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#### NATIONAL COMMUNICATIONS

## COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION

# Report on the guidelines for the preparation of first communications by Annex I Parties

#### **Note by the secretariat**

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#### I. INTRODUCTION

#### A. Mandate

1. The present note has been prepared pursuant to the conclusion adopted by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its first session by which it decided to return to the further development of guidelines for the preparation of national communications from Annex I Parties at its second and later sessions (FCCC/SBSTA/1995/3, para. 33 (d)). The Conference of the Parties, at its first session (COP 1), by its decision 3/CP.1,\* also requested the secretariat to prepare a report on the guidelines for the preparation of first communications by Annex I Parties for consideration by the SBSTA and by the Subsidiary Body for Implementation (SBI) before the second session of the Conference of the Parties (COP 2).

#### B. Scope of the note

- The scope of the present note is limited to a presentation of initial experience with the guidelines for the preparation of first communications by Annex I Parties (annex to decision 9/2, A/AC.237/55) (hereafter referred to as "the Guidelines"). The initial paragraph of the Guidelines sets out their three principal purposes, of which the first and third are, respectively, to assist Annex I Parties in meeting their commitments under Articles 4 and 12 of the Convention, and to ensure that the COP has enough information to carry out its responsibilities to review the implementation of the Convention and the adequacy of the commitments in Articles 4.2(a) and (b). In this note, however, the main focus for the secretariat has been the second purpose of the Guidelines, which is "to facilitate the process of considering the national communications, including the preparation of useful technical analysis and synthesis documentation, by encouraging the presentation of information in ways that are consistent, transparent and comparable". This approach is in line with decision 3/CP.1, which requests the secretariat to prepare a report on the Guidelines with a view, among other things, to further enhancing the comparability and focus of the communications. In keeping with the division of labour between the SBSTA and the SBI, as indicated in document FCCC/SB/1995/INF.1, this note is intended for discussion in the SBSTA. Any policy aspects that may arise from its consideration in the SBSTA may be brought to the attention of the SBI.
- 3. This note identifies areas where the recommendations contained in the Guidelines were in general closely followed, or, on the contrary, where there were noticeable data gaps. It also explores some possible options for overcoming the difficulties noted above and for enhancing the comparability of the information communicated. In some instances, even where the recommendations in the Guidelines were followed, the information provided was

<sup>\*</sup> For decisions adopted by the Conference of the Parties at its first session, see document FCCC/CP/1995/7/Add.1.

not comparable because of its very nature. The present note draws on the first compilation and synthesis of national communications from Parties listed in Annex I to the Convention (A/AC.237/81), preliminary information from national communications not considered in the first compilation and synthesis (FCCC/1995/INF.4 and FCCC/CP/1995/INF.4/Corr.1), the in-depth reviews carried out to date and the elements of the second compilation and synthesis report of national communications from Annex I Parties (FCCC/SB/1996/1).

- 4. The present document does not consider the issue of the scheduling of second national communications by Annex I Parties, which, under decision 3/CP.1, are due to be submitted to the secretariat by 15 April 1997 (except for second communications from Parties called upon to submit their first communication during 1996, which may be exempt from this requirement). Nor does this document attempt to discuss or summarize the specific scientific, methodological and technical issues arising from the Guidelines for National Greenhouse Gas Inventories and Technical Guidelines for Assessing Climate Change Impacts and Adaptations adopted by the Intergovernmental Panel on Climate Change (IPCC); but it notes that a separate process for the consideration of possible improvements is under way in the IPCC (see the note by the secretariat on cooperation with the IPCC (FCCC/SBSTA/1996/6)). Lastly, it does not consider the issue of appropriate adjustments to the Guidelines and procedures for national communications for Annex I Parties with economies in transition (FCCC/CP/1995/7, para. 47).
- 5. The material in this report is organized according to the sections of the Guidelines themselves. For each section, there is first a discussion of how the Guidelines were followed, with an analysis of the patterns observed, and, secondly, if relevant, the presentation of suggestions to enhance comparability. The secretariat is mindful of the fact that data are not always readily available, and that further data collection can be resource intensive. It has endeavoured to take this into account in presenting the options. In addition, suggestions are made for the modification of the Guidelines in order to update them and ensure consistency with COP 1 decisions taken after the Guidelines were agreed by the Intergovernmental Negotiating Committee.

# C. Possible action by the Subsidiary Body for Scientific and Technological Advice

- 6. The SBSTA may consider the present note, and in particular the suggestions contained in the paragraphs headed "Discussion" in section II below.
- 7. The SBSTA may also invite Parties to submit views on possible revisions to the Guidelines no later than 15 April 1996. Such submissions may, for example, describe tables to be added to the Guidelines in order to facilitate the presentation of information and enhance the comparability and focus of communications, specifying the type of information to be included in the tables.

- 8. In document FCCC/SBI/1996/5, it is suggested that, in order to assist the SBSTA with the revision of the Guidelines, the SBI may clarify what information it needs on the transfer of technology. In addition, the SBSTA may invite the SBI to indicate whether the other information communicated in accordance with the Guidelines is adequate for it to carry out its tasks, and, if not, to indicate its needs in this respect.
- 9. The SBSTA may consider whether it wishes to revise the Guidelines so that existing recommendations become clearer and/or that the information currently communicated becomes more comparable and focused. If so, the SBSTA could request the secretariat to prepare a document on possible modifications to the Guidelines, taking into account the submissions by Parties, and the discussions that took place and conclusions reached at the second sessions of the SBSTA and the SBI, for consideration at the third session of the SBSTA, with a view to presenting a recommendation to COP 2 for the adoption of revised guidelines. It would be helpful to the secretariat if the SBSTA, in making such a request, would identify what kind of revision the secretariat should envisage in its preparation of the relevant documentation, including the design of possible tables for the presentation of information. In order to give Parties sufficient time to prepare their second national communications by the deadline of 15 April 1997, any revisions to the Guidelines would have to be decided upon at COP 2.
- 10. The SBSTA may recall that decision 3/CP.1 requests the SBSTA, in the context of its work on methodological issues arising from the national communications, to consider the use of relevant statistical adjustments. In the event that an intergovernmental technical advisory panel is established, the SBSTA may consider including this task as a priority item for such a panel. Alternatively, it may request the secretariat to prepare documentation on the matter for consideration by the SBSTA at a future session. It would be helpful if this methodological issue could be resolved in time to be reflected in any revision to the Guidelines. Should this not be possible, it would be important that the Guidelines request that the relevant information be reported in a transparent manner, with clear indications of the method followed, and with both adjusted and unadjusted data (see also paragraph 37 below).
- 11. The SBSTA may also recall that, under decision 4/CP.1, the SBSTA and the SBI should address the issue of the allocation and control of emissions from international bunker fuels and report on this work to COP 2. The SBSTA may consider addressing this issue in a similar manner to the issue on statistical adjustments outlined above.

#### II. EXPERIENCE WITH THE GUIDELINES

#### A. Introduction

12. The paragraphs below indicate general findings on the experience with the Guidelines, so certain findings may not apply to all Parties. In preparing this document, the secretariat has sought to incorporate the views provided by the experts from Governments and intergovernmental organizations who participated in the preparation of the first compilation

and synthesis of national communications from the Parties listed in Annex I to the Convention (A/AC.237/81). It is in the nature of the present exercise to focus on shortcomings in the national communications. Readers should be aware that any negative impression that may arise would be unwarranted in view of the detailed analysis and research underlying the communications and of the efforts involved in preparing them.

- 13. There are mixed findings on the extent to which the recommendations contained in the Guidelines were followed. Recommendations on the sections relating to vulnerability assessment and adaptation measures, research and systematic observation, and education, training and public awareness were closely followed in general. The recommendations on policies and measures and on projections were less well followed.
- 14. The in-depth review process may also contribute to the process of learning, as the review teams request additional information, particularly on areas of the communications that they consider are not completely clear. The in-depth review reports also discuss explicitly the question of how closely the Guidelines were followed.

#### B. Coverage

15. The section of the Guidelines on "Coverage" deals with the scope of the communications, requesting, *inter alia*, that communications should "address all anthropogenic emissions and removals of all greenhouse gases not controlled by the Montreal Protocol". The coverage of gases was most extensive in the section on "Inventories", while the sections on "Policies and measures" and on "Projections and assessment of effects of measures" tended to focus on the three main greenhouse gases, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). In a number of cases, a communication has dealt solely with CO<sub>2</sub>.

#### C. Cross-cutting issues

#### **Findings**

16. The seven paragraphs in the section on "Cross-cutting issues" identify some issues that relate to all gases, to all sectors or to inventories, policies and measures, and projections alike. As a general rule, the recommendation to present data on inventories and projections on a gas-by-gas basis was followed. Emissions from sources were listed separately from removals by sinks. A number of Parties chose to use global warming potentials (GWPs) to reflect their inventories and projections in carbon dioxide-equivalent terms. Paragraph 6 of the Guidelines requests Parties to use the year 1990 as the base year for inventories, and refers to the possibility for Annex I Parties with economies in transition to seek "flexibility" in this regard. Two Parties in that situation have not provided greenhouse gas inventory data for 1990, although the Guidelines note that the provisions of Article 4.6 are relevant in this context. In addition, the Guidelines recommend that Parties use 2000 as a common reference year for projections. One Party, in providing projections, used another reference year instead. Although the level of uncertainty associated with inventory and projections data and

underlying assumptions should be clarified in the national communications, this did not always happen.

#### **Discussion**

- 17. In paragraph 5, the Guidelines recommend that "while awaiting updated information from the IPCC, any use of GWPs should be based on the direct effects of the greenhouse gases over a 100-year time horizon" and note further that "this is only the initial focus and, for future communications, indirect effects of other greenhouse gases will have to be looked at, as far as scientific understanding allows." Decision 4/CP.1 recommends that if Parties choose to use GWPs to reflect their inventories and projections in carbon dioxide-equivalent terms, "the 100-year time-horizon values provided by the Intergovernmental Panel on Climate Change in its 1994 Special Report should be used." These values were used in the preparation of the first compilation and synthesis of communications from Annex I Parties. The SBSTA may consider whether to adopt the recommendation that Parties choosing to use GWPs should use the proposed values, in keeping with decision 4/CP.1.
- 18. Paragraph 7 of the Guidelines refers to the possible provision of greenhouse gas inventory information for years subsequent to 1990. Decision 3/CP.1 requests Parties to submit national inventory data on an annual basis; "(where appropriate, updated) for the period 1990-1993 and, where available, for 1994 ... by 15 April 1996; data for subsequent years should be provided annually on 15 April, following the same principles". The SBSTA may consider recommending that paragraph 7 be updated to reflect these elements of decision 3/CP.1.
- 19. Paragraph 8 takes up the issue of the reference year for projections. In view of the time period specified in Article 4.2(a), data should be provided for the year 2000, and Parties are encouraged to include projections, if possible on a quantitative basis, that go beyond the year 2000. The SBSTA may consider recommending that Parties should provide data for years beyond 2000, such as the years 2005, 2010 and 2020, as referred to in decision 1/CP.1.

#### D. Greenhouse gas inventories

#### **Findings**

- 20. There are fairly detailed recommendations in the Guidelines for reporting on greenhouse gas inventories, to which must be added the recommendations contained in the IPCC Draft Guidelines for National Greenhouse Gas Inventories. Parties provided good coverage of gases when reporting inventory information, typically providing data for  $CO_2$ ,  $CH_4$ ,  $N_2O$ , non-methane volatile organic compounds (NMVOCs), carbon monoxide (CO) and nitrogen oxides (NO<sub>x</sub>). Some Parties also provided data for the other greenhouse gases. Only a few Parties, however, provided inventory data for removals of  $CO_2$  by sinks.
- 21. According to the Guidelines, Parties should use the IPCC Draft Guidelines for National Greenhouse Gas Inventories, unless they choose to use an established and

comparable methodology, in which case they should include sufficient documentation to back up the data presented. In many cases, Parties chose to adapt the IPCC methodology to reflect their national conditions more clearly. In several cases, they used other methodologies for reporting their emissions, in particular the CORINAIR methodology. Inventories calculated by other methods do not necessarily generate the same results as those derived with the IPCC methodology, with the resulting implications for comparability of data. Some Parties, however, have made commendable efforts to convert CORINAIR results into IPCC formats. Emissions from bunker fuels were in almost all cases reported separately from totals, although some Parties noted that there were difficulties in separating the emissions from domestic and international activities.

- 22. Nevertheless, in a number of cases, the inventory information in the national communications could be improved, in particular in terms of transparency, as follows:
  - (a) Explanations of emission factors that differed from IPCC default values were not always provided;
  - (b) Standard data tables were not always used for presentation;
  - (c) When the IPCC methodology was not used, information related to the methodology followed was not always provided;
  - (d) Data gaps were not always explained; and
  - (e) Uncertainty ranges for point estimates were rarely provided.
- 23. In a few instances, during the in-depth review, it was apparent that some of those deficiencies had arisen as a result of financial or time constraints in preparing inventory information. In most cases, however, Parties were ready to provide full information, allowing for verification of data and reconstruction of inventories, although this material had not been included in the communications themselves, possibly because it was thought to be too voluminous or because of the technical nature of the documents concerned.
- 24. The land use change and forestry source category was problematic in many cases. Scientific uncertainties and difficulties in data collection give rise to low confidence in the figures and led to lack of comparability among countries owing to differences in coverage. During the in-depth reviews, in some cases, the figures originally submitted were revised significantly, both for stocks, where reported, and for increments. Methodological difficulties were also discussed during the in-depth reviews, for example, in the case of definitions of anthropogenic activities.

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#### Discussion

- 25. The SBSTA may consider the possibility of including in any revisions to the Guidelines the recommendation that Parties listed in Annex I to the Convention should incorporate additional relevant background information, which would not be part of the official national communication, but would be submitted at the same time. Such information could include documentation on disaggregated emission factors and activity data, and other relevant assumptions. Providing such documentation in addition to the national communication may not require a great deal of extra work to be done by the Party concerned, since the data are often already contained in a study, or series of studies, on which the chapter on inventories in the national communication has been based.
- 26. In addition to modifications to enhance comparability, the SBSTA may consider updating information in the Guidelines. For instance, in paragraphs 12 (two references), 13, 14 and 19, the SBSTA may consider recommending that the title "IPCC Draft Guidelines for National Greenhouse Gas Inventories" should be amended to "Guidelines for National Greenhouse Gas Inventories and Technical Guidelines for Assessing Climate Change Impacts and Adaptations adopted by the Intergovernmental Panel on Climate Change", to ensure consistency with decision 4/CP.1.
- 27. If the SBSTA wishes to recommend that the title "IPCC Draft Guidelines for National Greenhouse Gas Inventories" should be amended to "Guidelines for National Greenhouse Gas Inventories and Technical Guidelines for Assessing Climate Change Impacts and Adaptations adopted by the Intergovernmental Panel on Climate Change", as outlined in paragraph 26 above, it might also consider removing paragraph 14 of the Guidelines altogether as it would become redundant.

#### E. Policies and measures

#### **Findings**

- 28. In general, policies and measures were reported on a gas-by-gas basis, although they were sometimes described by sector. Policies and measures focused primarily on  $CO_2$  although other gases, such as  $CH_4$  and  $N_2O$ , were discussed as well. Difficulties in discussions on  $CO_2$  were noted with regard to sequestration by sinks and to policies and measures in the land use and forestry sectors. It was not always clear which policies and measures were the most important, in part because they were not described in sufficient detail.
- 29. With regard to the recommendation in paragraph 20 of the Guidelines on transparency of policies and measures, in general the national communications did not provide adequate information on the "degree of implementation" of individual policies and measures. For example, there were ambiguities with regard to the legal status of different policies and measures, uncertainty associated with the political process on which their implementation rests and the status of funding of these policies and measures. On the whole, adequate

information was not provided on how the greenhouse gas effects of policies were to be "monitored over time". Subparagraphs (d) and (f) of paragraph 20 further stress the importance for transparency of providing information on the "status of implementation" and "intermediate indicators of progress for policies and measures". The experience from in-depth reviews suggests that information on the degree of implementation is available, but that in some cases monitoring mechanisms were not in place.

#### Discussion

- 30. The SBSTA may consider the possible inclusion in the Guidelines of a standard table for summarizing information in each communication on policies and measures. The table could include basic information to be provided for each policy or measure, such as the type of policy instrument (for example, economic instrument, regulation or guideline, voluntary agreement, and action on information, education and training), the status of the funding of the policy or measure, its legal status and an estimate of its mitigation impact. So far, some of this information has been reported by Parties in their communications. If Parties were requested to complete all the fields in such a table, however, this would ensure that a minimum amount of information of the same type was provided by all Parties, thereby facilitating comparison and subsequent analysis.
- 31. In the first compilation and synthesis, it was noted that policies and measures were described in varying degrees of detail, and that references to the number of policies and measures did not reflect the relative importance of these in terms of their mitigation potential. This drawback could be overcome, to some extent, if all Parties provided information on emissions reductions potential and on the effects of individual policies and measures which only a few Parties included in their first communications (the issue of effects of policies and measures is discussed in the next section). If quantitative information is not available on the effects of individual policies and measures, an alternative may be to rank individual policies and measures according to their relative importance in terms of greenhouse gas mitigation. Furthermore, during the in-depth reviews carried out so far, the overall policy context and economic and institutional framework have emerged as central to an understanding of the policies and measures implemented by a Party. While a number of communications describe the policy context in general terms, the SBSTA may consider encouraging, through the Guidelines, the submission of information related to the economic and institutional framework. Such information could include, for example, data relating to key sectors, such as energy prices, energy taxes, agricultural subsidies, and information on the market structure in electricity, natural gas, coal and oil markets.

### F. Projections and assessment of effects of measures

#### **Findings**

32. Projections followed the recommendations in the Guidelines to incorporate only the effects of policies and measures implemented or committed to at the time the communication

was prepared, and to provide, at a minimum, projections of emissions of  $CO_2$ ,  $CH_4$  and  $N_2O$ . Different methodologies, however, were followed for estimating the projections of different greenhouse gases. The findings below are particularly relevant for the projection of  $CO_2$  emissions.

- 33. Paragraph 28 of the Guidelines requests Parties to provide "estimates of the effect of individual policies and measures" wherever possible. In many cases this type of information was not provided. If this information was provided, it did not always cover all individual policies and measures, and discussions of the method used to arrive at the estimates were not provided.
- 34. Paragraphs 29 31 of the Guidelines contain some additional recommendations for reporting information on projections, *inter alia*, to ensure transparency. The projections analyses presented in the communications were not invariably transparent, and it was not always possible for "a third party to obtain a qualitative understanding of the model(s) and the approach(es) used and their relationship to each other" (see paragraph 29 (b) of the Guidelines). The strengths and weaknesses of the models used were generally not summarized, and the results of sensitivity analyses were not often provided.
- 35. In many cases, during the in-depth reviews, these gaps were filled in to the satisfaction of the in-depth review teams. Often key documentation for understanding the projections models was available, but did not form part of the official submission of the Parties concerned. During in-depth reviews it was also noted that although the Guidelines merely *encourage* Parties to present the findings of sensitivity analysis, such information helps to ensure transparency.

#### **Discussion**

- 36. As a result of the in-depth reviews carried out so far, some of the missing information was made available and was provided to the in-depth review teams during the country visits. In several cases they noted that the material should, to the extent possible, be provided as part of the submission. As the information is often fairly voluminous, the SBSTA may consider recommending to the Parties that they should include technical documents containing this information as background documentation for submission to the secretariat; they would not, however, constitute part of the national communication itself.
- 37. When projections analysis was undertaken, adjustments to base year emissions were made in three cases, for climate variations or trade patterns in electricity. The conclusion reached in both the in-depth reviews and the first compilation and synthesis was that, if carried out, any such adjustments should be reported in a transparent manner, with clear indications of the method followed, and with both adjusted and unadjusted data (see also paragraph 10 above).

- 38. Transparency would be enhanced if a more detailed indication was provided of how measures are reflected in the emissions projections. Furthermore, the exact methods of estimating the effects of measures need to be explained clearly and in detail.
- 39. Subsequent communications could also address the question of time perspectives in models, that is, the question of whether the same models or approaches are used for making projections for 2000 as for 2005, 2010 or 2020. They could also address the question of whether the same models or approaches are used to estimate the effects of measures as to develop greenhouse gas estimates.

#### G. Vulnerability assessment and adaptation measures

40. The Guidelines for reporting on these items are not demanding; they consist of only one sentence. The secretariat noted that the definition of what constitutes an adaptation measure was not completely clear. The first compilation and synthesis found that recommendations were followed in general, although in many instances Parties reported on few, if any, adaptation measures under way. It was clarified during the in-depth reviews that in some cases this was because no such adaptation measures were under way. Actions related to scientific research on adaptation, however, were reported in the communications.

#### H. Finance and technology

#### **Findings**

- 41. In accordance with decision 13/CP.1, the secretariat has prepared an itemized progress report on concrete measures taken by the Parties listed in Annex II to the Convention with respect to their commitments related to the transfer of environmentally sound technologies and the know-how necessary to mitigate and facilitate adequate adaptation to climate change (FCCC/SBI/1996/5, annex). This document will be considered by the SBI at its second session.
- 42. The above-mentioned document considers both information contained in national communications and additional information provided during in-depth reviews on finance and technology, and the issue of possible revisions to the section of the Guidelines pertaining to technology transfer. The detailed discussion on technology transfer is not reproduced here, but, in the interests of complete coverage, the present section recalls some of the general findings of document FCCC/SBI/1996/5, as well as raising some other issues of potential interest to the SBSTA.
- 43. Recommendations on finance in the Guidelines are not lengthy, advising Annex II Parties to provide information on contributions to the operating entity or entities of the financial mechanism, financial resources provided through bilateral, regional and other multilateral channels for the implementation of the Convention, expected future resource allocations and any other appropriate information. Most Parties did provide information on

contributions to the pilot phase of the Global Environmental Facility (GEF) and its first replenishment, although some further specified amounts contributed to core financing and cofinancing. Information on bilateral, regional and other multilateral assistance was provided, although in some cases Parties included amounts that had been allocated for environmental projects in general, and not specifically for climate change. Where the funds were allocated to climate change projects, it was not always clear whether these aimed at mitigation or adaptation.

44. The section of the Guidelines on technology transfer is very general in nature and easily subject to different interpretations by the Parties. As a result, the information contained in Annex II communications differs considerably in format, comprehensiveness and detail. Moreover, discussions held during the in-depth review visits revealed that more information was available than was provided in the communications. Finally, most Annex II national communications focus on activities supported by Governments rather than those of the private sector. Consequently, the full picture of technology transfer activities is not available at the present stage.

#### **Discussion**

45. For the purpose of ensuring comparability of information on financial contributions, the SBSTA may consider the possibility of recommending that a table on financial contributions be added to the Guidelines, for completion by Parties. This table would not include much more information than is already requested in the Guidelines, but would facilitate the presentation of data. It might distinguish between contributions through the GEF - within and outside the financial mechanism - and those in the form of official development assistance, with a further separation of data into bilateral, regional and multilateral channels. An additional distinction could be made between funds specifically targeting climate change and those that target environmental objectives in general.

#### I. Research and systematic observation

46. All Parties included some discussion of research and systematic observation in their communications, which followed the recommendations in the Guidelines. The information often appeared under several chapters of the communications, including, for instance, on vulnerability assessment and adaptation measures. The Guidelines indicate that information on research and systematic observation could include information on technology research and development. When provided, such information has tended to focus on government activities rather than on those of the private sector.

#### J. Education, training and public awareness

47. All Parties included some discussion of education, training and public awareness in their communications. Generally speaking, the information given followed the recommendations in the Guidelines. Slightly weaker coverage was provided on actions undertaken to implement commitments under Article 6(b). Only a few Parties reported on the

extent of public participation and involvement, either in the process of formulating policies and national strategies or in the preparation of the communication. In-depth reviews revealed that the communications did not cover the plethora of activities and initiatives undertaken by municipalities and non-governmental organizations.

#### K. National circumstances/basic data

48. This section was well documented in the communications, and further information was invariably provided during the in-depth reviews. It proved to be an important section of the communications, in particular for highlighting special features that affected implementation of commitments. In addition to the data suggested in paragraph 41 of the Guidelines, Parties also communicated information on export patterns, especially of energy-intensive products; the composition of domestic energy supply, indicating the respective proportions generated by nuclear and hydroelectric power; the overall policy context, including information on any interministerial committees for climate change; and facts on the political and institutional structure that might affect implementation, such as the process of drafting and enactment of legislation.

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