
CONFERENCE OF THE PARTIES
Fifth session
Bonn, 25 October - 5 November 1999
Agenda item 4 (a)

**REVIEW OF THE IMPLEMENTATION OF COMMITMENTS AND OF OTHER
PROVISIONS OF THE CONVENTION**

**NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED IN
ANNEX I TO THE CONVENTION**

Addendum

**GUIDELINES FOR THE TECHNICAL REVIEW OF GREENHOUSE
GAS INVENTORIES FROM PARTIES INCLUDED IN ANNEX I TO
THE CONVENTION
(GREENHOUSE GAS REVIEW GUIDELINES)**

A. Objective

1. The objective of these guidelines is to promote consistency in the review of annual greenhouse gas (GHG) inventories of Annex I Parties and to establish a process for a thorough and comprehensive technical assessment of inventories. This process, comprising a number of stages, should increase Parties' confidence in greenhouse gas inventories. Each stage of the technical review process considers different aspects of the inventories to varying extents, in such a way that all of the purposes described below are achieved by the end of the process.

B. Purposes of the technical review of greenhouse gas inventories

2. The purposes of the technical review of Annex I Parties' greenhouse gas inventories are:

(a) To ensure that the Conference of the Parties (COP) has adequate information on GHG inventories and GHG emission trends;

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(b) To examine in a facilitative, open and transparent manner the quantitative and qualitative information submitted by Annex I Parties in accordance with the UNFCCC reporting guidelines on annual inventories for consistency with those guidelines and to provide the COP with a thorough technical assessment of the implementation of Annex I Parties' commitments under Articles 4.1(a) and 12.1(a) of the Convention;

(c) To gain experience relevant to the preparation of guidelines related to Articles 5, 7 and 8 of the Kyoto Protocol;

(d) To assist all Parties in improving the quality of their GHG inventories.

C. General approach

3. The technical review process comprises three stages:

(a) Initial check of annual inventories;

(b) Synthesis and assessment of annual inventories; and

(c) Expert review of individual inventories (individual review).

4. The stages of the technical review process complement each other so that, in general, for each Party, a stage is concluded before the next one is undertaken.

5. At all stages of the inventory review process, the secretariat will provide individual Parties with the opportunity to clarify issues or provide additional information. The Parties will also be sent drafts of their status report, the relevant country section of the synthesis and assessment report and their individual inventory report. Every effort will be made to reach agreement with the Party on the content of a report prior to its publication. In the case of a Party and the expert team being unable to agree on an issue, the Party may provide explanatory text to be included in a separate section of the report.

D. Initial check of annual inventories

6. The purpose of the initial check conducted by the secretariat is to determine promptly whether the information provided is complete and in the correct format to enable subsequent review stages to occur, and to communicate this determination to Parties.

7. The initial checks cover the national inventory submission and, in particular, the data electronically submitted in the common reporting format.

8. The initial checks will:

- (a) Indicate the date of receipt by the secretariat;
- (b) Identify if the submission was received in both hard-copy and electronic format that permits the review to be conducted;
- (c) Determine whether the submission is complete and that information has been provided in the correct format as called for in the UNFCCC reporting guidelines on annual inventories;
- (d) Identify any gaps in the data or documentation.

9. The assessment of completeness, according to 8 (c) above, will determine whether:

- (a) All sources, sinks and gases included in the 1996 IPCC Guidelines for National Greenhouse Gas Inventories are reported and any gaps are explained;
- (b) Methodologies are documented;
- (c) Estimates for summary totals and individual source categories are provided in mass units and in CO₂ equivalent using the IPCC 1995 global warming potential (GWP) values;
- (d) Total emissions estimates are provided for all required years (i.e. from the base year to the year of the current submission);
- (e) Unadjusted emission estimates are reported;
- (f) Estimates for CO₂ emissions from fossil fuel combustion are reported using the IPCC reference approach in addition to estimates derived using national methods;
- (g) Estimates for hydrofluorocarbon, perfluorocarbon and sulphur hexafluoride emissions are reported by individual chemical species;
- (h) Any recalculations are reported for the entire time series with transparent documentation.

10. The results of initial checks covering the elements listed in paragraph 8 above will be published on the UNFCCC web site as a status report for each Annex I Party, mainly in a tabular format, within four weeks of the date of receipt of the submission by the secretariat.

E. Synthesis and assessment of greenhouse gas inventories

11. The purposes of the synthesis and assessment of Annex I Parties' greenhouse gas inventories are to facilitate the consideration of inventory data and other information across Parties, and to identify issues for further consideration during the review of individual inventories.

12. The synthesis and assessment will cover the national inventory submission, any additional information submitted by Annex I Parties and previous national inventory submissions, where relevant.

13. The synthesis and assessment will be conducted annually by the secretariat in two phases, with the assistance of experts selected for the second phase.

14. The results of this stage of the technical review will be published on the UNFCCC web site as a synthesis and assessment report, divided into two sections and an addendum. The first section will provide information allowing comparisons across Annex I Parties and describe common methodological issues. The second section will contain a preliminary analysis of individual Annex I Party inventories, in particular, to identify outstanding issues requiring clarification during the individual review stage of the process. The addendum will contain tables and graphs based on Annex I Party inventory data.

15. The first section of the synthesis and assessment would compile and compare information across Parties, including, *inter alia*:

- (a) Implied emission factors, default values and ranges contained in the 1996 IPCC Guidelines;
- (b) Methodologies used in the preparation of the inventories;
- (c) Estimates of CO₂ emissions from fuel combustion using the IPCC reference approach;
- (d) Estimates of actual and potential emissions of hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride;
- (e) Inventory recalculations and consistency of time series;
- (f) Any recurring problems with reporting.

16. Section two of the synthesis and assessment would, for each individual inventory, *inter alia*:

- (a) Compare emissions or removal estimates, activity data, implied emission factors and any recalculations with data from previous submissions to identify, to the extent possible, any irregularities or inconsistencies;
- (b) Compare activity data with relevant external authoritative sources, if feasible, and identify any inconsistencies;
- (c) Examine whether any *good practice*, when adopted by the COP, is documented

and identify areas where it is not;

(d) Based on the above activities, identify source or sink categories requiring further consideration or clarification during the individual review stage;

(e) Assess the availability of documentation on national self-verification procedures or independent review in the technical review process;

(f) Assess the consistency of information on methodologies and emission factors in the common reporting format with related information in the national inventory report.

17. The addendum will compile and tabulate aggregate information and trends concerning greenhouse gas emissions by sources and removals by sinks for all gases and sources, and any other inventory information.

F. Review of individual greenhouse gas inventories

18. The purpose of the review of individual greenhouse gas inventories is to provide for a periodic detailed examination of the inventory estimates and procedures and methodologies used in the preparation of inventories, and to communicate the results to Parties.

19. Individual reviews will be carried out by teams of nominated experts, coordinated by the secretariat. The individual review will cover the Annex I Party's national inventory submission, supplementary material submitted by the Party and, as appropriate, previous inventory submissions. The expert team will consider the 'paper trail' of an inventory from the collection of data to the reported emission estimate.

20. During the trial period the following three operational approaches for the individual review and their possible combinations, will be tested: sending inventory information to experts, expert meetings in a single location and in-country visits of experts.

21. The individual review would, *inter alia*:

(a) Examine procedures and institutional arrangements for inventory development and management;

(b) Assess the extent to which issues and questions raised during previous review stages have been addressed and resolved;

(c) Examine departures from the requirements of the IPCC 1996 Guidelines and the UNFCCC reporting guidelines on annual inventories;

(d) Assess the extent to which the guidance on *good practice* is used, when adopted by the COP, in particular noting the:

- (i) Selection and use of methodologies and assumptions;
 - (ii) Development and selection of emission factors;
 - (iii) Collection and selection of activity data;
 - (iv) Recalculations of previously submitted inventory data;
 - (v) Reporting of methodologies used for estimating uncertainties; and
 - (vi) Inventory quality assurance and quality control procedures;
- (e) Examine data and the application of methodologies for source and sink categories identified during the second phase of the synthesis and assessment;
- (f) Examine record-keeping and documentation procedures;
- (g) Identify areas for further improvement of the inventories; and
- (h) Note possible ways in which to improve methodologies and reporting of inventory information.
22. The expert team will produce an individual inventory review report for publication in both hard-copy and electronic format based, *inter alia*, on the results of the tasks listed in paragraph 21 above. The individual inventory review report, in general, should not exceed 25 pages.
