



UNITED
NATIONS



Framework Convention
on Climate Change

Distr.
GENERAL

FCCC/SBI/2002/INF.9
24 September 2002

ENGLISH ONLY

SUBSIDIARY BODY FOR IMPLEMENTATION

Seventeenth session

New Delhi, 23–29 October 2002

Item 4 (b) of the provisional agenda

**NATIONAL COMMUNICATIONS FROM PARTIES NOT INCLUDED IN
ANNEX I TO THE CONVENTION**

**REVISION OF THE GUIDELINES FOR THE PREPARATION OF NATIONAL
COMMUNICATIONS FROM PARTIES NOT INCLUDED IN ANNEX I TO
THE CONVENTION**

**Compilation of views by Parties on the proposed guidelines for the preparation of
national communications from Parties not included in Annex I to the Convention**

Note by the secretariat

I. INTRODUCTION

A. Mandate

1. The Conference of the Parties (COP), by its decision 32/CP.7, invited Parties to submit, by 5 August 2002, their views on the proposed improved guidelines for the preparation of national communications from Parties not included in Annex I to the Convention (non-Annex I Parties). In response to this invitation, eight submissions were received, from Australia, Brazil on behalf of the G77 and China, China, Denmark on behalf of the European Community and its member States and of Croatia, Cyprus, Czech Republic, Hungary, Lithuania, Poland, Slovakia and Slovenia,¹ Myanmar, New Zealand, Uzbekistan and the United States of America.

2. By the same decision the COP requested the secretariat to prepare a consolidated report on the views submitted, for consideration by the subsidiary bodies at their seventeenth sessions.

¹ In the following text the abbreviation EU for European Union is used when referring to the views submitted by Denmark on behalf of the European Community and its member States and of Croatia, Cyprus, Czech Republic, Hungary, Lithuania, Poland, Slovakia and Slovenia.

B. Scope

3. This report provides a summary of general comments on the proposed improved guidelines (section II), and highlights the detailed views expressed by Brazil on behalf of the G77 and China on the various sections of the proposed improved guidelines (section III).

II. GENERAL COMMENTS AND PROPOSALS

4. Australia, the EU, New Zealand, the United States and Uzbekistan expressed the view that the proposed guidelines provided a good framework for reporting on various elements of the national communications. Australia, the EU, New Zealand and the United States held the view that the proposed guidelines were a vast improvement on the existing guidelines as contained in the annex to decision 10/CP.2, and provided a good basis for further work towards having the new guidelines approved by the COP at its eighth session (COP 8).

5. China held the view that the guidelines annexed to decision 10/CP.2 should be the basis for the future improvement of the guidelines, considering that they played a positive and effective role in helping developing country Parties to prepare their national communications.

6. New Zealand welcomed the open process by which the guidelines were being revised. The United States expressed appreciation to the members of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) and the secretariat for the time and expertise they devoted to preparing the proposed guidelines. Myanmar held the view that the preparation of improved guidelines should be a continuous process.

7. The EU expressed the view that the focus of the national communications should depend on national circumstances. It pointed out that Parties with relatively low levels of greenhouse gas (GHG) emissions and high vulnerability to the effects of climate change should put the emphasis on vulnerability and adaptation, whereas Parties with higher emission levels and greater capacities should seek to increase consistency, transparency, accuracy and completeness in GHG inventories.

8. Myanmar held the view that in order to guarantee the availability of all national communications, a group of experts from the secretariat, or an expert team, should be established to assist the preparation of the national communications by Parties where guidelines cannot be followed due to some limitations. The EU acknowledged the important contribution provided by the CGE in the process of preparing national communications from non-Annex I Parties and took note of the importance of technical support to guide non-Annex I Parties in preparing their national communications.

9. The EU considered it important that the guidelines clearly reflect the reporting commitments laid down in Article 4 of the Convention and expressed the view that the improved guidelines should mainly serve as technical guidance to facilitate the preparation of national communications by non-Annex I Parties. In addition, the improved guidelines should provide guidance to the operating entity of the financial mechanism and other multilateral and/or bilateral funding sources. China stressed its view that the objective of improving the current guidelines was to help non-Annex I Parties to overcome the difficulties they meet in preparing their initial national communications. It therefore underlined its position that the any new guidelines shall not overstretch non-Annex I Parties' capacities and shall not create additional difficulties for them.

10. Australia expressed the view that it may be necessary to clarify where the proposed guidelines place a mandatory role versus where they encourage or endorse a course of action. It pointed out that, for example, paragraph 13 could be misunderstood as *requiring* Parties to develop their own emission factors and activity data rather than *encouraging* them to use country-specific emission factors in their inventory

reporting where they have been developed. The view of Australia was that the latter interpretation was the most appropriate and consistent with the IPCC guidelines for national GHG inventories. It also held the view that it could be useful to review the proposed guidelines as a whole to ensure that the focus is on *how to report* on specific commitments and activities.

11. Australia, the EU and New Zealand expressed the view that the improved guidelines should apply to all Parties which start preparing their second national communications after COP 8, and that Parties which had already started preparing their second national communications should be encouraged to apply the improved guidelines.

Frequency of submission

12. The EU proposed that the non-Annex I Parties shall submit their national communications every three years, to assist the non-Annex I Parties in maintaining the national teams that have been established for preparing the national communications and to strengthen the capacity-building in relation to the UNFCCC process. The United States expressed the view that national communications from non-Annex I Parties should be submitted no more than five years after their initial submissions.

13. The EU proposed that the non-Annex I Parties, especially those with high emission levels, should provide an inventory on an annual basis to the extent their capacities allow. The United States recommended that GHG inventories should be submitted every two to three years in order to ensure that global trends could be calculated accurately. It also suggested that emission inventories from least developed country Parties (LDCs) should be submitted only on a five-year cycle in conjunction with their national communications.

National circumstances and sustainable development programmes

14. The EU proposed that information to be reported under these headings should reflect the country's national sustainable development strategy/poverty reduction strategy, or its plans to prepare and implement a strategy, and that reporting should be to the extent that the capacities of the Parties allow.

National greenhouse gas inventories

15. The EU proposed that the reporting section on inventories in the revised guidelines should be as compatible as possible with the reporting guidelines of Annex I Parties in order to make GHG inventories more comparable and to facilitate compilation and synthesis of aggregate GHG information. It also proposed that the use of the revised 1996 IPCC Guidelines should be mandatory for all Parties. New Zealand indicated that the proposed guidelines provided improved guidance for the reporting of national GHG inventories and proposed to include a further footnote in table 1 of the proposed guidelines to make it clear that memo items were not included in the national total. The United States stressed the importance of applying, to the extent possible, the IPCC Good Practice Guidance in order to improve the consistency and comparability of inventories.

Vulnerability and adaptation to climate change

16. The EU expressed the view that vulnerability and adaptation should be evaluated in the context of country-specific sustainable development and/or poverty reduction strategies, and that synergies should be identified with other national plans/strategies, in particular those related to the United Nations Convention to Combat Desertification (UNCCD), the Convention on Biological Diversity (CBD) and the United Nations Forum on Forests (UNFF). It also considered it important to see this chapter in the context of national adaptation programmes of action (NAPAs) in so far as the NAPAs for some countries

constitute the first step in the preparation of initial national communications. The United States expressed the view that consistency would be useful in the structure of the proposed guidelines with regard to Section V on adaptation-related issues and Section VI on mitigation, and to other sections where possible.

17. Uzbekistan proposed the inclusion of web site addresses for all IPCC documents mentioned, especially those relating to adaptation and mitigation.

Mitigation of climate change

18. The EU considered this chapter highly relevant for some non-Annex I Parties that have better capacities and/or higher absolute emissions. It also stressed its view that mitigation should be evaluated in the context of country-specific sustainable development and/or poverty reduction strategies.

Technology transfer

19. The United States expressed the view that Section VII of the proposed guidelines (development and transfer of technologies) would be enhanced with a reference to reporting on ways of improving the enabling environment for the transfer of environmentally sound technologies, thereby encouraging private sector investments (e.g. removal of market barriers).

Funding

20. The EU expressed the view that reporting of information as outlined in the proposed improved guidelines would imply further guidance on facilitating assistance for the preparation of national communications. It noted that the need for financial and technical support would vary according to national circumstances, the content of the national communications, the work done in the initial and/or subsequent national communications, and NAPAs in the case of LDCs, and that support should be tailored accordingly.

21. Australia recommended that consideration be given to the subsidiary bodies at their seventeenth sessions preparing two draft decisions for consideration at COP 8: one relating to the improved guidelines and the other relating to the timing, frequency, funding and review of national communications. It pointed out that finalization of revised guidelines would also enable detailed consideration to be given to the financial and technical issues associated with new guidelines.

22. The EU proposed that deadlines for applying for funds to support the preparation of the second and/or subsequent national communications should be fixed relative to the submission of the initial or latest one, in order to avoid further delays in the submissions of second and/or subsequent national communications. The United States expressed the view that in order to maintain a five years cycle for the submission of the national communications, it was important that non-Annex I Parties initiate their requests for funding from the Global Environment Facility (GEF) in a timely manner, e.g., no later than two years after their previous submissions.

23. The EU expressed the view that the GEF Secretariat should continue to provide detailed information on the financial support provided to non-Annex I Parties for the preparation of their national communications. It also held the view that funding for reporting purposes should not cover basic field work and that developing countries should be encouraged to use existing funding opportunities under the GEF for regionally or nationally based field work in the areas of adaptation and mitigation. China stressed its view that positive elements of the current guidelines as contained in the annex to decision 10/CP.2 should be maintained, such as those contained in paragraph 13 which encourage non-Annex I Parties to formulate cost-effective national, and where appropriate regional, programmes aiming at the

improvement of the quality of local emission factors and appropriate data gathering, and to submit requests for financial and technical assistance to the interim operating entity of the financial mechanism of the Convention in addition to their request for support for the preparation of their initial communications..

III. VIEWS EXPRESSED BY G77 AND CHINA

24. The G77 and China submitted a proposal containing detailed modifications to the Chairman's text. In the following sections, the secretariat has typed a line through passages of the Chairman's text that the G77 and China propose to be deleted. Additional text proposed by the G77 and China is written in bold italics.

I. INTRODUCTION

A. Objectives

1. Taking into account Article 4, paragraphs ~~1 and~~ 7, of the Convention, the principal objectives of the guidelines for the preparation of national communications from Parties not included in Annex I to the Convention (non-Annex I Parties) shall be:

(a) To assist non-Annex I Parties in meeting their commitments under ~~Article 4, paragraph 1, and Article 12, paragraph 1, of the Convention, as well as under other relevant decisions of the Conference of the Parties (COP);~~

(b) To encourage the presentation of information in a consistent, transparent and comparable, as well as flexible manner, taking into account specific national circumstances;

(c) To facilitate the presentation of information on support required for the preparation and improvement of ~~elements in national communications from non-Annex I Parties, as outlined in these guidelines;~~ ***the completeness and reliability of activity data, emission factors and estimations in the national communications from non-Annex I Parties.***

(d) To serve as policy guidance to the operating entity of the financial mechanism for the timely provision of financial support needed by developing country Parties in order to meet the agreed full costs of complying with their obligations under Article 12, paragraph 1, as referred to in decisions 11/CP.2, 2/CP.4, 2/CP.7 and 6/CP.7;

~~(e) To facilitate the process of compilation and consideration of the communications, including the preparation of compilation and synthesis reports in accordance with the relevant decisions of the COP;~~

(e) (f) To ensure that the COP has sufficient information to carry out its responsibility for assessing the overall aggregated effects of steps taken by the Parties towards the implementation of the Convention ***in the light of the latest scientific assessments concerning climate change***, as referred to in Article 10, ***paragraph 2, subparagraph (a)***, of the Convention.

B. Scope

~~2. The guidelines cover the reporting of information on, inter alia, national circumstances; the integration of climate change concerns into sustainable development programmes; the estimation of national greenhouse gas (GHG) inventories; programmes containing measures to facilitate adequate adaptation to climate change; programmes containing measures to mitigate climate change; the development and transfer of technologies; research and systematic observation; education, training and~~

public awareness; information and networking; capacity building, constraints and gaps, and related financial, technical and capacity needs.

3. Parties are encouraged to include any other information they consider to be relevant to the achievement of the objective of the Convention and suitable for inclusion in their national communications, including, if feasible, material relevant to calculations of global emission trends.

2. *In accordance with Article 12, paragraph 1, of the Convention, the national communication shall include the following elements of information:*

(a) *A national inventory of anthropogenic emissions by sources and removal by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties;*

(b) *A general description of steps taken or envisaged by the non-Annex I Party to implement the Convention; and*

(c) *Any other information that the non-Annex I Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends.*

II. NATIONAL CIRCUMSTANCES

3. 4. *Non-Annex I Parties should may provide a description of their national and regional development objectives and priorities, including priorities, objectives and circumstances, on the basis of which they will address climate change and its adverse impacts. This description may include information on features of their geography, climate and economy which may affect their ability to deal with mitigating and adapting to mitigate and adapt climate change, as well as information regarding their specific needs and concerns arising from the adverse effects of climate change and/or the impact of the implementation of response measures, as contained in Article 4, paragraphs 8 and, as appropriate, in Article 4, paragraphs , 9 and 10, of the Convention.*

5. Parties should use, as appropriate, the following headings to describe their national circumstances: geographic profile, climatic profile, population profile, economic profile, energy, transport, industry, mining, tourism, waste, agriculture and fisheries, forest, land use, health, environment, education and research institutions, and other circumstances.

4. 6. *Non-Annex I Parties are encouraged to provide a summary of relevant information regarding their national circumstances, as appropriate, in tabular form.*

5. 7. *Non-Annex I Parties should provide a description of existing institutional arrangements relevant to the preparation of their national communications on a continuous basis, as well as a list of perceived deficiencies in this area.*

III. INFORMATION RELATING TO THE INTEGRATION OF CLIMATE CHANGE CONCERNS INTO SUSTAINABLE DEVELOPMENT PROGRAMMES

8. With a view to facilitating the formulation and implementation of sustainable development programmes, Parties are encouraged, as appropriate, to provide information on national and/or sectoral programmes which they have planned or implemented addressing climate change issues.

IV- III. NATIONAL GREENHOUSE GAS INVENTORY INFORMATION

6. 9. Each *Non-Annex I* Party shall, in accordance with ~~Article 4, paragraph 1(a), and Article 12, paragraph 1(a),~~ develop, periodically update and communicate to the COP information on *subparagraph (a), communicate to the Conference of the Parties a national inventory of* anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, *to the extent its capacities permits,* following the provisions in these guidelines.

7. *Taking into account Article 4, paragraph 7 and, that the developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1, the communication of this information is dependent on the effective implementation by developed country Parties and other developed Parties included in Annex II of their commitments in accordance with Article 4 paragraph 3 of the Convention.*

A. Inventory years

10. ~~Each Party shall estimate and report national GHG inventories for the year 1994 and periodically thereafter, in accordance with time frames to be established by the COP. Parties should, to the extent possible and taking into account data availability, provide time series of inventory information from 1994 or 1990 up to the most recent year reported.~~

B. Methodologies—A. Technical Guidelines

Methodologies

8. 11. *Non-Annex I* Parties should use the *Revised 1996 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories*, hereinafter referred to as the IPCC Guidelines, for estimating and reporting their national GHG inventories.

9. 12. In accordance with the IPCC Guidelines, Parties may use different methods (tiers) included in the Guidelines, giving priority to those methods which are believed to produce the most accurate estimates, depending on national circumstances and the availability of data. Parties can also use national methodologies where they consider these to be better able to reflect their national situation, ~~provided that these methodologies are accessible to the international community.~~ *and provided they are documented transparently.*

10. 13. The IPCC Guidelines offer a default methodology which includes default emission factors and in some cases default activity data. As these default factors, data and assumptions may not always be appropriate for specific national circumstances, ~~it is preferable that Parties~~ *non-Annex I Parties are encouraged to develop and* use their country-specific emission factors and activity data, ~~provided that these have been developed in a scientifically sound manner, are considered to be reliable and are documented~~ *these data* transparently.

11. 14. *Non-Annex I* Parties are encouraged, as appropriate and to the extent possible, to apply the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as the *IPCC Good Practice Guidance*), taking into account the need to improve transparency, consistency, comparability, completeness and accuracy in inventories. ~~In so doing, Parties could consider:~~

- (a) ~~Identifying key source categories as described in the IPCC Good Practice Guidance;~~
- (b) ~~Implementing quality assurance and quality control (QA/QC) procedures;~~

- (c) Archiving all relevant inventory information;
- (d) Estimating uncertainties, including quantitative information, where available.

C. B. Reporting

Institutional arrangements

~~12.~~ ~~15.~~ *Non-Annex I* Parties are encouraged to describe procedures followed and arrangements made undertaken to collect and archive data for the preparation of national GHG inventories, as well as efforts undertaken to make this a continuous process, including information on the role of the institutions involved.

Estimates of emissions and removals

~~13.~~ ~~16.~~ Each *non-Annex I* Party shall *should, as appropriate and to the extent possible*, provide in its national inventory, on a gas-by-gas basis and in units of mass, estimates of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) *anthropogenic* emissions by sources and removals by sinks.

~~14.~~ ~~17.~~ *Non-Annex I* Parties should, *as appropriate and* to the extent possible, report on *anthropogenic emission by sources of other greenhouse gases* other gases such as carbon monoxide (CO), nitrogen oxides (NO_x), and non-methane volatile organic compounds (NMVOCs). Parties are encouraged to provide information on sulphur oxides (SO_x).

~~15.~~ ~~18.~~ *Non-Annex I* Parties are encouraged, *as appropriate and* to the extent possible, to provide information on *anthropogenic emissions by sources of* hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

~~16.~~ ~~19.~~ *Non-Annex I* Parties are encouraged, to the extent possible, *and if disaggregated data are available*, to estimate and report CO₂ fuel combustion emissions using both the sectoral and the reference approaches, and to explain any large differences between the two approaches.

~~17.~~ ~~20.~~ *Non-Annex I* Parties ~~should~~ *are encouraged, to the extent possible and if disaggregated data are available*, to report emissions from international aviation and marine bunker fuels as two separate entries *separately* in their inventories. Emission estimates from these sources should not be included in the national totals.

~~21~~ — Parties wishing to report on GHG emissions and removals expressed in CO₂ equivalents should use the global warming potentials (GWP) provided by the IPCC in its Second Assessment Report (“1995 IPCC GWP Values”) based on the effects of GHGs over a 100-year time horizon.

~~18.~~ ~~22.~~ *Non-Annex I* Parties ~~should~~ *are encouraged to* provide information on methodologies used ~~in estimating GHG emissions and removals~~, *the estimation of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol*, including a brief explanation of the sources of emission factors and activity data. If Parties estimate emissions and removals from country-specific sources and/or sinks which are not specified in part of the IPCC Guidelines, they should explicitly describe the source and/or sink categories, methodologies, emission factors and activity data used in their estimation of emissions, as appropriate. *Parties are encouraged to identify areas where data may be further improved in future communications through capacity building and thus encouraged to formulate cost-effective national, and where appropriate regional, programmes aiming at the improvement of the quality of local emission factors and appropriate data gathering.*

19. *Non-Annex I Parties are encouraged to provide information on the level of uncertainty associated with inventory data and their underlying assumptions, and to indicate the methodologies used, if any, for estimating these uncertainties.*

Tables

20. ~~23.~~ Each *non-Annex I* Party shall *should* use tables 1 and 2 of these guidelines in reporting its national GHG inventory, taking into account the provisions established in paragraphs ~~16 to 18~~ **13 to 15 above. In preparing those tables, Parties should strive to present information which is as complete as possible. Where numerical data are not provided, Parties should use the notation keys as indicated.**

21. ~~24.~~ *Non-Annex I* Parties are encouraged to include in their national communications the inventory sectoral tables and worksheets² of the IPCC, where applicable, as an appendix to the national GHG inventory section, in both electronic and hard copy format.³

Uncertainties

~~25. Parties are encouraged to provide information on the level of uncertainty associated with the inventory data and their underlying assumptions. Parties are encouraged to provide, to the extent possible, quantitative information on uncertainties, where this is available, and to indicate the methodologies used for estimating these uncertainties⁴~~

Key sources

~~26. Parties are encouraged to provide, to the extent possible, information on any key source analysis as indicated in the IPCC Good Practice Guidance.~~

~~V. PROGRAMMES CONTAINING MEASURES TO FACILITATE ADEQUATE ADAPTATION TO CLIMATE CHANGE~~

IV. GENERAL DESCRIPTION OF STEPS TAKEN OR ENVISAGED TO IMPLEMENT THE CONVENTION

22. *Each non-Annex I Party shall, in accordance with Article 12, paragraph 1, subparagraph (b), communicate to the Conference of the Parties a general description of steps taken or envisaged by the Party to implement the Convention, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.*

23. *Non-Annex I Parties may provide information on programmes containing measures to mitigate climate change by addressing anthropogenic emission by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change, following the provisions in these guidelines.*

24. *Taking into account Article 4, paragraph 7 and, as appropriate, Article 4, paragraphs 3 and 5, of the Convention, the communication of this information is dependent on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology.*

² The IPCC software (see <http://www.ipcc-nggip.iges.or.jp/public/gl/software.htm>) provides for automated reporting in the worksheets, as well as in the sectoral and summary tables.

³ An electronic version of the tables or worksheets facilitates processing of the inventory data.

⁴ The IPCC Guidelines and the IPCC Good Practice Guidance provide methodologies for estimating uncertainties.

A. Programmes containing measures to facilitate adequate adaptation to climate change

~~27. — Each Party shall, in accordance with Article 4, paragraph 1 (b), (e) and (j), and Article 12, paragraph 1 (b) and (c) of the Convention, provide to the COP information on the general description of steps taken or envisaged towards formulating, implementing, publishing and regularly updating national and, where appropriate, regional programmes containing measures to facilitate adequate adaptation to climate change, and any other information they consider to be relevant to the achievement of the objective of the Convention and suitable for inclusion in their communications.~~

25. 28. *Non-Annex I* Parties ~~should~~ *may* provide information on their vulnerability to the adverse effects of climate change, including climate variability and extreme weather events, and on measures being taken to meet their specific needs and concerns arising from these adverse effects.

A. Methodological approaches

~~29. — Parties should, to the extent that their financial resources and capacities allow, use approaches and/or best practices to assess their vulnerability and adaptation⁵ to climate change, as appropriate, and focus on policy options which could be integrated into national planning processes for sustainable development. Parties are encouraged to use traditional knowledge based approaches and practices in assessing their vulnerability and adaptation to climate change.~~

26. 30. *Non-Annex I* Parties ~~should~~ *may* use methodologies contained in the following technical guidelines, as appropriate, for assessing their vulnerability and adaptation to climate change, ***taking into account their national circumstances and priorities for sustainable development***: the *IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations* (Carter et al. 1994), the *UNEP Handbook on Methods for Climate Change Impact Assessment and Adaptation Strategies* (Feenstra et al. 1998), the *International Handbook on Vulnerability and Adaptation Assessments* (Benioff et al. 1996); or any other methodologies they consider better able to reflect their national situation, provided that these methodologies are accessible to the international community, including the IPCC ***documented properly***.

27. 31. *Non-Annex I* Parties ~~should~~ *may* use, as appropriate, methodologies for the evaluation of adaptation strategies and measures, ***taking into account their national circumstances and priorities for sustainable development***, contained in the *Compendium of Decision Tools to Evaluate Strategies for Adaptation to Climate Change*², which is available from the UNFCCC web site, www.unfccc.int/issues/meth_tools.html. They ~~should~~ *may* also use other methodologies where they consider these to be better able to reflect their national situation, provided that these methodologies are accessible to the international community, including the IPCC ***documented properly***.

A. Sectors/areas/processes

~~32. — Taking into account their national circumstances and priorities for sustainable development, Parties should focus their assessment of vulnerability and adaptation on any number of sectors/areas/processes such as, but not limited to: agriculture, energy, fisheries, forests, human health, human settlement, industry, tourism, water resources, coastal zones, wetlands and other ecosystems, rangelands and livestock, biodiversity, desertification and land degradation.~~

⁵ Parties may use the guidance, methodologies and approaches provided in the adaptation policy framework, which is currently being developed by the United Nations Development Programme in collaboration with non-Annex I Parties.

² It is available from the UNFCCC web site, www.unfccc.int/issues/meth_tools.html

B. Reporting

~~33. Information on vulnerability, and on strategies and measures for adapting to climate change, should be provided under the following headings, as appropriate.~~

Scope Reporting

~~28.~~ 34. *Non-Annex I* Parties ~~should~~ *may* provide information on the scope of their vulnerability and adaptation assessment, including identification of vulnerable sectors/areas/processes that are most critical.

Methodologies

~~29.~~ 35. *Non-Annex I* Parties ~~should~~ *may* include a description of methodologies, tools and approaches used, including scenarios for the assessment of impacts of, and vulnerability and adaptation to, climate change, as well as any uncertainties inherent ~~in~~ *to* these methodologies.

Vulnerability and adaptation to climate change

~~30.~~ 36. *Non-Annex I* Parties ~~should~~ *may* provide information on their vulnerability to the impacts of, and their adaptation to, climate change in key vulnerable sectors/areas/processes. Information should include key findings, and direct and indirect effects arising from climate change, allowing for an integrated analysis of the country's vulnerability to climate change. ~~In so doing, Parties should consider:~~

- ~~(a) Impacts of climate variability and extreme weather events;~~
- ~~(b) Sectors and population groups most affected;~~
- ~~(c) Stakeholders, including decision makers, in the management of adverse effects of climate change;~~
- ~~(d) Current capacities in weather forecasting, early warning systems and disaster preparedness and rehabilitation, including, as appropriate, financial, technological, institutional, legal and managerial capabilities.~~

Adaptation strategies and measures

~~31.~~ 37. *Non-Annex I* Parties ~~should~~ *may* provide information on and, to the extent possible, an evaluation of, adaptation strategies and measures for adapting to climate change, based on the assessment of vulnerability and adaptation to climate change, ~~in key sectors/areas/processes.~~ *including climate variability and extreme events, on key sectors/areas/ processes, including on those which are of the highest priority. Where relevant, Parties may report on the use of policy frameworks, such as national adaptation programmes, plans and policies for developing and implementing adaptation strategies and measures.*

~~38. Parties should provide information on those adaptation strategies and measures for adapting to climate change which are of the highest priority, as well as those which improve their ability to cope with the impacts of climate change, including climate variability and extreme events (adaptive capacity).~~

~~39. Parties should report on the use, where relevant, of policy frameworks, such as national adaptation programmes, plans and policies for developing and implementing adaptation strategies and~~

measures, such as the national adaptation programmes of action (NAPA) for the least developed countries.⁶

~~40. Parties should include information on opportunities for the implementation of adaptation measures, including pilot and/or demonstration adaptation projects being undertaken or proposed. They should also provide information on barriers to the implementation of adaptation measures.~~

32. ~~41.~~ *Non-Annex I* Parties ~~should~~ *may* include, as appropriate, information on national, subregional and/or regional capacity-building activities for integrating adaptation to climate change into medium and long-term planning.

33. ~~42.~~ *Non-Annex I* Parties ~~should~~ *may* include, as appropriate, information on how support programmes from Parties included in Annex II to the Convention are meeting their specific needs and concerns relating to vulnerability and adaptation to climate change.

VI. B. Programmes containing measures to mitigate climate change

~~43. Each Party shall, in accordance with Article 4, paragraph 1 (b) and (j) and paragraph 7, and Article 12, paragraphs 1 (b) and (c), of the Convention, provide to the COP information on the general description of steps taken or envisaged for formulating, implementing, publishing and regularly updating national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, and any other information they consider to be relevant to the achievement of the objective of the Convention and suitable for inclusion in their communications.~~

A. Methodological approach

34. ~~44.~~ Based on national circumstances, *non-Annex I* Parties are encouraged to use whatever methods are available and appropriate in order to formulate and prioritize programmes containing measures to mitigate climate change; this should be done within the framework of sustainable development objectives, which should include social, economic and environmental factors.

35. ~~45.~~ In their assessment of these programmes on various sectors of the economy ~~such as energy, transport, industrial processes, forestry, agriculture and waste~~, *non-Annex I* Parties may find the following technical resources helpful: *Technologies, Policies and Measures for Mitigating Climate Change (IPCC Technical Paper I)*; *Greenhouse Gas Mitigation Assessment: A Guidebook by the U.S. Country Studies Program*; *Climate Change 2001: Mitigation (Contribution of Working Group III to the Third Assessment Report of the IPCC)*.

B. Reporting

36. ~~46.~~ Based on national circumstances, *non-Annex I* Parties are encouraged to provide, to the extent their capacities allow, information on programmes containing measures which they believe contribute to mitigating climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, including, as appropriate, information by sectors on methodologies, scenarios, results, measures and institutional arrangements.

37. ~~47.~~ *Non-Annex I* Parties are encouraged to include, to the extent their capacities allow, a list of proposed projects for financing, in accordance with Article 12, paragraphs 4 and 7, of the Convention.

⁶ ~~Decision 28/CP.7 indicates that information contained in national adaptation programmes of action may constitute the first step in the preparation of initial national communications.~~

VII. DEVELOPMENT AND TRANSFER OF TECHNOLOGIES

V. OTHER INFORMATION CONSIDERED RELEVANT TO THE ACHIEVEMENT OF THE OBJECTIVE OF THE CONVENTION

38. *Each non-Annex I Party shall, in accordance with Article 12, paragraph 1, subparagraph (c), communicate to the Conference of the Parties any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculation of global emission trends, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.*

39. *Non-Annex I Parties may provide information on development and transfer of technologies; research and systematic observation; education, training and public awareness; capacity building; and information and networking, following the provisions in these guidelines.*

40. *Taking into account Article 4, paragraph 7 and, as appropriate, Article 4, paragraphs 3 and 5, of the Convention, the communication of this information is dependent on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology.*

A. Development and transfer of technologies

41. ~~48.~~ Pursuant to decision 4/CP.7, its annex, and the implementation of Article 4, paragraph 5, of the Convention, non-Annex I Parties are encouraged, in the light of their social and economic conditions, to provide information on: *results of country-specific technology needs; transfer of, and access to, environmentally sound technologies and know-how and the development and enhancement of endogenous capacities, technologies and know-how; assistance received from developed country Parties and the financial mechanism of the Convention and, as appropriate, its utilization, in support of the development and enhancement of endogenous capacities, technologies and know-how, and in the implementation of programmes and measures identified in the technology needs assessment.*

(a) ~~Country specific technology needs;~~

(b) ~~Transfer of, and access to, environmentally sound technologies and know-how and the development and enhancement of endogenous capacities, technologies and know-how;~~

(c) ~~Assistance received from developed country Parties and the financial mechanism of the Convention and, as appropriate, its utilization, in support of the development and enhancement of endogenous capacities, technologies and know-how, and in the implementation of programmes and measures identified in the technology needs assessment.~~

VIII. B. Research and systematic observation

42. ~~49.~~ *Non-Annex I Parties should be encouraged to provide information on climate change research and systematic observation, including their participation in and contribution to activities and programmes, as appropriate, of national, regional and global research networks and observing systems.*

50. ~~Parties are encouraged to provide, as appropriate, information on their national programmes for meteorological, hydrological and climatic observations, including programmes for monitoring GHG concentrations, sea levels, desertification, ecosystem quality, and other indicators of climate change.~~

Research

~~51. Parties should include information on scientific research relating specifically to the assessment of impacts of, and adaptation to, climate change, including, as appropriate, modelling and prediction, as well as effects of the El Niño Southern Oscillation (ENSO) phenomenon on climate variability and extreme weather events.~~

43. ~~52.~~ *Non-Annex I* Parties are encouraged to provide information on research relating to programmes containing measures to mitigate climate change, ~~to~~ programmes containing measures to facilitate adequate adaptation to climate change, and to the development of emission factors and activity data.

Systematic observation

44. ~~53.~~ *Non-Annex I* Parties ~~should~~ **are encouraged to** provide, to the extent that their capacities allow, information on their participation in national, regional and global observing systems (such as the Global Climate Observing System, Global Terrestrial Observing System and Global Ocean Observing System).

~~54. Parties are encouraged to use the UNFCCC reporting guidelines on global climate change observing systems.⁷~~

IX. C. Education, training and public awareness

45. ~~55.~~ *Non-Annex I* Parties ~~should~~ **may** provide, to the extent possible, and as appropriate, ~~the following~~ information on activities relating to climate change education, training and public awareness at national and/or, where appropriate, subregional and regional levels. In providing this information, Parties are encouraged to consider:

(a) — Institutions and/or programmes, expertise and resources, including information centres, for climate change education, training and public awareness;

(b) — Scholarship and/or fellowship programmes for climate change;

(c) — Incorporation of climate change issues into non-formal education and into the curricula of different levels of formal education systems;

(d) — Focus and scope of education, training and public awareness programmes on climate change.

XI. D. Capacity-building

46. ~~57.~~ *Non-Annex I* Parties ~~should~~ **may** provide, in accordance with decision 2/CP.7, information on how capacity-building activities, as contained in the framework annexed to that decision, are being implemented at national and, where appropriate, at subregional and/or regional levels. This could include, inter alia, options and priorities for capacity-building, participation in and promotion of South-South cooperation, the involvement of stakeholders in capacity-building, coordination and sustainability of capacity-building activities, and the dissemination and sharing of information on capacity-building activities.⁸

⁷ — FCCC/CP/1999/7.

⁸ — In accordance with the annex to decision 2/CP.7, the initial scope of needs and areas for capacity building covers: institutional capacity building, including the strengthening or establishing, as appropriate, of national climate change secretariats or national focal points; enhancement and/or creation of an enabling environment;

47. 58. *Non-Annex I* Parties are encouraged to provide information on relevant needs and/or areas for capacity-building other than those mentioned in paragraph 57 46 above.

59. ~~Parties should provide information on their capacity building needs relating to research and systematic observation, and on how these needs are being met and supported by bilateral and multilateral activities and programmes.~~

X. E. Information and networking

48. 56. *Non-Annex I* Parties ~~should~~ *are encouraged to* provide information on their efforts to promote information sharing ~~among~~ *between* and within countries and regions. Information could include the following, as appropriate: *participation in and contribution to networks and access to, and use of, information technologies for information exchange.*

~~(d) Participation in and contribution to networks providing information, data, tools and expertise necessary for the preparation of national communications and implementation of programmes and activities identified in the national communications;~~

~~(e) Access to, and use of, information technologies for information exchange;~~

~~(f) Availability of resources and training;~~

~~(g) A list of national experts, including details of their expertise, who have participated in the preparation of national communications.~~

XII. VI. CONSTRAINTS AND GAPS, AND RELATED FINANCIAL, TECHNICAL AND CAPACITY NEEDS

49. 60. *Non-Annex I* Parties should, in accordance with national circumstances and development priorities, describe any constraints and gaps, and related financial, technical and capacity needs, as well as proposed and/or implemented activities for overcoming the gaps and constraints associated with the implementation of activities, measures and programmes envisaged under the Convention, and with the preparation and improvement of national communications on a continuous basis. ~~in the areas of:~~

~~(a) National GHG inventories, such as lack of national capacities for undertaking national GHG inventories on a continuous basis, or existing methodological and data gaps;~~

~~(b) Vulnerability and adaptation assessments, such as data constraints, limitations of the methodologies, models or scenarios;~~

~~(c) Programmes containing measures to facilitate adequate adaptation to climate change, such as the identification, development, evaluation and implementation of adaptation measures;~~

~~(d) Programmes containing measures to mitigate climate change;~~

national communications; national climate change programmes; GHG inventories, emissions database management and systems for collecting, managing and utilizing emission factors and activity data; vulnerability and adaptation assessment; implementation of adaptation measures; assessment of mitigation options; research and systematic observation, including meteorological, hydrological and climatological services; development and transfer of technology; improved decision making, including assistance for participation in international negotiations; clean development mechanism; implementation of Article 4, paragraphs 8 and 9, of the Convention; education, training and public awareness; and information and networking, including the setting up of databases.

~~(e) — Development and transfer of technologies, such as difficulties encountered in technology needs assessments and technology information, barriers to technology transfer and implementation, or development and enhancement of endogenous capacities and technologies;~~

~~(f) — Research and systematic observation, such as data constraints or a lack of equipment;~~

~~(g) — Education, training and public awareness;~~

~~(h) — Information and networking, such as opportunities for, and barriers to, free and open exchange of data and information;~~

~~(i) — Capacity building.~~

50. ~~61.~~ *Non-Annex I* Parties should provide information on *all* financial resources and technical support provided by the GEF, and where possible from other sources, including the Parties themselves, for other climate change related activities for the preparation of their national communications provided by themselves, as well as those received from the Global Environment Facility (GEF), Annex II Parties or bilateral and multilateral institutions.

~~XIII.~~ VII. SUBMISSION

51. ~~63.~~ The information provided in accordance with these guidelines shall be communicated by each *non-Annex I* Party to the COP in a single document, with an executive summary outlining the information contained in the full document, in both hard copy and electronic format.

52. ~~64.~~ Each *non-Annex I* Party shall submit its national communication in one of the official languages of the United Nations. The executive summary, which is to be of no more than 10 pages, shall be translated into English and ~~distributed widely~~ *made publicly available*. Parties are also encouraged to submit, to the extent possible and where relevant, English translations of their communications.

53. ~~65.~~ Additional or supporting information may be supplied through other documents such as a technical annex.

Table 1. National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol^a and greenhouse gas precursors

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ emissions (Gg)	CO ₂ removals (Gg)	CH ₄ (Gg)	N ₂ O (Gg)	CO ^b (Gg)	NO _x ^b (Gg)	NMVOCs ^b (Gg)	SO _x ^b (Gg)
Total national emissions and removals	X	X	X	X	X	X	X	X
1. Energy	X	X	X	X	X	X	X	X
A. Fuel combustion (sectoral approach)	X		X	X	X	X	X	X
1. Energy industries	X		X	X	X	X	X	X
2. Manufacturing industries and construction	X		X	X	X	X	X	X
3. Transport	X		X	X	X	X	X	X
4. Other sectors	X		X	X	X	X	X	X
5. Other (please specify)	X		X	X	X	X	X	X
B. Fugitive emissions from fuels	X		X		X	X	X	X
1. Solid fuels			X		X	X	X	X
2. Oil and natural gas			X		X	X	X	X
2. Industrial processes	X	X	X	X	X	X	X	X
A. Mineral products	X				X	X	X	X
B. Chemical industry	X		X	X	X	X	X	X
C. Metal production	X		X	X	X	X	X	X
D. Other production	X				X	X	X	X
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	X		X	X	X	X	X	X
3. Solvent and other product use	X			X			X	
4. Agriculture			X	X	X	X	X	X
A. Enteric fermentation			X					
B. Manure management			X	X			X	
C. Rice cultivation			X				X	
D. Agricultural soils			X	X			X	
E. Prescribed burning of savannahs			X	X	X	X	X	
F. Field burning of agricultural residues			X	X	X	X	X	
G. Other (please specify)			X	X	X	X	X	
5. Land-use change and forestry	X ^c	X ^c	X	X	X	X	X	X
A. Changes in forest and other woody biomass stocks	X ^c	X ^c						
B. Forest and grassland conversion	X	X	X	X	X	X		
C. Abandonment of managed lands		X						
D. CO ₂ emissions and removals from soil	X ^c	X ^c						
E. Other (please specify)	X	X	X	X	X	X		
6. Waste			X	X	X	X	X	X
A. Solid waste disposal on land			X		X		X	
B. Waste-water handling			X	X	X	X	X	
C. Waste incineration					X	X	X	X
D. Other (please specify)			X	X	X	X	X	X
7. Other (please specify)	X	X	X	X	X	X	X	X
Memo items								
International bunkers	X		X	X	X	X	X	X
Aviation	X		X	X	X	X	X	X
Marine	X		X	X	X	X	X	X
CO₂ emissions from biomass	X							

Notes: Shaded cells do not require entries.

^a The following standard indicators may be used, as appropriate, for emissions by sources and removals by sinks of GHGs: **NO** (not occurring) for a gas or source/sink category which does not occur within a country, **NE** (not estimated) for existing emissions and removals which have not been estimated, **NA** (not applicable) for activities in a given source/sink category which do not result in emissions or removals of a specific gas, **IE** (included elsewhere) for emissions and removals estimated but included elsewhere in the inventory (Parties should indicate where the emissions or removals have been included), **C** (confidential) for emissions and removals which could lead to the disclosure of confidential information. *Data to be presented by Parties, to the extent their capacities allow. The following standard indicators may be used, as appropriate, for emissions by sources and removals by sinks of GHGs: NO (not occurring) for a gas or source/sink category which does not occur within a country, NE (not estimated) for existing emissions and removals which have not been estimated, NA (not applicable) for activities in a given source/sink category which do not result in emissions or removals of a specific gas, IE (included elsewhere) for emissions and removals estimated but*

included elsewhere in the inventory; Parties should indicate where the emissions or removals have been included, C (confidential) for emissions and removals which could lead to the disclosure of confidential information.

^b—Data on CO₂, NO_x, NMVOCs and SO_x to be provided to the extent possible (see paragraph 17 above).

^c Do not provide an estimate of both CO₂ emissions and CO₂ removals. “Net” emissions (emissions—removals) of CO₂ should be estimated and a single number placed in either the CO₂ emissions or CO₂ removals column, as appropriate. Note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+). Estimate “net” emissions of CO₂ and place a single number in either the CO₂ emissions or CO₂ removals column, as appropriate. Please note that the sign for uptake/removals is always (-) and for emissions is (+).

Note by the secretariat:

No changes have been proposed by the G77 and China for table 2 of the proposed guidelines. Therefore it is not included in the present document.
