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MATTERS RELATING TO COMMITMENTS

FIRST REVIEW OF INFORMATION COMMUNICATED BY EACH PARTY
INCLUDED IN ANNEX I TO THE CONVENTION

Addendum

Report on the initiative undertaken by countries and an organization included in
Annex I to the Convention with respect to national communications

Note by the interim secretariat

At its eighth session, the Committee expressed its thanks for a presentation on the work undertaken by a group of countries and an organization included in Annex I to the Convention relating to the preparation of national communications of information under the Convention. The initiative was seen as a useful contribution to the preparatory work of the Committee. The countries and the organization were invited to report to the Committee at its ninth session on further results achieved under the project, thus enabling the Committee to take advantage of their contribution.

In response to this invitation, Canada, on behalf of the countries and the organization involved, has submitted to the interim secretariat the report attached to this note. The report presents, for consideration by the Committee, consensus conclusions reached among experts from these Annex I countries and the organization with respect to possible elements of guidelines for first communications from Annex I Parties.



**REPORT ON THE INITIATIVE UNDERTAKEN BY COUNTRIES AND AN ORGANISATION
INCLUDED IN ANNEX I TO THE CONVENTION WITH RESPECT TO
NATIONAL COMMUNICATIONS**

Submitted by Canada on Behalf of Countries and an Organisation Included in Annex I

INTRODUCTION

1. In its discussion at the eighth session on the first review of information communicated by each Party included in Annex I to the Framework Convention on Climate Change (FCCC), the Intergovernmental Negotiating Committee (INC) took note of the initiative by a group of countries and an organisation included in Annex I with respect to the preparation of national communications.¹ It asked Annex I countries and organisations to report to INC IX on results achieved under this project to enable the INC to take advantage of its work. This report responds to the INC's request.

2. This report is meant to serve as a supplement to INC document A/AC.237/45 on guidelines and procedures for first communications from Annex I Parties. It hopes to provide useful input to the INC by bringing forward additional information for its consideration during discussion of document A/AC.237/45. In order to help facilitate this discussion, the report includes cross-references to relevant sections of document A/AC.237/45.

3. The report presents, for consideration by the INC, the project's conclusions on recommendations for possible elements of guidelines for first communications from Annex I Parties. These recommendations represent a consensus reached among the experts from those countries and an organisation included in Annex I who attended a meeting on national communications held January 17-19, 1994 in Berlin (see Annex A for list of countries and the organisation attending).

**THE NATIONAL COMMUNICATIONS PROJECT OF COUNTRIES AND AN ORGANISATION
INCLUDED IN ANNEX I**

4. In July 1993, experts from Annex I countries and organisations met informally to discuss the communication of information under the FCCC. Numerous methodological, technical and policy questions were raised. At the end of the meeting, experts asked the Organisation for Economic Co-operation and Development and the International Energy Agency (OECD/IEA Secretariat) to undertake a project to address these questions.

5. Experts from Annex I countries and organisations established the following objectives for the project:

- (a) to provide guidance to Annex I countries and organisations in their preparation of national communications under the Convention; and
- (b) to develop recommendations that could be forwarded to the INC for its consideration during discussions on the communication of information under the Convention.

6. Experts from Annex I countries and organisations agreed that the project should focus on three elements of national communications in detail: greenhouse gas inventories; the description of policies, programmes and measures; and the projection of greenhouse gas emissions and removals.²

¹ When used in this report, the term "national" also refers to regional economic integration organisations.

² The term "greenhouse gas emissions and removals" has been used in this report to describe anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol.

In each of these areas, the project was asked to begin to elaborate:

- criteria for complete, comparable and transparent communications;
- a common structure and options for content; and
- a minimum set of information which could be recommended for inclusion.

While the Convention also requires Annex I Parties to communicate information relevant to their other commitments under the Convention, experts agreed that these areas would not fall within the scope of the project.

7. Other project tasks included: outlining the methodological options for estimating the effects of measures on greenhouse gas emissions and removals; identifying how national communications might be structured to assist the Conference of the Parties (CoP) in making its global assessment of progress; and examining the special situation of countries with economies in transition with respect to national communications.

8. In October and November 1993, project teams made up of national experts and members of the OECD/IEA Secretariat visited six Annex I countries to study their preliminary national communications or plans to prepare such communications, and to survey the views of national experts on the range of issues identified above. The countries visited were: Canada, Germany, Hungary, Poland, Switzerland and the United States. Preliminary findings of the project formed the basis for discussions among experts from Annex I countries and organisations at their January meeting in Berlin. This report summarises the results of those discussions and forwards a series of recommendations for consideration by the INC.

POSSIBLE GUIDELINES FOR FIRST COMMUNICATIONS FROM ANNEX I PARTIES

9. Experts from Annex I countries and organisations, at their January meeting in Berlin, agreed to recommend that the INC consider the following guidelines for the minimum information to be included in first communications from Annex I Parties. All of the recommendations contained in this report are presented for consideration by the INC during its discussion of document A/AC.237/45. In some areas, Parties are encouraged to provide additional information in their communications, and in these instances Parties would have the flexibility to include this information at their discretion.

10. Paragraphs 35-39 of this report underline the importance of the provisions in Article 4.6 of the Convention, which calls for a certain degree of flexibility to enhance the ability of Annex I Parties undergoing the process of transition to a market economy to address climate change. These paragraphs outline the type of flexibility deemed necessary by Parties with economies in transition with regard to initial communications.

Cross-Cutting Issues

11. The minimum set of information identified in guidelines for first communications should be communicated by a Party to the CoP in a single document. Any additional or supporting information may be supplied in the main document or through other documents such as a technical annex.

12. Quantitative data related to inventories and projections of greenhouse gas emissions and removals should be presented on a gas by gas basis with emissions by sources listed separately from removals by sinks.

13. Further to paragraph 12, Parties may choose to use global warming potentials (GWPs) to reflect their inventories and projections in carbon-equivalent terms using information provided by the IPCC, pending the decision of CoP 1. The question of whether or not the use of GWPs should be required as part of national communications was recommended for consideration by the INC. (See Para. 22 in INC Document A/AC.237/45).

Base Year/Time Horizon (See Paras. 14-16 in INC Document A/AC.237/45)

14. The base year for Annex I Parties is 1990. Inventory data should be provided for the base year. Parties may, if they so desire, also provide greenhouse gas inventory information for years subsequent to 1990.

15. With respect to projections of greenhouse gas emission and removal levels, and specific estimates of the effects of policies and measures on those levels, data should be provided for the year 2000. In view of the ultimate objective of the Convention and the intent of modifying longer-term trends in emissions, Parties are encouraged to include projections, if possible on a quantitative basis, that go beyond 2000 (for example, to 2005 and/or 2010). Parties are also encouraged to provide data for one or more years prior to 2000.

Treatment of Uncertainty (See Para. 19 in INC Document A/AC.237/45)

16. When national communications present quantitative data related to inventories and projections of greenhouse gas emission and removal levels, the level of uncertainty associated with these data and underlying assumptions should be discussed qualitatively and, where possible, quantitatively.

Specific Elements of National Communications

Inventories (See Paras. 20-23 in INC Document A/AC.237/45)

17. Parties should strive to provide inventory data for all anthropogenic sources and sinks of greenhouse gases not controlled by the Montreal Protocol. At a minimum, information should be provided on the following greenhouse gases and precursors: CO₂, CH₄, N₂O, CO, NO_x and VOCs. Parties are encouraged to provide information on other greenhouse gases including, *inter alia*, PFCs and HFCs. Where methodological or data gaps exist, information should be presented in a transparent manner.

18. Presentation of information on inventories in national communications should be structured to facilitate the summary, aggregation and international review of that information. The IPCC Draft Guidelines offer a default methodology available to any country that wishes to use it. Parties that already have an established and comparable methodology could continue to use it provided that they include sufficient documentation to support the data presented. Standard tables and formats recommended in the IPCC Draft Guidelines should be used. If Parties wish in addition to present their inventory data in other forms, *inter alia*, greenhouse gas emissions per capita, this information could be provided in a section of the national communication dealing with national circumstances.

19. To ensure transparency, enough information should be provided to allow a third party to reconstruct the inventory from national activity data, emission factors and other assumptions, and to evaluate the reasonableness of the results. Annex I Parties should follow the IPCC Draft Guidelines with respect to the presentation of methodologies, activity data, emission factors and other assumptions.

Policies and Measures (See Paras. 24-28 in INC Document A/AC.237/45)

20. To provide as complete an overview as possible, national communications should describe all of a Party's policies and measures implemented or committed to since the base year, that the Party believes contribute significantly to its efforts to reduce emissions and enhance sinks of greenhouse gases. These actions need not have as a primary objective the limitation of greenhouse gas emissions.

21. Parties may also provide information on actions implemented by regional and local governments or the private sector, ensuring that double-counting is avoided.

22. Policies and measures should be organised by gas and by sector. This should, to the extent possible, be consistent with the categories set out in the IPCC Draft Guidelines for inventories. Their description should, in principle, be structured along the following lines, as appropriate:³

Carbon Dioxide Emissions

- Energy and Transformation Industries
- Transport
- Industry (energy-related)
- Industry (non-energy)
- Residential and Commercial
- Agriculture (energy-related)
- Cross-Sectoral

Carbon Dioxide Sinks

- Land Use Change and Forestry

Methane Emissions

- Waste management (including sewage treatment)
- Agriculture (non-energy)
- Fugitive Fuel Emissions
- Industry (non-energy)
- Industry (energy-related)

³ Parties need include only those sectors where they have specific policies or measures to describe. Sectors might be further disaggregated, or other sectors added, as appropriate. Impacts of policies and measures should be included under each appropriate gas and sector. They need be described only once, where they have the most significant impact, with appropriate cross-references.

Nitrous Oxide Emissions

- Industry (non-energy)
- Industry (energy-related)
- Agriculture (non-energy)
- Transport
- Energy and Transformation Industries

Other Greenhouse Gases and Precursors⁴

- Transport
- Energy and Transformation Industries
- Industry (non-energy)
- Industry (energy-related)
- Residential and Commercial
- Land Use Change and Forestry
- Solvent and Other Product Use

23. To facilitate transparency, enough detail should be provided about each individual policy and measure described in the national communication to allow a third party to understand the action's objective and degree of implementation, as well as how the greenhouse gas effects of the action will be monitored over time. The following information should be included in the description of individual policies and measures:

- (a) the objective(s) of the measure in terms of the gas(es) and sector(s) targeted;
- (b) the type of policy instrument used by the measure (e.g., regulatory, fiscal, education, voluntary, research and development);
- (c) how the policy or measure interacts with other policies and measures described;
- (d) the status of implementation of the policy or measure (this should, where appropriate, make reference to a section of the national communication related to national circumstances that describes the policy-making process in the country or organisation);
- (e) how the measure is expected to work or is working; and
- (f) intermediate indicators of progress for policies and measures (these may be related to legislative processes, emissions-related activities or the broader objectives of the policies and measures).

24. In their description of policies and measures, Parties may also provide information relating to the cost of the policy or measure.

25. Parties may also briefly describe, in a section of the national communication dealing with national circumstances, policies and measures adopted and implemented before the base year that will have a significant effect on greenhouse gas emissions and removals after the base year.

⁴

Other greenhouse gases might be disaggregated if appropriate.

26. Parties may also briefly describe, in a separate section of the national communication, policies and measures under consideration that have not yet been adopted or committed to.

Projections and Specific Estimates of the Effects of Measures (See Paras. 29-31 in INC document A/AC.237/45)

27. In accordance with Article 4.2(b) of the FCCC, national communications should include a projection of future greenhouse gas emission and removal levels. The projection should, to the extent possible, incorporate the effects of policies and measures that are implemented or committed to when the national communication is produced (i.e., "with-measures" scenario). In the interest of transparency, Parties are encouraged to include "without measures" scenarios.

28. At a minimum, projections would be made of future emissions and removals of the following three greenhouse gases: CO₂, CH₄, and N₂O. Parties are encouraged to provide projections of other greenhouse gases as well. Where methodological or data gaps exist, information should be presented in a transparent manner.

29. While Parties should present the projection on a gas by gas basis, as indicated in paragraph 12, they may also disaggregate the results by sector.

30. In accordance with Article 12.2(b) of the FCCC, national communications should provide a specific estimate of the total effect on greenhouse gas emissions and removals of policies and measures. This specific estimate should, to the extent possible, take into account all policies and measures implemented or committed to since the base year (as outlined under paragraph 20 of this report).

31. In addition, Parties should, wherever possible, provide estimates of the effect of individual policies and measures on future greenhouse gas emissions and removals.

32. In the interests of transparency, when projecting greenhouse gas emissions and removals, and estimating the specific effect of policies and measures on emissions and removals, Parties should:

- be free to use the model(s) and/or approach(es) they are most familiar with and that, in their view, provide the most accurate results;
- provide enough information to allow a third party to obtain a qualitative understanding of the model(s) and/or approach(es) used and their relationship to each other;
- summarise strengths and weaknesses of the model(s) and/or approach(es) used and provide an indication of their scientific and technical credibility; and
- ensure that the model(s) and/or approach(es) used account for any overlap or synergies that may exist between different policies and measures.

33. To ensure transparency, national communications should include enough information to provide a third party with a quantitative understanding of the key assumptions used to develop projection(s) of greenhouse gas emissions and removals and specific estimate(s) of the effects of policies and measures on emissions and removals. Values of key assumptions should be clearly presented for the years 1990 and 2000. Parties could also provide information for the years 1990 and 2000 on other key outputs of the model(s) and/or approach(es) used. Parties may draw upon the illustrative lists of possible key assumptions and outputs attached as Annex B.

34. When providing a qualitative discussion of the uncertainty associated with the results of projections and specific estimates of effects (see Paragraph 16), Parties are encouraged to present the findings of sensitivity analyses illustrating how the results would be affected by changes in key assumptions.

Special Considerations for Parties with Economies in Transition (See Paras. 42-43 in INC Document A/AC.237/45)

35. The countries with economies in transition emphasise the importance of the special circumstances in which they currently find themselves. The beginning of this decade was a milestone in the history of these countries. The period of centrally planned economies was terminated and the transition to market economies began. As a result of these changes and current and future economic uncertainties, Article 4.6 of the Convention, which provides that the economies in transition may seek a certain degree of flexibility in fulfilling the commitments of the Convention, is very important for these countries.

36. For the reasons mentioned above, the year 1990 would not be a particularly appropriate base year for the Parties with economies in transition. Pursuant to Article 4.6 of the Convention, the Parties with economies in transition may seek to use as a base year for greenhouse gas emission inventories a year other than 1990. The preferred base year varies from country to country in accordance with their historical level of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol. If a base year other than 1990 is selected, countries with economies in transition will undertake best efforts to provide additional data for 1990 as well.

37. Pursuant to the guidelines recommended in this report, Parties with economies in transition will follow the IPCC methodology in preparing their national inventories. In this respect, they stress the urgent need to receive the IPCC Draft Guidelines, workbook and software as soon as possible. These Parties agree to present data on CO₂, CH₄, and N₂O emissions on a gas by gas basis and to make best efforts to provide the data on a sectoral basis.

38. The countries with economies in transition will be able to project their economic activities only for the short-term. The projection of future emissions for Parties with economies in transition will not extend beyond 2000 in their first communications due to the unreliability of methodologies and data. Keeping in mind the special problems of projections in a transitional period, the countries stress the importance of the co-operation envisaged by Article 4.1(g), (h) and (i) of the Convention.

39. The Parties with economies in transition will make every effort to meet the provisions of the guidelines for the preparation of first communications but expect to face some difficulties. In order to facilitate the process of preparing these communications, it would be desirable to promote collaborative efforts between Annex I Parties in the spirit of Article 4.1(g), (h) and (i) of the Convention.

FUTURE WORK

40. Participants in the Berlin meeting agreed that the initiative undertaken by countries and an organisation included in Annex I to the Convention with respect to national communications has been a valuable experience for all participants. The project has provided a forum for co-operation between countries with economies in transition and other Annex I countries and an organisation. In light of the success of the project in dealing with technical issues related to national communications, the participants in the Berlin meeting agreed that continued co-operation would be extremely useful. For example, the question of how national communications could be structured to assist the CoP in making its global assessment of progress under the Convention requires further elaboration. Countries and an organisation included in Annex I will meet on the margins of INC IX to discuss future work for the project.

ANNEX A

Annex I Countries and the Organisation that were Represented
at the January 17-19 Meeting in Berlin

Australia
* Belarus
Belgium
* Bulgaria
Canada
* Czech Republic
Denmark
Commission of the European Communities
Finland
France
Germany
* Hungary
Iceland
Ireland
Italy
Japan
* Latvia
The Netherlands
Norway
* Poland
* Romania
* Slovakia
Sweden
Switzerland
* Ukraine
United Kingdom
United States

* Countries with economies in transition.

ANNEX B

Examples of Key Assumptions that may be Required to Project Greenhouse Gas Emissions and Removals or to Estimate the Specific Effects of Policies and Measures

- World Oil Price (US\$/bbl)
- Domestic Energy Prices (national currency/litre - fuel oil, gasoline, diesel; national currency/tonne - coal; national currency/kwh - electricity)
- GDP Level (national currency) and Annual Growth Rate (consistent with economic forecasts of the Party)
- Population Level (millions) and Compound Annual Growth Rate
- Interest Rate
- Annual Rate of Autonomous Energy Efficiency Improvement in Total and by Sector
- Total Housing, Including Turnover (number of dwellings)
- Commercial Floor Space, Including Turnover (thousands of square kilometres)
- Index of Manufacturing Production (specify index year = 100)
- Index of Industrial Production (specify index year = 100)
- Average New Vehicle Fuel Economy by Vehicle Type (litres/100 km)
- Vehicle Kilometres Travelled by Vehicle Type (thousands)
- Policy Context (description of significant measures that reduce emissions or enhance removals that have been incorporated in the projection, as well as how they were incorporated)
- Rate of Penetration and Absolute Levels of Use of New End-Use Technologies

Examples of Other Key Outputs that may be Produced when Projecting Greenhouse Gas Emissions and Removals or Estimating the Specific Effects of Policies and Measures

- Primary Energy Production by Fuel Type (Petajoules)
- Primary Energy Demand by Fuel Type, as well as Electricity (Petajoules)
- Energy Demand by Sector (Petajoules)
- Final Energy Consumption by End Use (Petajoules)
- Head of Livestock (thousands by species)
- Rice Cultivation (area cultivated in hectares)
- Nitrogen Fertilizer and Manure Use (tonnes of nitrogen)
- Forest Area Cleared (thousands of hectares)
- Waste Landfilled (tonnes)
- Wastewater Biochemical Oxygen Demand (kg)
- Energy Imports/Exports (Petajoules)
- Primary Energy per Unit of Production in the Industrial and Commercial Sectors
- Energy Consumption per Square Metre in the Residential and Commercial Sectors
- Primary Energy for Transport (per tonne-km of passenger-km)
- Electricity and Heat Produced per Unit of Fuel Used in Thermal Power Stations