

Proposal for a Directive of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC

(2002/C 75 E/04)

(Text with EEA relevance)

COM(2001) 581 final — 2001/0245(COD)

(Submitted by the Commission on 23 October 2001)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the Economic and Social Committee,

Having regard to the opinion of the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty,

Whereas:

(1) The Green Paper on greenhouse gas emissions trading within the European Union⁽¹⁾ launched a debate across Europe on the suitability and possible functioning of greenhouse gas emissions trading within the European Union. The European Climate Change Programme⁽²⁾ has considered Community policies and measures through a multi-stakeholder process, including a framework for greenhouse gas emissions trading in the Community based on the Green Paper. In its Conclusions of 8 March 2001, the Council recognised the particular importance of the European Climate Change Programme and work based on the Green Paper, and underlined the urgent need for concrete action at Community level.

(2) The sixth Environmental Action Programme: Environment 2010: Our Future, Our Choice⁽³⁾ identifies climate change as a priority for action and provides for the establishment of a Community-wide emissions trading scheme by 2005. That Programme recognises that the Community is committed to achieving an 8 % reduction in emissions of greenhouse gases by 2008 to 2012 compared to 1990 levels, and that in the longer-term global emissions of greenhouse gases will need to be reduced by approximately 70 % compared to 1990 levels.

(3) The ultimate objective of the United Nations Framework Convention on Climate Change, which was approved by Council Decision 94/69/EC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change⁽⁴⁾, is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system.

(4) Once it enters into force, the Kyoto Protocol, which was approved by Council Decision ./. ./.EC [of . . ., concerning the conclusion of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder] will commit the Community and its Member States to reduce their aggregate anthropogenic emissions of greenhouse gases listed in Annex A to the Protocol by 8 % compared to 1990 levels in the period 2008 to 2012.

(5) The Community and its Member States have agreed to fulfil their commitments to reduce anthropogenic greenhouse gases emissions under the Kyoto Protocol jointly, in accordance with Decision ./. ./.EC [concerning the conclusion of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder].

(6) Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO₂ and other greenhouse gas emissions⁽⁵⁾, established a mechanism for monitoring greenhouse gas emissions and evaluating progress towards meeting commitments in respect of these emissions. This mechanism will assist Member States in determining the total quantity of allowances to allocate.

(7) Community provisions relating to allocation of allowances by the Member States are necessary to contribute to preserving the integrity of the internal market and to avoid distortions of competition.

⁽¹⁾ COM(2000) 87.

⁽²⁾ COM(2000) 88.

⁽³⁾ COM(2001) 31.

⁽⁴⁾ OJ L 33, 7.2.1994, p. 11.

⁽⁵⁾ OJ L 167, 9.7.1993, p. 31; Decision as amended by Decision 1999/296/EC (OJ L 117, 5.5.1999, p. 35).

- (8) Member States should ensure that the operators of certain specified activities monitor and report their emissions of greenhouse gases specified in relation to those activities.
- (9) Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. Those penalties must be effective, proportionate and dissuasive.
- (10) In order to ensure transparency, the public should have access to information relating to the allocation of allowances and to the results of monitoring of emissions subject only to restrictions provided for in Council Directive 90/313/EEC of 7 June 1990 on the freedom of access to information on the environment ⁽¹⁾.
- (11) Member States should submit a report on the implementation of this Directive drawn up on the basis of Council Directive 91/692/EEC of 23 December 1991 standardising and rationalising reports on the implementation of certain Directives relating to the environment ⁽²⁾.
- (12) Since the measures necessary for the implementation of this Directive are measures of general scope within the meaning of Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽³⁾, they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision.
- (13) Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ⁽⁴⁾ establishes a general framework for pollution prevention and control, through which greenhouse gas emissions permits may be issued. Directive 96/61/EC should be amended to ensure that emission limit values are not set for direct emissions of greenhouse gases from an installation subject to this Directive, without prejudice to any other requirements pursuant to Directive 96/61/EC.
- (14) Since the objective of the proposed action, the establishment of a scheme for greenhouse gas emission allowance trading in the Community, cannot be sufficiently achieved by the Member States acting individually, and can therefore by reason of the scale and effects of the proposed action be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.
- (15) This Directive is compatible with the United Nations Framework Convention on Climate Change and the

Kyoto Protocol. It should be reviewed in the light of developments in that context and to take into account experience in its implementation and progress achieved in monitoring of emissions of greenhouse gases.

- (16) Emission allowance trading should form part of a comprehensive and coherent package of policies and measures implemented at Member State and Community level. Without prejudice to the application of Articles 87 and 88 of the Treaty, where activities are covered by the Community greenhouse gas emission allowance trading scheme, it would be appropriate to take into account the level of taxation that pursues the same objectives. The review of the Directive should consider the extent to which these have been attained.
- (17) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Subject matter

This Directive establishes a Community greenhouse gas emission allowance trading scheme in order to promote reductions of greenhouse gas emissions in a cost-effective manner.

Article 2

Scope

1. This Directive shall apply to emissions from the activities listed in Annex I of greenhouse gases specified in relation to those activities.

2. This Directive shall apply without prejudice to any requirements pursuant to Directive 96/61/EC that relate to energy efficiency.

Article 3

Definitions

For the purposes of this Directive the following definitions shall apply:

- (a) 'allowance' means an allowance to emit one tonne of carbon dioxide equivalent during a specified period valid only for the purposes of meeting the requirements of this Directive and which is transferable in accordance with the provisions of this Directive;

⁽¹⁾ OJ L 158, 23.6.1990, p. 56.

⁽²⁾ OJ L 377, 31.12.1990, p. 48.

⁽³⁾ OJ L 184, 17.7.1999, p. 23.

⁽⁴⁾ OJ L 257, 10.10.1996, p. 26.

- (b) 'emissions' means the release of greenhouse gases into the atmosphere from sources in an installation;
- (c) 'greenhouse gases' means the gases listed in Annex II;
- (d) 'greenhouse gas emissions permit' means the permit issued in accordance with Articles 5 and 6;
- (e) 'installation' means a stationary technical unit where one or more activities listed in Annex I are carried out;
- (f) 'operator' means any person who operates or controls an installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated;
- (g) 'person' means any natural or legal person;
- (h) 'the public' means one or more persons and, in accordance with national legislation or practice, associations, organisations or groups of persons;
- (i) 'tonne of carbon dioxide equivalent' means one metric tonne of carbon dioxide (CO₂) or an amount of any other greenhouse gas listed in Annex II with an equivalent global warming potential.

Article 4

Greenhouse gas emissions permits

Member States shall ensure that, from 1 January 2005, no installation undertakes any activity listed in Annex I resulting in emissions of a greenhouse gas specified in relation to that activity unless its operator holds a permit issued by a competent authority in accordance with Articles 5 and 6.

Article 5

Applications for permits

An application to the competent authority for a greenhouse gas emissions permit shall include a description of:

- (a) the installation and its activities;
- (b) the raw and auxiliary materials, the use of which is likely to lead to emissions;
- (c) the sources of emissions from the installation; and
- (d) the measures planned to monitor emissions, in accordance with the guidelines adopted pursuant to Article 14.

The application shall also include a non-technical summary of the details referred to in the first paragraph.

Article 6

Conditions for and contents of the permit

1. The competent authority shall issue a greenhouse gas emissions permit granting authorisation to emit greenhouse gases from all or part of an installation if it is satisfied that the operator is capable of monitoring and reporting emissions.

A permit may cover one or more installations on the same site operated by the same operator.

2. Greenhouse gas emissions permits shall contain the following:

- (a) the name and address of the operator;
- (b) a description of the activities and emissions from the installation;
- (c) monitoring requirements, specifying monitoring methodology and frequency;
- (d) reporting requirements; and
- (e) an obligation to surrender allowances equal to the total emissions of the installation in each calendar year, as verified in accordance with Article 15, within three months following the end of that year.

Article 7

Changes relating to installations

The operator shall inform the competent authority of any change planned in the nature or functioning, or an extension, of the installation which may require updating of the greenhouse gas emissions permit. Where appropriate, the competent authority shall update the permit.

Where there is a change in the identity of the installation's operator, the competent authority shall update the permit to include the name and address of the new operator.

Article 8

Coordination with Directive 96/61/EC

Member States shall take the necessary measures to ensure that, where installations carry out activities that are included in Annex I to Directive 96/61/EC, the conditions of, and procedure for, the issue of a greenhouse gas emissions permit are coordinated with those for the permit provided for in that Directive. The requirements of Articles 5, 6 and 7 of this Directive may be integrated into the procedures provided for in Directive 96/61/EC.

*Article 9***National allocation plan**

1. For each period referred to in Article 11(1) and (2), each Member State shall develop a national plan stating the total quantity of allowances that it intends to allocate for that period and how it proposes to allocate them. The plan shall be based on objective and transparent criteria, including those listed in Annex III.

For the period referred to in Article 11(1), the plan shall be published and notified to the Commission and to the other Member States by 31 March 2004 at the latest. For subsequent periods, the plan shall be published and notified to the Commission and to the other Member States at least eighteen months before the beginning of the relevant period.

2. National allocation plans shall be considered within the committee referred to in Article 23(1).

3. Within three months of notification of a national allocation plan by a Member State under paragraph 1, the Commission may reject that plan, or any aspect thereof, on the basis that it is incompatible with the criteria listed in Annex III or with Article 10. The Member State shall only take a decision under Article 11(1) or (2) if proposed amendments are accepted by the Commission.

*Article 10***Method of allocation**

1. For the three-year period beginning 1 January 2005, Member States shall allocate allowances free of charge.

2. The Commission shall specify a harmonised method of allocation for the five-year period beginning 1 January 2008 in accordance with the procedure referred to in Article 23(2).

*Article 11***Allocation and issue of allowances**

1. For the three-year period beginning 1 January 2005, each Member State shall decide upon the total quantity of allowances it will allocate for that period and the allocation of those allowances to the operator of each installation. This decision shall be taken at least three months before the beginning of the period and be based on its national allocation plan developed pursuant to Article 9 and in accordance with Article 10, taking due account of comments from the public.

2. For the five-year period beginning 1 January 2008, and for each subsequent five-year period, each Member State shall decide upon the total quantity of allowances it will allocate for that period and the allocation of those allowances to the operator of each installation. This decision shall be taken at

least twelve months before the beginning of the relevant period and be based on its national allocation plan developed pursuant to Article 9 and in accordance with Article 10, taking due account of comments from the public.

3. Decisions taken pursuant to paragraph 1 or 2 shall be in conformity with the requirements of the Treaty, in particular Articles 87 and 88 thereof. When deciding upon allocation, Member States shall take into account the need to provide access to allowances for new entrants.

4. The competent authority shall issue a proportion of the total quantity of allowances each year of the period referred to in paragraph 1 or 2, by 28 February of that year.

*Article 12***Transfer, surrender and cancellation of allowances**

1. Member States shall ensure that allowances can be transferred between persons within the Community without restrictions other than those contained in, or adopted pursuant to, this Directive.

2. Member States shall ensure that allowances issued by a competent authority of another Member State are recognised for the purpose of meeting an operator's obligations pursuant to paragraph 3.

3. Member States shall ensure that, by 31 March each year at the latest, the operator of each installation surrenders a number of allowances equal to the total emissions from that installation during the preceding calendar year as verified in accordance with Article 15, and that these are subsequently cancelled.

4. Member States shall take the necessary steps to ensure that allowances can be cancelled at any time at the request of the person holding them.

*Article 13***Validity of allowances**

1. Allowances shall be valid for emissions during the period referred to in Article 11(1) or (2) for which they are issued.

2. Three months after the beginning of the first five-year period referred to in Article 11(2), allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12(3) shall be cancelled by the competent authority.

Member States may issue allowances to persons for the current period to replace any allowances held by them which are cancelled in accordance with the first subparagraph.

3. Three months after the beginning of each subsequent five-year period referred to in Article 11(2), allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12(3) shall be cancelled by the competent authority.

Member States shall issue allowances to persons for the current period to replace any allowances held by them which are cancelled in accordance with the first subparagraph.

Article 14

Guidelines for monitoring and reporting of emissions

1. The Commission shall adopt guidelines for monitoring and reporting of emissions resulting from the activities listed in Annex I of greenhouse gases specified in relation to those activities, in accordance with the procedure referred to in Article 23(2). The guidelines shall be based on the principles for monitoring and reporting set out in Annex IV.

2. Member States shall ensure that emissions are monitored in accordance with the guidelines.

3. Member States shall ensure that each operator of an installation reports the emissions from that installation during each calendar year to the competent authority at the end of that year in accordance with the guidelines.

Article 15

Verification

Member States shall ensure that the reports submitted by operators pursuant to Article 14(3) are verified in accordance with the criteria set out in Annex V, and that the competent authority is informed thereof.

Member States shall ensure that an operator whose report has not been verified as satisfactory in accordance with the criteria set out in Annex V by 31 March each year for emissions during the preceding year cannot make further transfers of allowances until a report from that operator has been verified as satisfactory.

Article 16

Penalties

1. Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties

provided for must be effective, proportionate and dissuasive. Member States shall notify these provisions to the Commission by 31 December 2003 at the latest, and shall notify it without delay of any subsequent amendment affecting them.

2. Member States shall publish the names of operators who are in breach of national provisions adopted pursuant to this Directive.

3. Member States shall ensure that any operator which does not surrender sufficient allowances by 31 March of each year to cover its emissions during the preceding year shall be held liable for the payment of an excess emissions penalty. The excess emissions penalty shall be either EUR 100 or twice the average market price between 1 January and 31 March of that year for allowances valid for emissions during the preceding year, whichever is the higher, for each tonne of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances. Payment of the excess emissions penalty shall not release the operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year.

4. During the three-year period beginning 1 January 2005, Member States shall apply a lower excess emissions penalty of EUR 50 or twice the average market price between 1 January and 31 March of that year for allowances valid for emissions during the preceding year, whichever is the higher, for each tonne of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances. Payment of the excess emissions penalty shall not release the operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year.

Article 17

Access to information

Decisions relating to the allocation of allowances and the reports of emissions required under the greenhouse gas emissions permit and held by the competent authority shall be made available to the public by that authority subject to the restrictions laid down in Article 3(2) and (3) of Directive 90/313/EEC.

Article 18

Competent authority

Member States shall make the appropriate administrative arrangements, including the designation of the appropriate competent authority or authorities, for the implementation of the rules of this Directive. Where more than one competent authority is designated, the work of these authorities pursuant to this Directive must be coordinated.

*Article 19***Registries**

1. Member States shall establish and maintain a registry in order to ensure the accurate accounting of the issue, holding, transfer and cancellation of allowances. Member States may maintain their registries in a consolidated system, together with one or more other Member States.
2. Any person may hold allowances. The registry shall contain separate accounts to record the allowances held by each person to whom allowances are issued or transferred.
3. In order to implement this Directive, the Commission shall adopt a Regulation in accordance with the procedure referred to in Article 23(2) for a standardised and secured system of registries in the form of standardised electronic databases, containing common data elements to track the issue, holding, transfer and cancellation of allowances, to provide for confidentiality as appropriate and to ensure that there are no transfers incompatible with obligations resulting from the Kyoto Protocol.

*Article 20***Central Administrator**

1. The Commission shall designate a Central Administrator to maintain an independent transaction log recording the issue, transfer and cancellation of allowances.
2. The Central Administrator shall conduct an automated check on each transaction in registries through the independent transaction log to ensure there are no irregularities in the issue, transfer and cancellation of allowances.
3. If irregularities are identified through the automated check, the Central Administrator shall inform the Member State or Member States concerned who shall not register the transactions in question or any further transactions relating to the allowances concerned until the irregularities have been resolved.

*Article 21***Reporting by Member States**

1. Each year the Member States shall submit to the Commission a report on the application of this Directive. This report shall pay particular attention to the arrangements for the allocation of allowances, the operation of registries, the application of the monitoring and reporting guidelines, verification and issues related to compliance with the Directive. The first report shall be sent to the Commission by 31 May 2005. The report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the

procedure laid down in Article 6 of Directive 91/692/EEC. The questionnaire or outline shall be sent to Member States at least six months before the deadline for the submission of the first report.

2. Based on the reports referred to in paragraph 1 the Commission shall publish a report on the application of this Directive within three months of receiving the reports from the Member States.

3. The Commission shall organise an exchange of information between the competent authorities of the Member States concerning developments related to issues of allocation, the operation of registries, monitoring, reporting, verification and compliance.

*Article 22***Amendments to Annex III**

The Commission may amend Annex III in the light of the reports pursuant to Article 21 and experience of the application of this Directive, in accordance with the procedure referred to in Article 23(2).

*Article 23***Committee**

1. The Commission shall be assisted by the committee instituted by Article 8 of Decision 93/389/EEC.
2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 7 and Article 8 thereof.
3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be three months.

*Article 24***Links with other greenhouse gas emissions trading schemes**

1. The Community may conclude agreements with third countries to provide for the mutual recognition of allowances between the Community greenhouse gas emissions trading scheme and other greenhouse gas emissions trading schemes in accordance with the rules set out in Article 300 of the Treaty.
2. Where an agreement referred to in paragraph 1 has been concluded, the Commission shall draw up any necessary provisions relating to the mutual recognition of allowances under that agreement in accordance with the procedure referred to in Article 23(2).

*Article 25***Amendment of Directive 96/61/EC**

In Article 9(3) of Directive 96/61/EC the following subparagraph is added:

'Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive . . ./EC of the European Parliament and of the Council [establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC] (*) in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas unless it is necessary to ensure that no significant local pollution is caused. Where necessary, the competent authorities shall amend the permit to remove the emission limit value.

(*) OJ L . . .'

*Article 26***Review**

1. Based on progress achieved in the monitoring of emissions of greenhouse gases, the Commission may make a proposal to the European Parliament and the Council by 31 December 2004 to amend Annex I to include other activities and emissions of other greenhouse gases listed in Annex II.

2. Based on experience of the application of this Directive and on progress achieved in the monitoring of emissions of greenhouse gases and in the light of developments in the international context, the Commission may draw up a report on the application of this Directive, considering:

- (a) whether Annex I should be amended to include other activities and emissions of other greenhouse gases listed in Annex II, with a view to further improving the economic efficiency of the scheme;
- (b) the harmonised method of allocation necessary;

- (c) the use of credits from project mechanisms;
- (d) the relationship of emissions trading with other policies and measures implemented at Member State and Community level, including taxation that pursue the same objectives; and
- (e) whether it is appropriate for there to be a single Community registry.

The Commission shall submit any such report to the European Parliament and the Council by 30 June 2006, accompanied by proposals as appropriate.

*Article 27***Implementation**

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 2003 at the latest. They shall forthwith inform the Commission thereof. The Commission shall notify the other Member States of those laws, regulations and administrative provisions.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

*Article 28***Entry into force**

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

*Article 29***Addressees**

This Directive is addressed to the Member States.

ANNEX I

CATEGORIES OF ACTIVITIES REFERRED TO IN ARTICLES 2(1), 3, 4, 14(1) AND 26

1. Installations or parts of installations used for research, development and testing of new products and processes are not covered by this Directive.
2. The threshold values given below generally refer to production capacities or outputs. Where one operator carries out several activities falling under the same subheading in the same installation or on the same site, the capacities of such activities are added together.

Activities	Greenhouse gases
Energy activities	
Combustion installations with a rated thermal input exceeding 20 MW (excepting hazardous or municipal waste installations)	Carbon dioxide
Mineral oil refineries	Carbon dioxide
Coke ovens	Carbon dioxide
Production and processing of ferrous metals	
Metal ore (including sulphide ore) roasting or sintering installations	Carbon dioxide
Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour	Carbon dioxide
Mineral industry	
Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or lime in rotary kilns with a production capacity exceeding 50 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day	Carbon dioxide
Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day	Carbon dioxide
Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day, and/or with a kiln capacity exceeding 4 m ³ and with a setting density per kiln exceeding 300 kg/m ³	Carbon dioxide
Other activities	
Industrial plants for the production of	
(a) pulp from timber or other fibrous materials	Carbon dioxide
(b) paper and board with a production capacity exceeding 20 tonnes per day	Carbon dioxide

ANNEX II

GREENHOUSE GASES REFERRED TO IN ARTICLES 3 AND 26

Carbon dioxide (CO₂)
Methane (CH₄)
Nitrous Oxide (N₂O)
Hydrofluorocarbons (HFCs)
Perfluorocarbons (PFCs)
Sulphur Hexafluoride (SF₆)

ANNEX III

CRITERIA FOR NATIONAL ALLOCATION PLANS REFERRED TO IN ARTICLE 9

1. The total quantity of allowances to be allocated for the relevant period shall be consistent with the Member State's obligation to limit its emissions pursuant to Decision ./. /EC and the Kyoto Protocol, taking into account the proportion of overall emissions that these represent in comparison with emissions from sources not covered by this Directive;
 2. The total quantity of allowances to be allocated shall be consistent with assessments of actual and projected progress towards fulfilling the Community's commitments made pursuant to Decision 93/389/EEC;
 3. Quantities of allowances to be allocated shall be consistent with the technological potential of installations to reduce emissions;
 4. The plan shall be consistent with other EC legislative and policy instruments. In particular, no allowances should be allocated to cover emissions which would be reduced or eliminated as a consequence of Community legislation on renewable energy in electricity production, and account should be taken of unavoidable increases in emissions resulting from new legislative requirements;
 5. The plan shall not discriminate between companies or sectors in such a way as to unduly favour certain undertakings or activities, nor shall any installation be allocated more allowances than it is likely to need;
 6. The plan shall contain information on the manner in which new entrants will be able to begin participating in the greenhouse gas emissions trading scheme in the Member State;
 7. The plan shall contain information on the manner in which early action will be taken into account; and
 8. The plan shall include provisions for comments to be expressed by the public, and contain information on the arrangements by which due account will be taken of these comments before a decision on the allocation of allowances is taken.
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ANNEX IV

PRINCIPLES FOR MONITORING AND REPORTING REFERRED TO IN ARTICLE 14(1)**Monitoring of carbon dioxide emissions**

Emissions shall be monitored either by calculation or on the basis of measurement.

Calculation

Calculations of emissions shall be performed using the formula:

$$\text{Activity data} \times \text{Emission factor} \times \text{Oxidation factor}$$

Activity data (fuel used, production rate etc.) shall be monitored on the basis of supply data or measurement.

Accepted emission factors shall be used. Activity-specific emission factors are acceptable for all fuels. Default factors are acceptable for all fuels except non-commercial ones (waste fuels such as tyres and industrial process gases). Seam-specific defaults for coal, and EU-specific or producer country-specific defaults for natural gas shall be further elaborated. IPCC default values are acceptable for refinery products. The emission factor for biomass shall be zero.

If the emission factor does not take account of the fact that some of the carbon is not oxidised, then an additional oxidation factor shall be used. If activity-specific emission factors have been calculated and already take oxidation into account, then an oxidation factor need not be applied.

Default oxidation factors developed pursuant to Directive 96/61/EC shall be used, unless the operator can demonstrate that activity-specific factors are more accurate.

A separate calculation shall be made for each activity and for each fuel.

Measurement

Measurement of emissions shall use standardised or accepted methods, and shall be corroborated by a supporting calculation of emissions.

Monitoring of emissions of other greenhouse gases

Standardised or accepted methods shall be used.

Reporting of emissions

Each operator shall include the following information in the report for an installation:

- A. Data identifying the installation, including:
 - Name of the installation;
 - Its address, including postcode and country;
 - Type and number of Annex I activities carried out in the installation;
 - Address, telephone, fax and e-mail details for a contact person; and
 - Name of the owner of the installation, and of any parent company.
- B. For each Annex I activity carried out on the site for which emissions are calculated:
 - Activity data;
 - Emission factors;
 - Oxidation factors; and
 - Total emissions.

C. For each Annex I activity carried out on the site for which emissions are measured:

- Total emissions; and
- Information on the reliability of measurement methods.

D. For emissions from energy combustion, the report shall also include the oxidation factor, unless oxidation has already been taken into account in the development of an activity-specific emission factor.

Member States shall take measures to coordinate reporting requirements with any existing reporting requirements in order to minimise the reporting burden on businesses.

ANNEX V

CRITERIA FOR VERIFICATION REFERRED TO IN ARTICLE 15

General principles

1. Emissions from each activity listed in Annex I shall be subject to verification.
2. The verification process shall include consideration of the report pursuant to Article 14(3) and of monitoring during the preceding year. It shall address the reliability, credibility and accuracy of monitoring systems and the reported data and information relating to emissions, in particular:
 - (a) the reported activity data and related measurements and calculations;
 - (b) the choice and the employment of emission factors;
 - (c) the calculations leading to the determination of the overall emissions; and
 - (d) if measurement is used, the appropriateness of the choice and the employment of measuring methods.
3. Reported emissions may only be validated if reliable and credible data and information allow the emissions to be determined with a high degree of certainty. A high degree of certainty requires the operator to show that:
 - (a) the reported data is free of inconsistencies;
 - (b) the collection of the data has been carried out in accordance with the applicable scientific standards; and
 - (c) the relevant records of the installation are complete and consistent.
4. The verifier shall be given access to all sites and information in relation to the subject of the verification.
5. The verifier shall take into account whether the installation is registered under the Community eco-management and audit scheme (EMAS).

Methodology

Strategic analysis

6. The verification shall be based on a strategic analysis of all the activities carried out in the installation. This requires the verifier to have an overview over all the activities and their significance for emissions.

Process analysis

7. The verification of the submitted information shall, where appropriate, be carried out on the site of the installation. The verifier shall use spot-checks to determine the reliability of the reported data and information.

Risk analysis

8. The verifier shall submit all the sources of greenhouse gas emissions in the installation to an evaluation with regard to the reliability of the data of each source contributing to the overall emissions of the installation.

9. On the basis of this analysis the verifier shall explicitly identify those sources with a high risk of error and other aspects of the monitoring and reporting procedure which are likely to contribute to errors in the determination of the overall emissions. This especially involves the choice of the emission factors and the calculations necessary to determine the emissions of single sources of emissions. Particular attention shall be given to those sources with a high risk of error and those aspects of the monitoring procedure.
10. The verifier shall take into consideration any effective risk control methods applied by the operator with a view to minimising the degree of uncertainty.

Report

11. The verifier shall prepare a report on the validation process stating whether the report pursuant to Article 14(3) is satisfactory. This report shall specify all issues relevant to the work carried out. A statement that the report pursuant to Article 14(3) is satisfactory may be made if, in the opinion of the verifier, the total emissions are not materially misstated.

Minimum competency requirements for the verifier

12. The verifier shall be independent of the operator, carry out his activities in a sound and objective professional manner, and understand:
 - (a) the provisions of this Directive, as well as relevant standards and guidance adopted by the Commission pursuant to Article 14(1);
 - (b) the legislative, regulatory, and administrative requirements relevant to the activities being verified; and
 - (c) the generation of all information related to each source of emissions in the installation, in particular, relating to the collection, measurement, calculation and reporting of data.
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