14	INDUSTRY	CO <sub>2</sub> emissions from the industry sector, kt		Emissions from combustion of fossil fuels in manufacturing industries, construction and mining and quarrying (except coal mines and oil and gas extraction) including combustion for the generation of electricity and heat (IPCC source category 1A2). Energy used for transport by industry should not be included here but in the transport indicators. Emissions arising from off-road and other mobile machinery in industry should be included in this sector
15	HOUSEHOLDS	Total final energy consumption from industry, PJ		Includes total final energy consumption of industry from all energy sources (including biomass and electricity consumption) (source: energy balance)
		CO <sub>2</sub> emissions from households, kt		CO <sub>2</sub> emissions from fossil fuel combustion in households (IPCC source category 1A4b)
		Total final energy consumption from households, PJ		Includes total final energy consumption of households from all energy sources (including biomass and electricity consumption) (source: energy balance)

## ANNEX III

Indicators for projections to monitor and evaluate progress with policies and measures <sup>(1)</sup>

No	Eurostat sectors	Indicator	Numerator/denominator
1	MACRO	CO <sub>2</sub> intensity of GDP, t/EUR million	Total CO <sub>2</sub> emissions, kt
			GDP, Bio Euro (EC95)
2	TRANSPORT C0	CO <sub>2</sub> emissions from passenger cars, kt	
		Number of kilometres by passenger cars, Mkm	
3	TRANSPORT D0	CO <sub>2</sub> emissions from freight transport (all modes), kt	
		Freight transport (all modes), Mtkm	
4	INDUSTRY A1	Energy related CO <sub>2</sub> intensity of industry, t/EUR million	CO <sub>2</sub> emissions from fossil fuel consumption industry, kt
			Gross value-added total industry, Bio Euro (EC95)
5	HOUSEHOLDS A1	Specific CO <sub>2</sub> emissions of households, t/dwelling	CO <sub>2</sub> emissions from fossil fuel consumption households, kt
			Stock of permanently occupied dwellings, 1 000
6	SERVICES A0	CO <sub>2</sub> intensity of the services sector, t/EUR million	CO <sub>2</sub> emissions from fossil fuel consumption services, kt
			Gross value-added — services, Bio Euro (EC95)
7	TRANSFORMATION B0	Specific CO <sub>2</sub> emissions of public and autoproducer power plants, t/TJ	CO <sub>2</sub> emissions from public and autoproducer thermal power stations, kt
			All products — output by public and autoproducer thermal power stations, PJ
8	AGRICULTURE	Specific N <sub>2</sub> O emissions of fertiliser and manure use, kg/kg	N <sub>2</sub> O emissions from synthetic fertiliser and manure use, kt
			Use of synthetic fertiliser and manure, kt nitrogen
9	AGRICULTURE	Specific CH <sub>4</sub> emissions of cattle production, kg/head	CH <sub>4</sub> emissions from cattle, kt
			Cattle population, 1 000 head
10	WASTE	Specific CH <sub>4</sub> emissions from landfills, kt/kt	CH <sub>4</sub> emissions from landfills, kt
			Municipal solid waste going to landfills, kt

<sup>(1)</sup> For more detailed guidance/definitions for indicators 1-7 see Annex II. Indicators 1-7 should be consistent with the equivalent indicators in Annex II, if possible; indicators 8-10 should be consistent with the information provided in the CRF.

## ANNEX IV

## LIST OF PARAMETERS ON PROJECTIONS

**1. Mandatory parameters on projections***Assumptions for general economic parameters*

- Gross Domestic Product (GDP) (value at given years or annual growth rate and base year)
- Population (value at given years or annual growth rate and base year)
- International coal prices at given years in euro per tonne or GJ (Gigajoule)
- International oil prices at given years in euro per barrel or GJ
- International gas prices at given years in euro per m<sup>3</sup> or GJ

*Assumptions for the energy sector*

- Total gross inland consumption in Petajoule (PJ) (split by oil, gas, coal, renewables, nuclear, other)
- Total electricity production by fuel type (oil, gas, coal, renewables, nuclear, other)
- Energy demand by sector split by fuel (delivered) (suggested sectors are energy industries, industry, commercial or tertiary, residential and transport)
- Assumptions on weather parameters, especially heating or cooling degree days

*Assumptions for the industry sector*

For Member States using macroeconomic models:

- The share of the industrial sector in GDP and growth rate

For Member States using other models:

- The production index for industrial sector (suggested split is energy intensive industry based on physical production and manufacturing industry based on monetary value)

*Assumptions for the transport sector*

For Member States using macroeconomic models:

- The growth of transport relative to GDP

For Member States using other models:

- The growth of passenger person kilometres
- The growth of freight tonne kilometres

*Assumptions for buildings (in residential and commercial or tertiary sector)*

For Member States using macroeconomic models:

- The level of private consumption (excluding private transport)
- The share of the tertiary sector in GDP and the growth rate

For Member States using other models:

- The rate of change of floor space for tertiary buildings and dwellings
- The number of dwellings and number of employees in the tertiary sector

*Assumptions in the agriculture sector*

For Member States using macroeconomic models:

- The share of the agriculture sector in GDP and relative growth

For Member States using other models:

- The livestock numbers by animal type (for enteric fermentation beef, cattle and dairy cows, sheep, for manure management also pigs and poultry)
- The area of crops by crop type
- The emissions factors by type of livestock for enteric fermentation and manure management and by type of crop and the fertilizer use (tonnes)

*Assumptions in the waste sector*

- Waste generation per head of population or tonnes of municipal solid waste
- The organic fractions of municipal solid waste
- Municipal solid waste disposed to landfills, incinerated or composted (in tonnes or %)

*Assumptions in the forestry sector*

- Forest definitions
- Areas of:
  - managed forests
  - unmanaged forests

## **2. Recommended parameters on projections**

*Assumptions for general economic parameters*

- GDP growth rates split by industrial sectors in relation to 2000
- Comparison projected data with official forecasts

*Assumptions for the energy sector*

- National coal, oil and gas energy prices per sector (including taxes) — suggested sectors are electricity and heat generation, industry, commercial, residential and transport. Constant prices should be quoted
- National electricity prices per sector as above (may be model output)
- Total production of district heating by fuel type

*Assumptions for the industry sector*

- Assumptions fluorinated gases:
  - Aluminium production and emissions factors
  - Magnesium production and emissions factors
  - Foam production and emissions factors
  - Stock of refrigerant and leakage rates

For Member States using macroeconomic models:

- Share of GDP for different sectors and growth rates
- Rate of improvement of energy intensity (1990 = 100)

For Member States using other models:

- Index of production for different sectors
- Rate of improvement or index of energy efficiency

*Assumptions for buildings (in residential and commercial or tertiary sector)*

For Member States using macroeconomic models:

- Share of tertiary and household sectors in GDP
- Rate of improvement of energy intensity

For Member States using other models:

- Number of households
- Number of new buildings
- Rate of improvement of energy efficiency (1990 = 100)

*Assumptions for the transport sector*

For Member States using econometric models:

- Growth of transport relative to GDP — split by passenger and freight
- Improvements in energy efficiency — split by vehicle type
- Improvements in energy efficiency — split by vehicle type, specify whether it applies to whole fleet or new cars
- Rate of change of modal split (passenger and freight)
- The growth of passenger road kilometres
- The growth of passenger rail kilometres
- The growth of passenger aviation kilometres
- The growth of freight tonne kilometres on the road
- The growth of freight tonne kilometres by rail
- The growth of freight tonne kilometres by navigation

*Assumptions for the agriculture sector*

For Member States using econometric models:

- Agricultural trade (import/export)
- Domestic consumption (e.g. milk/beef consumption)

For Member States using other models:

- Development of area of crops, grassland, arable, set-aside, conversion to forests etc
  - Macroeconomic assumptions behind projections of agricultural activity
  - Description of livestock (e.g. by input/nutrient balance, output/animal production, milk production quota/productivity of cattle)
  - Development of farming types (e.g. intensive conventional, organic farming)
  - Distribution of housing/grazing systems and housing/grazing period
  - Parameters of fertiliser regime:
    - Details of fertiliser use (type of fertiliser, timing of application, inorganic/organic ratio);
    - Volatilisation rate of ammonia, following spreading of manure on the soil;
    - Efficiency of manure use.
  - Parameters of manure management system:
    - Distribution of storage facilities (e.g. with or without cover):
      - Nitrogen excretion rate of manures
      - Methods of application of manure
    - Extent of introduction of control measures (storage systems, manure application), use of best available techniques
  - Parameters related to nitrous oxide emissions from agricultural soils (e.g., Nitrogen leaching fraction, emission factor for direct emissions, Nitrogen content in crop residues)
  - Amount of manure treatment
-

## ANNEX V

**Questionnaire on the use of the Kyoto Protocol mechanisms in meeting the 2008-2012 targets**

1. Does your Member State intend to use joint implementation (JI), the clean development mechanism (CDM) and international emissions trading (IET) under the Kyoto Protocol (the Kyoto mechanisms) to meet its quantified emission limitation or reduction commitment pursuant to Article 2 of Decision 2002/358/EC and the Kyoto Protocol? If so, what progress has been made with the implementing provisions (operational programmes, institutional decisions) and any related domestic legislation?
2. Has your Member State established and notified to the UNFCCC a designated national authority for clean development mechanism projects and a designated focal point for joint implementation projects? If so, please provide details.
3. Which of the three Kyoto mechanisms is your Member State using or does it plan to use?
4. What quantitative contributions to the fulfilment of the quantified emission limitation or reduction commitment pursuant to Article 2 of Decision 2002/358/EC and the Kyoto Protocol does your Member State expect from the Kyoto mechanisms during the first quantified emission limitation and reduction commitment period, from 2008 to 2012 (please use Table 1)?

TABLE 1

**Quantitative contribution of Kyoto mechanisms for the first commitment period**

Kyoto mechanism	Total projected quantities for the first commitment period (Gg CO <sub>2</sub> equivalent)
Total for all Kyoto mechanisms (*)	
<i>International emissions trading</i>	
<i>All project based activities</i>	
<i>joint implementation</i>	
<i>clean development mechanism</i>	

(\*) If possible please disaggregate this data as suggested in *Italics*.

5. Specify the budget in euro for the total use of the Kyoto mechanisms and, where possible, per mechanism and initiative, programme or fund, including the time over which the budget will be spent.
6. With which countries has your Member State closed bilateral or multilateral agreements, or agreed memorandums of understanding or contracts for the implementation of project based activities?
7. For each planned, ongoing and completed clean development mechanism and joint implementation project activity in which your Member State participates, provide the following information:
  - (a) Project title and category (JI/CDM)
  - (b) Host country
  - (c) Financing: give a brief description of any financial involvement of the government and the private sector, using categories such as 'private', 'public', 'public-private partnership'.
  - (d) Project type: use a short description, for example:
    - Energy and power: Fuel-switching, renewable energy generation, improving energy efficiency, reduction of fugitive emissions from fuels, other (please specify)
    - Industrial processes: Material substitution, process or equipment change, waste treatment, recovery or recycling, other (please specify)
    - Land use, land-use change and forestry: Afforestation, reforestation, forest management, cropland management, grazing land management, revegetation

Transport:	Fuel-switching, improving fuel efficiency, other (please specify)
Agriculture:	Manure management, other (please specify)
Waste:	Solid-waste management, landfill methane recovery, waste-water management, other (please specify)
Other:	Please provide a short description of the other project type

(e) Status: use the following categories:

- Proposed,
- approved (approval of governments involved and feasibility studies completed),
- under construction (start-up or construction phase),
- in operation,
- completed,
- suspended.

(f) Lifetime: provide the following information:

- date of official approval (e.g. of the Executive Board for clean development mechanism projects, of the host country for joint implementation projects),
- date of project initiation (operation starts),
- expected date of project termination (lifetime),
- crediting period (for what years will ERUs or CERs be generated),
- date(s) of issue of emission reduction units (ERUs) (by host country) or certified emission reductions (CERs) (by CDM executive board).

(g) First or second track approval procedure (For joint implementation projects only).

(h) Projected total and annual emissions reductions that accrue until the end of the first commitment period.

(i) Amount of ERUs or CERS generated by the project that will be acquired by the Member State.

(j) Credits accrued until the end of reporting year: provide information on the number of credits (total and annual) obtained from joint implementation projects, clean development projects and credits resulting from land use, land-use change and forestry activities.

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## ANNEX VI

**Procedures and time scales for the compilation of the Community greenhouse gas inventory and inventory report**

Element	Who	When	What
1. Submission of annual inventories (complete Common Reporting Format (CRF) and elements of the national inventory report) by Member States under Decision No 280/2004/EC	Member States	Annually, by 15 January	Elements listed in Article 3(1) of Decision No 280/2004/EC as elaborated in Articles 2 to 7.  Steps taken to improve estimates in areas that were previously adjusted under Article 5.2 of the Kyoto Protocol (for reporting under the Kyoto Protocol).
2. 'Initial check' of Member State submissions	Commission (incl. DG ESTAT (Eurostat), DG JRC (JRC)), assisted by European Environment Agency (EEA)	As soon as possible after receipt of Member State data, at the latest by 1 April	Initial checks and consistency checks (by EEA). Comparison of energy data provided by Member States on the basis of the IPCC Reference Approach with Eurostat energy data (by Eurostat and Member States) and check of Member States' agriculture and land use, land-use change and forestry (LULUCF) inventories by DG JRC (in consultation with Member States).
3. Compilation of draft Community inventory	Commission (incl. Eurostat, JRC), assisted by EEA	Up to 28 February	Draft Community inventory (by EEA), based on Member State inventories and additional information where needed.
4. Circulation of draft Community inventory	Commission assisted by EEA	28 February	Circulation of the draft Community inventory on 28 February to Member States. Member States check data.
5. Submission of updated or additional inventory data and complete national inventory reports by Member States	Member States	15 March	Updated or additional inventory data submitted by Member States (to remove inconsistencies or fill gaps) and complete final national inventory reports.
6. Estimates for data missing from a national inventory	Commission assisted by EEA	31 March	The Commission prepares estimates for missing data by 31 March of the reporting year, following consultation with the Member State concerned, and communicate these to the Member States.
7. Comments from Member States regarding the Commission estimates for missing data	Member States	8 April	Member States provide comments on the Commission estimates for missing data, for consideration by the Commission.
8. Final annual Community inventory (incl. Community inventory report)	Commission assisted by EEA	15 April	Submission to UNFCCC of the final annual Community inventory. This inventory will also be used to evaluate progress as part of the Monitoring Mechanism.

Element	Who	When	What
9. Circulation of initial check results of the Community submission to Member States	Commission assisted by EEA	As soon as possible after receipt of initial check results	Commission circulates the initial check results of the Community submission as soon as possible after their receipt to those Member States, which are affected by the initial checks.
10. Response of relevant Member State to initial check results of the Community submission	Member States	within one week from receipt of the findings	The Member States for which the initial check indicated problems or inconsistencies provide their responses to the initial check to the Commission.
11. Any resubmissions by Member States in response to the UNFCCC initial checks	Member States	<p>For each Member State the same as under the UNFCCC initial checks phase</p> <p>Under the Kyoto Protocol: the resubmission should be provided to the Commission within five weeks of the submission due date</p>	<p>Member States provide to the Commission the resubmissions which they submit to the UNFCCC secretariat in response to the UNFCCC initial checks. The Member States should clearly specify which parts have been revised in order to facilitate the use for the Community resubmission.</p> <p>As the Community resubmission also has to comply with the deadlines specified in the guidelines under Article 8 of the Kyoto Protocol, the resubmission has to be sent to the Commission earlier than the period foreseen in the guidelines under Article 8 of the Kyoto Protocol, provided that the resubmission correct data or information that is used for the compilation of the Community inventory.</p>
12. Submission of any other resubmission after the initial check phase	Member States	When additional resubmissions occur	Member States provide to the Commission any other resubmission (CRF or national inventory report) which they provide to the UNFCCC secretariat after the initial check phase.

## ANNEX VII

**Procedures and time scales for the determination of the assigned amounts of the Member States and the Community**

When	What	Task of
15 January 2006	Submission of the draft Member State reports establishing their assigned amount to the Commission, pursuant to Article 23 by Member States listed in Annex II to Decision 2002/358/EC	Member States listed in Annex II to Decision 2002/358/EC
March 2006	Draft Commission Decision on determining the respective emission levels allocated to the Community and to each Member State listed in Annex II to Decision 2002/358/EC pursuant to Article 3 of Decision 2002/358/EC sent to the Climate Change Committee	Commission
April 2006	Opinion on the Draft Commission Decision on determining the respective emission levels allocated to the Community and to each Member State listed in Annex II to Decision 2002/358/EC pursuant to Article 3 of Decision 2002/358/EC	Climate Change Committee
15 June 2006	Submission of the draft Member State reports establishing their assigned amount to the Commission, pursuant to Article 23 by Member States not listed in Annex II to Decision 2002/358/EC	Member States not listed in Annex II to Decision 2002/358/EC
August 2006	Circulation to Member States of the draft report determining the Community assigned amount	Commission
September 2006	Comments to the Commission on the draft report determining the Community assigned amount	Member States
by 31 December 2006	Member State and Community reports on the determination of their assigned amount submitted to the UNFCCC	MS and Commission