

Framework Convention on Climate Change (FCCC)
Ad Hoc Group on the Berlin Mandate (AGBM)
Ad Hoc Group on Article 13 (AG13)

**SECOND SESSION OF THE AGBM (AGBM 2)
AND FIRST SESSION OF THE AG13**

October 30 to November 3, 1995

Geneva

DELEGATION REPORT

DFAIT/AGE

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Reporting Telex on
Ad Hoc Group on the Berlin Mandate (AGBM 2)
&
Article 13 (AG 13)

Importance : Routine
Sensitivity : UNCLASSIFIED

AGE1033-CLIMATE CHANGE AGBM 2 AND ARTICLE 13 MEETINGS, 30 OCTOBER
- NOVEMBER 3, 1995, GENEVA: REPORTING TELEX

SUMMARY: THE SECOND SESSION OF THE AD HOC GROUP ON THE BERLIN MANDATE (AGBM), WAS CHARACTERIZED BY MORE SUBSTANTIVE DELIBERATIONS, PARTICULARLY ON ISSUES RELATED TO 1) STRENGTHENING COMMITMENTS UNDER ARTICLE 4.2 (A) & (B), INCLUDING THE ELABORATION OF POLICIES AND MEASURES AND QUANTIFIED EMISSIONS LIMITATION AND REDUCTION OBJECTIVES WITHIN SPECIFIED TIME FRAMES; 2) ADVANCING CURRENT COMMITMENTS OF NON-ANNEX 1 PARTIES; AND, 3) POSSIBLE FEATURES OF A PROTOCOL OR OTHER LEGAL INSTRUMENT. THERE WERE THREE IMPORTANT DEVELOPMENTS DURING THE SESSION, A) URUGUAY WITHDREW ITS OFFER TO HOST THE SECOND CONFERENCE OF THE PARTIES DUE TO THE COST AND AS A RESULT COP2 WILL BE HELD IN GENEVA JULY 8 TO 19. 1996, B) THE EU TABLED A PROPOSAL ON THE STRUCTURE OF A PROTOCOL OR OTHER LEGAL INSTRUMENT AND C) THE USA MADE A PRESENTATION IN PLENARY HIGHLIGHTING PROJECTED GROWTH IN GHG EMISSIONS FROM DEVELOPING COUNTRIES. ON THE COMPOSITION OF THE AGBM BUREAU, THE CHAIRMAN HELD INFORMAL CONSULTATIONS WITH REGIONAL COORDINATORS, BUT NO CONCLUSION WAS REACHED. THE CHAIRMAN RELUCTANTLY AGREED TO CONTINUE TO DIRECT THE AGBM ALONE, AND WILL TAKE UP THE ISSUE AGAIN AT THE THIRD SESSION OF THE AGBM IN MARCH. THE FIRST SESSION OF THE AD HOC GROUP ON ARTICLE 13 OF THE CONVENTION TOOK PLACE IN CONJUNCTION WITH AGBM 2 ON OCTOBER 30-31.

2. AS IT WOULD NOT BE POSSIBLE IN THE TIME AVAILABLE TO CONDUCT A DETAILED ANALYSIS OF ALL POSSIBLE POLICIES AND MEASURES, A NEED WAS EXPRESSED TO BEGIN TO NARROW THE RANGE OF POLICIES AND MEASURES UNDER CONSIDERATION AT THE THIRD SESSION WHILE BEING MINDFUL NOT TO CLOSE OFF POSSIBLE FUTURE OPTIONS. CANADA SUCCEEDED IN INCLUDING IN THE CHAIRMAN'S CONCLUSIONS THE IMPORTANCE OF THE LINKAGES BETWEEN QUANTIFIED EMISSION OBJECTIVES WITH THE ELABORATION OF POLICIES AND MEASURES AND THE IMPORTANCE OF UNDERLYING CONSIDERATIONS INCLUDED IN ARTICLE 2(A) OF THE BERLIN MANDATE, INCLUDING NATIONAL CIRCUMSTANCES. DISCUSSIONS AROUND NON-ANNEX 1 COMMITMENTS WERE CHARACTERIZED BY DEVELOPING COUNTRIES EXPRESSING A READINESS TO ADVANCE THE PREPARATION OF THEIR INITIAL COMMUNICATIONS ON CLIMATE CHANGE BUT STOPPING FAR SHORT OF ANYTHING WHICH MIGHT IMPLY AN INCREASE IN THEIR COMMITMENTS UNDER THE CONVENTION. THE AGBM ALSO REQUESTED THE SECRETARIAT TO PREPARE A REVIEW OF EXISTING RELEVANT CONVENTIONS FOR CONSIDERATION BY THE AGBM AT ITS FOURTH SESSION.

3. UNDER THE CANADIAN CHAIR, SIDE MEETING OF THE ANNEX 1 EXPERTS' GROUP ON THE FCCC WAS HELD ON NOVEMBER 1, WITH DELIBERATIONS FOCUSING ON METHODOLOGIES FOR MEASURING THE EFFECTS OF POLICIES AND MEASURES AND THE REVISED FRAMEWORK FOR ANALYSIS FOR THE PROJECT ON POLICIES AND MEASURES FOR COMMON ACTION. CANADA ALSO CHAIRED A MEETING OF THE COMMON INTEREST GROUP, INCLUDING ECONOMIES IN TRANSITION.

4. ON POSSIBLE FEATURES OF A PROTOCOL OR OTHER LEGAL INSTRUMENT, MOST PARTIES WERE OF THE VIEW THAT DISCUSSION ON THE FORM OF LEGAL INSTRUMENT MUST BE GUIDED BY FURTHER PROGRESS ON NATURE OF COMMITMENTS.

5. REPORT: THE SECOND MEETING OF THE AGBM TOOK PLACE IN GENEVA FROM OCTOBER 30 - NOVEMBER 3, 1995. CANADIAN DELEGATION WAS CO-LED BY DOUG RUSSELL/ENVCAN/APPD AND PETER FAWCETT/AGE/DFAIT AND INCLUDED VARANGU/NRCAN, DREXHAGE/ENVCAN, SYLVIA MACIUNAS/JLO/DFAIT STEVEN GUILBEAULT/QUEBEC COALITION ON CLIMATE CHANGE AND PIERRE GUIMOND/CANADIAN ELECTRICAL ASSOCIATION.

6. MOST OF THE UNCERTAINTIES ASSOCIATED WITH COP 2 WERE PUT TO REST AT AGBM 2. URUGUAY REGRETFULLY WITHDREW ITS INVITATION TO HOST THE EVENT, APPARENTLY DUE TO LACK OF AVAILABLE FUNDING AND HIGHER THAN ANTICIPATED COSTS. AS A RESULT, COP 2 WILL BE HELD IN GENEVA, FROM JULY 8 TO 19, 1996. COP 2 HAD ORIGINALLY BEEN PLANNED FOR OCTOBER 1996, WHICH LIKELY MEANS THAT AGBM 4 WILL BE HELD IN THE FIRST WEEK OF COP 2 FOLLOWED BY A MINISTERIAL SESSION JULY 17,18.

7. THERE WAS CONSENSUS THAT STRENGTHENING COMMITMENTS OF ANNEX 1 (DEVELOPED COUNTRIES AND ECONOMIES IN TRANSITION) IN ARTICLE 4.2(A) AND (B) OF THE BERLIN MANDATE, WAS CRITICAL TO THE BERLIN MANDATE PROCESS, AND THAT THE GOAL OF THE PROCESS IS TO INTER ALIA STRENGTHEN THE COMMITMENTS IN ARTICLES 4.2(A) AND (B) THROUGH AN APPROACH THAT ELABORATES POLICIES AND MEASURES AS WELL AS SETS QUANTIFIED EMISSION LIMITATION AND REDUCTION OBJECTIVES WITHIN SPECIFIED TIME FRAMES IN ACCORDANCE WITH THE BERLIN MANDATE.

8. POLICIES AND MEASURES:
IT WAS CONCLUDED THAT IT WOULD NOT BE POSSIBLE IN THE TIME AVAILABLE TO CONDUCT A DETAILED ANALYSIS AND ASSESSMENT OF ALL POLICIES AND MEASURES AND SO AGREEMENT WAS REACHED TO BEGIN TO NARROW THE RANGE OF POLICIES AND MEASURES WITHOUT CLOSING OPTIONS, AT THE THIRD SESSION OF AGBM. FURTHER, THE AGBM REQUESTED THE SECRETARIAT TO ORGANIZE AN INFORMAL WORKSHOP FOCUSING ON POLICIES AND MEASURES AND ITS LINKS WITH EMISSION OBJECTIVES, IN CONJUNCTION WITH THE THIRD SESSION.

9. EARLY ON IN THE DISCUSSION OF POLICIES AND MEASURES, THE USA MADE A SLIDE PRESENTATION IN THE PLENARY MEETING. IT FOCUSED ON EMISSIONS SOURCES AND TRENDS BOTH BY MAJOR WORLD GROUPINGS AND REGIONS (E.G. OECD-ASIA AND FORMER SOVIET UNION). NOTEWORTHY FROM THE PRESENTATION WAS THAT EITS EMISSIONS WERE FORECAST TO DECLINE. MOST CONTENTIOUS ELEMENTS OF THE PRESENTATION WERE THE REFERENCES TO NON-OECD EMISSIONS FORECASTS, WHICH SHOWED A CONSIDERABLY HIGHER UPWARD TREND THAN OECD COUNTRIES. IN MANY SUBSEQUENT INTERVENTIONS, G77 MEMBERS HASTENED TO CONDEMN THE PRESENTATION AS IRRELEVANT TO THE CURRENT NEGOTIATIONS ON ANNEX 1 COMMITMENTS AND NOTED IT DIVERTED ATTENTION FROM THE BERLIN MANDATE WHICH CLEARLY STATES NO NEW COMMITMENTS FOR NON-ANNEX 1 COUNTRIES. MANY NOTED THAT QUOTE HISTORY DOES NOT BEGIN IN 1984

UNQUOTE AND THAT DEVELOPED COUNTRIES THROUGH HUNDREDS OF YEARS OF INDUSTRIALIZATION WERE RESPONSIBLE FOR CLIMATE CHANGE AND SHOULD BEAR THE RESPONSIBILITY FOR REDUCING EMISSIONS NOW.

10. CANADA REITERATED ITS STRONG SUPPORT FOR A COMBINED APPROACH IN ADDRESSING POLICIES AND MEASURES ON THE RATIONALE THAT POLICIES AND MEASURES AGREED TO IN AN EVENTUAL AGREEMENT WILL SET THE DIRECTION FOR HOW ANNEX 1 COUNTRIES WILL MEET THEIR QUANTITATIVE COMMITMENTS IN A PROTOCOL OR OTHER LEGAL INSTRUMENT. CANADA ALSO PROPOSED A SET OF PRINCIPLES TO GUIDE THE WORK PROGRAM FOR ANALYSIS/ASSESSMENT. THE PRINCIPLES INCLUDED; EFFECTIVENESS OF MEASURE IN REDUCING GREENHOUSE GAS EMISSIONS, POLITICAL FEASIBILITY, COMPETITIVENESS, FLEXIBILITY, COMPREHENSIVENESS AND DEGREE OF COMMONALITY REQUIRED FOR EFFECTIVE IMPLEMENTATION.

11. A WIDE RANGE OF VIEWS WERE EXPRESSED ON APPROACHES TO THE TREATMENT OF POLICIES AND MEASURES, INCLUDING AN ANNEX-BASED APPROACH TABLED BY THE EU, WHICH REFLECTS DIFFERENT DEGREES OF COMMON ACTION, A SECTORAL AND CROSS-SECTORAL APPROACH, FAVOURED BY NORWAY; A TECHNOLOGY APPROACH, AN INSTRUMENT APPROACH, AND A MENU OF OPTIONS APPROACH, FAVOURED BY THE UNITED STATES.

12. ESTABLISHMENT OF QUANTIFIED LIMITATION AND REDUCTION OBJECTIVES WITHIN SPECIFIED TIME FRAMES:
IN ADDITION TO UNDERLINING THE LINKAGE WITH POLICIES AND MEASURES, PARTIES ALSO AGREED THAT THE THIRD SESSION WILL PROVIDE AN INITIAL OPPORTUNITY FOR THE AGBM TO MAKE PROGRESS ON ASSESSING RELEVANT INFORMATION AND NARROWING THE RANGE OF OPTIONS, TAKING INTO ACCOUNT THE ENVIRONMENTAL AND SOCIO-ECONOMIC COSTS AND BENEFITS OF SUCH ACTIONS. BASED ON AN AMERICAN PROPOSAL, AND SUPPORTED BY CANADA, THE AGBM REQUESTED THAT THE SECRETARIAT ORGANIZE, IN CONJUNCTION WITH THE THIRD SESSION, AN INFORMAL MEETING FEATURING TECHNICAL/ANALYTICAL PRESENTATIONS BY PARTIES AND INTERGOVERNMENTAL ORGANIZATIONS ON QUANTIFIED OBJECTIVES AND TIME FRAME AND THEIR IMPACTS.

13. IN ADDITION TO THE OPTIONS ON APPROACHES FOR QUANTIFIED OBJECTIVES FOUND IN FCCC/AGBM/1995/4, PARTIES IDENTIFIED A NUMBER OF ALTERNATIVE APPROACHES. THE UNITED STATES NOTED THAT OTHER APPROACHES INCLUDED CUMULATIVE AND MULTI-PARTY APPROACHES WHILE A NUMBER OF ANNEX 1 COUNTRIES MENTIONED DIFFERENTIATED OR COLLECTIVE OBJECTIVES. THE NETHERLANDS PROPOSED THE CONCEPT OF EMISSIONS BUDGETS, THAT IS, A CERTAIN AMOUNT OF EMISSIONS OVER A GIVEN PERIOD, FOR EXAMPLE FIVE YEARS.

14. CANADA SPOKE TO THE ISSUES OF DIFFERENTIATION AND COLLECTIVE QUANTITATIVE OBJECTIVES, EXPRESSING AN INTEREST TO EXPLORE ANALYSIS OF BOTH ISSUES FURTHER. IN THE CASE OF DIFFERENTIATION, IT MADE NOTE OF CANADA'S NATIONAL CIRCUMSTANCES AND CAUTIONED THAT SUCH A REGIME OF DIFFERENTIATED COMMITMENTS WOULD LIKELY ENTAIL COMPLEX NEGOTIATIONS, PARTICULARLY IN THE AREA OF CRITERIA. CANADA ALSO NOTED THAT IT IS INTERESTED IN FURTHER ANALYSIS OF COLLECTIVE QUANTITATIVE OBJECTIVES, BUT, ONLY ON THE UNDERSTANDING THAT DIFFERENTIATED COMMITMENTS AMONG INDIVIDUAL NATIONS COULD BE INCORPORATED IN SUCH A SCHEME. CANADA ALSO EXPRESSED THE VIEW THAT EMISSION OBJECTIVES COULD TAKE ON A

VARIETY OF FORMS, INCLUDING THE USE OF INDICATORS, SUCH AS ENERGY EFFICIENCIES AND/OR RENEWABLE ENERGIES.

15. CONTINUING TO ADVANCE IMPLEMENTATION OF ARTICLE 4.1 ON NON-ANNEX 1 COMMITMENTS:

COP 1 AGREED THAT ALTHOUGH THE BERLIN MANDATE PROCESS WOULD NOT INTRODUCE ANY NEW COMMITMENTS FOR NON-ANNEX 1 PARTIES, IT DID REAFFIRM THEIR EXISTING COMMITMENTS AND THE CONTINUING ADVANCEMENT OF THOSE COMMITMENTS UNDER ARTICLE 4.1. MOST INTERVENTIONS FROM ALL SIDES DID EMPHASIZE THE ISSUE OF NO NEW NON-ANNEX 1 COMMITMENTS. WHERE INTERVENTIONS SPLIT BETWEEN NON-ANNEX 1 AND ANNEX 1 COUNTRIES WAS ON WHICH OTHER ELEMENTS OF THE BERLIN MANDATE DECISION TO PLACE EMPHASIS. ANNEX 1 COUNTRIES, INCLUDING CANADA, EMPHASIZED THE NEED TO ADVANCE EXISTING COMMITMENTS THROUGH OPPORTUNITIES SUCH AS SUCCESS STORIES IN DEVELOPING COUNTRIES WHICH COULD BE DUPLICATED ELSEWHERE. DEVELOPING COUNTRIES EMPHASIZED THAT THE ADVANCEMENT OF COMMITMENTS WAS, IN THEIR INTERPRETATION OF THE BERLIN MANDATE, CONDITIONAL UPON ARTICLES 4.3, 4.5 AND 4.7 IN THE CONVENTION. THESE REFER TO COMMITMENTS ON DEVELOPED COUNTRIES TO PROVIDE NEW AND ADDITIONAL FUNDING AND TO PROMOTE AND FACILITATE TECHNOLOGY TRANSFER.

16. A PROPOSAL BY MALAYSIA, TO HOLD A WORKSHOP ON DEVELOPMENT OF GUIDELINES FOR COMMUNICATIONS FROM NON-ANNEX 1 COUNTRIES, WAS A PRODUCTIVE OUTCOME OF THIS DEBATE AND IS TO TAKE PLACE IN CONJUNCTION WITH THE SECOND SBSTA IN FEBRUARY 1996. THE KEY OUTSTANDING ISSUES CONCERNING THIS WORKSHOP ARE THE SOURCE OF FUNDING AND WHETHER ANNEX 1 PARTY EXPERTS WILL BE PERMITTED TO PARTICIPATE. A CONSENSUS DOCUMENT SUBMITTED BY THE G77 AFTER THE DEBATE OUTLINING THE TERMS OF THE WORKSHOP, WAS NOT INCLUDED AS PART OF THE CHAIRMAN'S CONCLUSIONS BUT WILL BE INCLUDED IN A MISCELLANEOUS DOCUMENT FOR FURTHER CONSIDERATION.

17. POSSIBLE FEATURES OF A PROTOCOL OR OTHER LEGAL INSTRUMENT: MOST PARTIES WERE OF THE VIEW THAT DISCUSSION ON THE FORM OF LEGAL INSTRUMENT MUST BE GUIDED BY FURTHER PROGRESS ON NATURE OF COMMITMENTS. ALTHOUGH EU TABLED PAPER OUTLINING ELEMENTS OF PROTOCOL, AND SAMOA ON BEHALF OF AOSIS, REFERRED TO ITS PREVIOUS PROPOSAL, MOST DELEGATIONS STRESSED THAT CONSIDERABLE PROGRESS WAS REQUIRED IN NEGOTIATIONS BEFORE ELEMENTS OF FUTURE LEGAL INSTRUMENT COULD BE CONSIDERED IN DETAIL. HOWEVER, GENERAL VIEW WAS THAT PRELIMINARY EXCHANGE OF VIEWS OF POSSIBLE DESIGN OF PROTOCOL WOULD BE USEFUL.

18. SEVERAL DELEGATIONS REFERRED TO THE NEED FOR LEGAL INSTRUMENT TO REFLECT ELEMENTS OF BERLIN MANDATE AND BE COMPREHENSIVE AND FLEXIBLE. USA REQUESTED SECRETARIAT TO COORDINATE REVIEW OF RELEVANT EXISTING CONVENTIONS, WITH EMPHASIS ON NATURE OF COMMITMENTS, DIFFERENTIATED RESPONSIBILITIES, AND INSTITUTIONAL ARRANGEMENTS AND LINKAGES, WHILE NOTING THAT BERLIN MANDATE COULD POSSIBLY BE ACHIEVED VIA AMENDMENT. CHINA EXPRESSED PREFERENCE FOR AMENDMENT PROCESS AS WELL. RUSSIA STRESSED NEED FOR DIFFERENTIATED RESPONSIBILITIES WITHIN ANNEX I PARTIES. JAPANESE CONCERN WAS FOR NATURE OF COMMON MEASURES.

19. EU PROPOSAL WAS OF SOME INTEREST. IT SUGGESTS GENERAL

COMMITMENT TO ADOPT POLICIES AND MEASURES WITHIN NATIONAL PROGRAMMES BUT BASED UPON THREE CATEGORIES OF COMMITMENTS: 1) MANDATORY CATEGORY FOR COMMITMENTS TO BE INCLUDED IN ALL NATIONAL PROGRAMMES; 2) SECOND CATEGORY, OF POLICIES AND MEASURES APPROPRIATE FOR INTERNATIONAL ACTION AND FOR WHICH PRIORITY CONSIDERATION IS MANDATORY; AND 3) THIRD CATEGORY OF OPTIONAL POLICIES AND MEASURES THAT COULD BE CONSIDERED IN LIGHT OF NATIONAL CIRCUMSTANCES. POLICY OBLIGATIONS OUTLINED ABOVE WOULD BE LINKED TO QUANTIFIED LIMITATION AND REDUCTION OBJECTIVES.

20. PARTIES WERE INVITED TO MAKE PRELIMINARY SUBMISSIONS BY JANUARY 15, 1996 TO SECRETARIAT REGARDING ADDITIONAL IDEAS ON POSSIBLE FEATURES OF PROTOCOL OR OTHER LEGAL INSTRUMENT.

21. CANADA EXPRESSED ITS SUPPORT IN INVOLVING AS MANY PARTIES AS POSSIBLE IN THE DELIBERATIONS OF THE FCCC AND ITS SUBSIDIARY BODIES AND THE NEED FOR CONTINUED CONTRIBUTIONS TO THE TRUST FUND FOR PARTICIPANTS IN THE UNFCCC TO ALLOW FOR THE MAXIMUM PARTICIPATION AT CONVENTION MEETINGS. IN THAT RESPECT, CANADA INDICATED THAT IT RECENTLY HAD MADE A CONTRIBUTION OF \$65,000 CDN TO THE FUND.

22. AD HOC GROUP ON ARTICLE 13 CONSULTATIVE MECHANISM ON IMPLEMENTATION:

PATRICK SZELL, RESPECTED INTERNATIONAL ENVIRONMENTAL LAWYER WAS CONFIRMED AS CHAIRMAN. ISSUE OF RAPporteur AND VICE-CHAIR LEFT TO NEXT SESSION. IT QUICKLY BECAME APPARENT THAT MOST DELEGATES HELD ONLY PRELIMINARY VIEWS ON SUBJECT OF APPROPRIATE CONSULTATIVE MECHANISM AND THAT, GIVEN NEED FOR FURTHER DETAILED EXAMINATION OF ISSUES AND DESIGN, WORK ON ARTICLE 13 PROCESS WOULD NOT BE COMPLETED BY COP2.

23. SEVERAL DELEGATIONS WERE NOT SUPPORTIVE OF IDEA OF MECHANISM (CHINA AND KOREA) AND MANY ADVOCATED CAUTIOUS APPROACH. EU POSITION WAS FOR NON-COMPLIANCE REGIME. AUSTRALIA SHARED CDN VIEWS ON MOST ISSUES (IE, NON-CONFRONTATIONAL, TRANSPARENT, PROBLEM SOLVING APPROACH.) IN LIGHT OF LACK OF CONSIDERED THOUGHT ON SUBJECT, REFLECTED EVEN IN JUSCANZ MEETINGS, AND GIVEN NUMBER OF CONCERNS BEING RAISED IN THE SESSION, CANADA DID NOT TABLE REVISED PAPER ON ART13.

24. HOWEVER, WE SPOKE ABOUT CDN PROPOSAL AND DESCRIBED ITS KEY ELEMENTS IN PLENARY. PAPER WAS SHARED WITH JUSCANZ DELEGATIONS. CDN PROPOSAL WILL BE FURTHER MODIFIED TO REFLECT SOME OF COMMENTS MADE BY DELEGATES AND WILL BE SUBMITTED, IN MODIFIED FORM, AT MORE STRATEGIC TIME. JUSCANZ REACTION WAS GENERALLY SUPPORTIVE, BUT SOME DELS NOTED THAT IT MAY BE TOO SPECIFIC FOR THIS EARLY STAGE OF NEGOTIATION. CANADA MADE INTERVENTION STRESSING NEED FOR ART13 CONSULTATIVE PROCESS AND OUTLINED PRINCIPLES WE VIEW AS ESSENTIAL TO SUCH PROCESS (TRANSPARENT, OPEN, EXPERT, NON-BINDING RESULT, NON-CONFRONTATIONAL).

25. DISCUSSION FOCUSED ON NUMBER OF QUESTIONS PREPARED BY SECRETARIAT, INCLUDING 1) NATURE OF MULTILATERAL PROCESS AND QUESTIONS THAT COULD BE RAISED; 2) LINKAGES WITH OTHER ARTICLES OF THE CONVENTION, IN PARTICULAR, REPORTING AND REVIEW AND DISPUTE RESOLUTION; AND 3) TIMING CONSIDERATIONS. NUMBER OF OTHER ISSUES

WERE RAISED IN DISCUSSIONS, MOST SIGNIFICANT OF WHICH WERE APPLICABILITY OF MECHANISM TO ANY NEW LEGAL INSTRUMENT, COMPULSORY OR MANDATORY NATURE OF PROCESS, PRINCIPLES TO BE INCLUDED IN ELABORATION OF A PROCESS AND FINALLY, WHETHER SUCH A PROCESS WAS NECESSARY.

26. SECOND SESSION IS PLANNED FOR JUL96, IN TANDEM WITH COP2. IN INTERIM, CANADA SHOULD PREPARE CONSIDERED RESPONSE TO QUESTIONNAIRE AND SEEK VIEWS OF LIKE-MINDED. AUSTRALIA STRESSED NEED TO INVOLVE DEVELOPING COUNTRY PARTIES IN ART13 PROCESS TO ACHIEVE BROAD BASED SUPPORT FOR ITS DEVELOPMENT.

27. ANNEX 1 EXPERTS GROUP:
CANADA CHAIRED A SIDE MEETING OF THE ANNEX ONE EXPERTS GROUP ON THE FRAMEWORK CONVENTION ON CLIMATE CHANGE. PARTICIPATING ANNEX 1 MEMBERS ENDORSED THE PROPOSAL FROM THE IEA SECRETARIAT ON METHODOLOGIES PROJECT FOR ESTIMATING THE EMISSIONS REDUCTION EFFECTS OF POLICIES AND MEASURES AND FOR REVIEWING EXISTING GUIDELINES FOR NATIONAL COMMUNICATIONS. PARTICIPANTS ALSO CONSIDERED A DRAFT FRAMEWORK FOR ASSESSMENT AND ANALYSIS OF COMMON ACTIONS AND AGREED TO SUBMIT IT TO AGBM 2 AS A WORK IN PROGRESS THAT WILL BE SUBJECT TO REVISION ONCE ANNEX 1 PARTIES, IN CONSULTATION WITH MULTISTAKEHOLDERS, HAVE HAD AN OPPORTUNITY TO FULLY CONSIDER ITS CONTENTS. A FINAL VERSION OF THE DOCUMENT IS TO BE SUBMITTED AT AGBM 3.

28. IN ACCORDANCE WITH INTERDEPARTMENTALLY-DISCUSSED PROPOSAL CO-HEADS OF CDNDEL ALSO SENT A LETTER TO THE HEAD OF THE SECRETARIAT EXPRESSING AN INTEREST IN CANADA ORGANIZING A TECHNOLOGY FAIR IN CONJUNCTION WITH COP 2. SIMILAR TO INITIATIVES UNDERTAKEN FOR BIODIVERSITY COP MEETINGS, THE FAIR IS INTENDED TO HAVE MOST OF ITS EXHIBITORS FROM THE PRIVATE SECTOR AND WOULD FOCUS ON MITIGATION OPPORTUNITIES IN ENERGY EFFICIENCY AND RENEWABLE AND ALTERNATIVE ENERGIES. INDUSTRY CANADA, DFAIT, EC AND NRCAN WILL MEET TO DISCUSS NEXT STEPS.

Report from Environmental Group

Canadian Delegation Member

La Coalition
québécoise
sur les
changements
climatiques
(CQCC)



Quebec
Coalition
on Climate
Change
(QCCC)

The apparent tranquillity of ABGM-1 was contrasted with the eventful week of ABGM-2.

First, the E.U. tabled a proposal on a frame work protocol the second day of the conference that did attract a lot of attention from a number a different countries (AOSIS and G-77 and China). The JUSCANZ countries were very slow to react (when they did).

As far as Canada was concerned, they were no major problems with the E.U. proposal although they thought it was a little bit premanure and that the proposal needed some clarification's. Environmental Non-Governmental Organizations (ENGOs) were a little disappointed that Canada didn't explicitly support this proposal, especially since a protocol is the kind of legal instrument that Canada is looking for.

Finally on the E.U. proposal. It contained a very interesting element for Canada which is the collective reductions, this might very well be for us the only we to reach our reduction target. (E.U. was a framework - ideas were generated by the E.U. and many delegations, including possible consideration of collective targets and differentiation (different targets)).

The U.S. ~~did~~ also attracted quite a bit of attention with a rather entertaining, but controversial slide show. They were also accused on a number of occasions of trying to divert us from our main goal - the Berlin Mandate - and also of overburdening the Secretariat with an exhaustive list of irrelevant demands.

The discussions on the strengthening of article 4.2 a) and b) were launched the debate of policics of mcasures for Annex 1 countries. The Parties were divided as to whether or not more analysis and asscsmnt war needed or if, since this an iterative process, this would be done as

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we go along. ENGOs and most of the countries (except JUSCANZ) felt that it is more than time to get on our way with the implementation. Need we to say that the proposed reductions of Annex 1 countries (for those who will be able to meet them) are still very far from the IPCC latest recommendations.

Regarding the advancement of implementation of 4.1, we participated in the ongoing debate between Annex 1 and Non-Annex 1 countries regarding their National Communication, Annex 1 arguing that since they had met their objective of producing theirs, it was now the turn of the developing countries to do so.

There is one incident we want to deplore is the attempt by the Global Climate Coalition (GCC, the Fossil Fuel lobby) to discredit Ambassador Estrada. The GCC held a press conference in Washington to denounce "The refusal of the AGBM Conference Chair to allow a discussion on the need for analysis and assessment of actions under consideration". The press release also stipulated that this behavior was discrediting the entire AGBM process. In reaction, ENGOs would like to point out that this attack on Ambassador Estrada's integrity is a dishonest attempt from the GCC to move us away from the real debate. Further more, this attack is based on a manipulated use of the event that took place during AGBM-2. In our view, the Chair directed AGBM-2 in a very able manner.

Finally, on the last day of the Session, it should be noted that there was a rather intense debate regarding the IPCC and its role in the AGBM process. Saudi Arabia, Kuwait and a few other countries tried - but failed in their attempt - to weaken the importance of IPCC in the work AGBM and its subsidiary bodies.

Steven Guilbeault
Coordinator, QCCC

Report from Industry
Canadian Delegation Member



Canadian Association
Electrical canadienne
Association de l'électricité

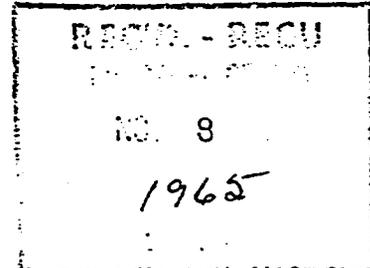
MEMORANDUM/ Note de service

DATE: November 7, 1995

TO/À: Doug Russell
A/Director General Air Pollution Prevention
Environment Canada

FROM/De: Pierre Guimond
Manager, Government Relations

SUBJECT/Objet: Report on the Second Meeting of the Ad Hoc Group on the Berlin Mandate (AGBM): Geneva, October 30-November 3, 1995



The Ad hoc Group on the Berlin Mandate (AGBM) met in Geneva for its second meeting from October 30 to November 3, 1995. This meeting of the AGBM was the first actual negotiation on the substantive issues and it provided insight into some of the agenda being played out as Parties maneuver to influence an eventual protocol or another legal instrument. While no substantive decisions were made at the meeting, the agenda prepared by the Chairman was clearly intended to move consideration of the issues forward along the process leading to decisions.

The Canadian Delegation made a number of interventions at AGBM 2 which were helpful contributions to the process of moving matters forward while not closing options at this time. The assumption made in the Berlin Mandate is that a strengthening of Article 4.2(a) and (b) will mean hard targets and timetables to reduce net emissions even though such direct language is not used. The environmental community maintained pressure on Parties to see the eventual outcome only in terms of a reductions protocol. While Canada has been careful not to close options, it has not signaled a preference.

It is important to note that for the first time, an alternative way of thinking about the outcome made an appearance at the international negotiations. The approach is analogous to that developed by W. David Montgomery and others. Other Annex 1 delegations indicated a willingness to consider a wider range of policies and measures and, presumably, this reflects a wish for a more rational approach to the economics underlying commitments. From industry's perspective, the most important development at AGBM 2 was the US Delegation's attempt to broaden the thinking by considering alternative options and approaches that have not yet been tabled.

The head of the US Delegation suggested that the approaches that have so far been suggested are essentially variations on a single theme, and are narrower than the broad mandate contained in the decisions of the CoP 1 in Berlin. They call for a common emissions target and a timetable for meeting that target. The US wanted an organized discussion of alternative approaches and full consideration of all options. Industry representatives at the AGBM meeting were pleased to see a more thoughtful discussion of the emerging issues.

While the US démarche was greeted with some enthusiasm by industry, it was not immediately clear if the US was simply going through the motions of a full consideration of options or genuinely looking to establish a path away from binding "one size fits all" targets and measures. With the US presidential election next fall, the US Delegation may be saying everything that its home audiences want to hear, while not yet really narrowing matters down to choices/decisions. However, the US Delegation at the first Conference of the Parties made undertakings to US industry regarding Article 4.2 (b) and it is expected that as a practical matter, there will be movement and shifting occurring soon to better reflect the "national circumstances" in the US position.

It is premature at this time to think a new current of thought will prevail over the "reductions protocol" assumption. However, some delegations from Annex 1 countries started raising the need for a more realistic cost-benefit consideration of emission reductions in informal discussions with industry representatives.

Canadian Delegation Interventions

Ad Hoc Working Group on the Berlin Mandate
Framework Convention on Climate Change
Second Session
30 October - 3 November, 1995
Geneva

INTERVENTION BY CANADA:

POLICIES AND MEASURES IN THE AGBM PROCESS

Mr. Chairman

The Canadian delegation would first like to make a general statement on policies and measures for the AGBM process to be followed by a more detailed statement on guidelines and criteria for the selection of appropriate policies and measures.

Canada strongly supports a combined approach in addressing policies and measures. For a Protocol or other legal instrument to be credible, it is critical that policies and measures agreed to in an eventual agreement define how Annex 1 countries will reach agreed-on limitation and reduction objectives. To simply cast relevant policies and measures as a menu from which Parties may or may not choose, fails to recognize the need to link policies and measures with reduction and limitation objectives within specified time frames. Canada, therefore, supports the principle that the selection of policies and measures will set the direction for how Annex 1 countries will meet their quantitative commitments.

Mr. Chairman, as we noted at the first AGBM session, there is a great deal of work involved in the task of identifying policies and measures which could be undertaken in the AGBM process. We need to prioritize, by looking at and narrowing down options through the use of some broad criteria or principles. Canada has found this a very effective way to address a number of diverse interests in developing our own action program on climate change.

In Canada's view, the following principles could act as a guide in forming the work program for analysis assessment:

- a) effectiveness of measures - how well does the measure deliver in reducing emissions?
- b) political feasibility - are the measures consistent with national priorities and policies? Will they be implemented in light of national circumstances?
- c) competitiveness - do the measures enhance other policy objectives, related to job creation and countries' international competitiveness?

- d) flexibility - can the measures be implemented across a range of national circumstances?
- e) comprehensiveness - do the measures cover all relevant sectors, and greenhouse gases and sinks?
- f) common measures - is it likely that these measures would only make sense if a number of countries decide to implement them?

In this regard, specific examples might be energy market reforms, including deregulation, the removal of subsidies, and incentives for measures that conserve energy, or sustainable transport, including road pricing, fuel specifications and standards of low emission/energy efficient vehicles.

Finally, Mr. Chairman, we listened carefully to your comments about the work load of the Secretariat, and we, like other delegations, are prepared to help the work of our group and thereby hopefully reduce the burden of work that the Secretariat must bear.

Thank you Mr. Chairman

October, 31, 1995

INTERVENTION BY CANADA:

QUANTIFIED EMISSION LIMITATION AND REDUCTION OBJECTIVES WITHIN SPECIFIED TIME-FRAMES

Thank you Mr. Chairman. Canada would like to speak to two issues under Item 3b), namely differentiation and collective limitation and reduction objectives among Annex 1 Parties. But first, we would like to take note of the intervention by the United States and suggest that the proposal that the Secretariat co-ordinate a special session on quantitative emission limitation and reduction objectives for the third session of the AGBM be given serious consideration.

Mr. Chairman, Canada is interested to explore the analysis of differentiated commitments among Annex 1 Parties. A number of Annex 1 Parties made interventions during the first and second session of the AGBM to the effect that they support the notion of differentiated, or regional, targets among Annex 1 Parties.

It is our view that this is consistent with Article 2 (a) of the Berlin Mandate, which in setting out its policies & measures and limitation & reduction objectives, notes that such negotiations amongst Annex 1 Parties would need to take into account "differences in starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances...". In the case of Canada, for example, we would need to take into account a number of unique circumstances in setting appropriate limitation and reduction commitments, including Canada's climate, geography, resource base and economic and political structures.

One cautionary note, however, Mr. Chairman. It needs to be kept in mind that such an approach would likely entail complex negotiations, particularly on the issue of identifying and defining appropriate criteria to be used in differentiating national commitments. It has yet to be clarified, for example, how appropriate commitments would be determined.

Canada is also interested to explore the analysis of collective limitation and reduction objectives among Annex 1 Parties.

In particular, we are keen to explore the views of some Parties that the use of collective reduction objectives would promote a "least - cost strategy, that could drastically reduce the costs for all Parties involved". The greatest challenge in reaching a collective solution lies in ensuring that the principle of equitable burden sharing is maintained. In other words, while Canada is interested to pursue the notion of a collective objective, it does so on the understanding that differentiated commitments among individual nations could be incorporated in such a scheme.

Finally, Mr. Chairman, it is the Canadian delegation's view that collective emission objectives could take on a variety of forms, including the use of indicators, such as energy efficiencies and/or renewable energies. Canada would strongly support the use of such indicators in developing collective solutions and would take note of the work taking place domestically as an opportunity for potential use in the AGBM process.

October 31, 1995

Ad Hoc Body on the Berlin Mandate
Second Session, October 30 - November 3, 1995
Geneva

CANADIAN INTERVENTION ARTICLE 4.1
NOVEMBER 1, 1995

Thank you Mister Chairman.

Canada has consistently held to the position that climate change is a global problem, requiring action by all countries. This concept is recognized in the Convention. What is also recognized in the Convention, however, is that not all Parties will be undertaking the same level of action -- the concept of common but differentiated responsibilities.

In Berlin, the Conference of the Parties agreed not to introduce any new commitments for non-Annex 1 countries in this next round of discussions which we are pursuing now. The Berlin decision did not, however, diminish the commitments which non-Annex 1 Parties already had under the Convention. In fact, as noted by earlier speakers, the Conference of the Parties reaffirmed and agreed to advance the implementation of these commitments.

In our view, mister Chairman, there are many successful projects and measures being undertaken in non-Annex 1 countries which could serve as good examples for all of us. These include, research and development projects in China and education and awareness programs in Mexico. Further, there are programs under development which will also contribute to the mitigation of climate change. For example, an examination of a regional electrical energy project to seek opportunities to assist Central American countries in line loss reduction, energy efficiency and demand side management is currently underway.

As well, Canada has long been a supporter of the concept of joint implementation or activities implemented jointly as a cost-effective mechanism to reduce net greenhouse gases. We believe that the concept is win-win in that it can provide significant benefits for the project proponent and the host country, including through the introduction of new and more efficient technologies.

As we move to the third session of the AGBM, we will have to examine what this element of the Berlin mandate decision really means. We would encourage Parties to come forward with examples of what is currently being done to mitigate climate change in non-Annex 1 countries. This will help us answer the questions of how this will affect the development of national inventories, national programs on measures to mitigate change and national communications. In Canada, we think some of the answers will emerge through examination of some of the successful initiatives noted earlier. We note with encouragement the examples by our colleague from Argentina and others.

Finally, Mister Chairman, we have heard much over the past few days on the perceived linkage between Annex 1 countries fulfilling our commitments before non-Annex 1 countries advance implementation of their own responsibilities. Canada is meeting our commitments under the Convention. For example, we have done our national communications and supported and participated in an in-depth review. We call upon all other countries to do the same, particularly under Article 4.1.

Thank you mister chairman.

Ad Hoc Group on Article 13
First Session
October 30-31

CANADIAN STATEMENT

Canada welcomes the formation of the Ad Hoc Group on Article 13 and considers that the work of this Group will develop an important element of the Climate Change Convention regime.

We have listened carefully to the comments of experts who have already spoken at this meeting and agree that any process to establish a mechanism under Article 13 must proceed cautiously. We must ensure that consideration be given to procedures already established under the Convention and its subsidiary bodies. There is no desire to duplicate. We must ensure that relationships with subsidiary bodies are clearly established and are serving a useful purpose.

However, we are concerned that a gap may exist between traditional dispute resolution mechanisms under Article 14 and the reporting and review process established under Article 12.

Also, traditional dispute resolution mechanisms have been of limited use in the environmental field. This is especially the case in a situation where the commitments are multilateral and the impacts are global. The actions of one party may affect the ability of others to achieve Convention goals. All parties must work cooperatively in this situation. Reporting and review mechanisms may not be able to solve problems or concerns that arise from difficulties in achieving Convention goals, individually or collectively. Thus there could be a role for a multilateral consultative process.

It is Canada's position that a multilateral consultative process could be useful but that it must reflect certain principles.

As a multilateral process it must be open to all. Its actions must be transparent. It must be able to deal with problems which affect more than one or two parties.

As a consultative process it must reflect the views of parties. It should, as necessary, draw upon experts for inputs. As a consultative process it will not have a binding result but it should have an outcome that is arrived at in a cooperative manner. It should operate in a nonconfrontational manner.

These are the principles that should be integral to the development of Article 13.

The process should consider questions that impact on the achievement of Convention results, by individual parties or collectively. Thus parties could certainly raise questions regarding their own commitments. Policy questions regarding implementation could be discussed as could be questions regarding the interpretation of the Convention. We anticipate that parties could raise questions regarding the implementation of the Convention by other parties as well under this mechanism. Possibly the subsidiary bodies could submit questions to the process.

Canada believes that consideration should be given to the operation of the Article 13 mechanism under the Subsidiary Body for Implementation. This would avoid the establishment of an additional institution and would be useful in linking the process to the reporting and review functions conducted by that body.

With respect to the formal dispute resolution mechanisms, we are of the view that should a formal dispute arise under Article 14, proceedings under Article 13 should not prejudice such proceedings. It may follow that any related process under Article 13 should, in such circumstances, be suspended.

We continue to have a strong interest in pursuing the elaboration of an innovative procedure for dealing with questions regarding implementation under Article 13 and encourage parties to participate in this work.

Ad Hoc Group on the Berlin Mandate
2nd Session
October 30 - November 3, 1995

Intervention by Canada

November 2, 1995

Mr. Chairman,

Canada has always been a strong supporter of the need to involve as many Parties as possible in our deliberations. As the Secretariat has noted, there are more of us here at this meeting than at our previous one, but the room is not yet full. We recognize the need for voluntary contributions to the Trust Fund for Participants in the UNFCCC to allow for the maximum amount of participation at our meetings. I am therefore pleased to indicate today that my country has recently made an additional contribution of \$65,000 CDN to the fund.

Thank you Mr. Chairman

Canadian Statement
on Behalf of the Annex 1 Experts' Group

STATEMENT BY
CANADA
ON BEHALF OF THE
ANNEX 1 EXPERTS' GROUP ON
THE FRAMEWORK CONVENTION ON CLIMATE CHANGE

Mr. Chairman,

Canada is taking the floor to update delegates on the work of the Annex 1 Experts' Group on the Framework Convention on Climate Change, formerly called the Joint OECD/IEA Project on National Communications. This update is intended to meet the request of FCCC Parties that Parties participating in the Experts' Group provide a regular progress report on its' work. These progress reports represent an input into the analysis and assessment currently under way in the AGBM process. {See the Report of the AGBM on the Work of Its First Session [FCC/AGBM/1995/2/Article 19(f)(vii)].}

The group has requested that the OECD and IEA Secretariats concentrate on two projects: 1) policies and measures for common action and 2) methodologies for estimating the effects of policies and measures and evaluating projections. The Common Actions Project is of most interest to the AGBM and we will therefore focus on its work in this intervention.

The overall objective of the Project on Policies and Measures for Common Action is to broadly assess the relative potential of a range of policies and measures for common action by Annex 1 Parties, with a view to bringing forward this analysis to the AGBM process.

At its last meeting on the 26th and 27th of September, the Annex 1 Experts' Group considered over 100 measures and selected around a dozen for further scoping. These measures cover the energy supply, transport, utilities, renewable and agriculture & forestry sectors in combination with a range of voluntary, regulatory, financial and economic instruments.

At this session of the AGBM we will hear views of Parties on the work plan from now until the third session of the Conference of the Parties, including views on analytic input to policies and measures. Taking into account these views, the Annex 1 Experts' Group will next meet to select representative measures for in-depth analysis.

It is our expectation that any measures being pursued should provide for win-win opportunities, that is policies and measures which are consistent with, and complement, other policy priorities, related to economic stability, employment growth, health protection and environmental sustainability. It would also be important that identified measures are flexible enough to be implemented across a range of national circumstances. That being said, it must also be emphasized that selected measures do not represent policy preferences on the part of the Participants. This project is an analytic exercise only, and is not intended to prejudge nations' preferences on policies and measures. The success of the Project on Common Actions will be based on it remaining apolitical in its orientation. It is not intended to become another venue for negotiations, but instead, one that will help to inform and enlighten Parties as they develop their response to climate change for the post-2000 era.

Mr. Chairman, a brief explanation regarding the change in the name of this group may be in order. This modification is intended to clarify that while the analytic work being done on these projects will, to a large extent, be dependent on the contributions of the OECD and IEA Secretariats, it is the Annex 1 Experts' Group that is ultimately accountable for the results. In that respect, we need to be clear that the activities of the project on common actions and on methodologies are outside the formal consultative mechanisms of either the OECD or the IEA.

As far as consultations with non-government bodies and non-Annex 1 countries are concerned, this means that while governments are free to make available their inputs into this project to others, outputs from this project will initially be reviewed by participating governments. After the review, a revised draft would be made available to others for their comments. Any comments from non-government bodies will be coordinated through government delegations, who will then pass on those comments on to the Annex 1 Experts' Group through the OECD and IEA Secretariats. In an effort to keep this process open and transparent, it is the intention of the group to regularly brief plenary sessions of the AGBM on our work to ensure that others are being kept adequately informed.

Mr. Chairman, it is our hope that the work of the Annex 1 Experts' Group can offer valuable analytic assistance to Annex 1 and other Parties as we address the next steps towards achieving the ultimate objective of the Climate Change Convention. I would also like to, on behalf of Annex 1 Parties, extend our deep thanks for the dedicated and professional work of the OECD and IEA Secretariats in ensuring that this important work stays on track and on time.

Thank you Mr. Chairman. Copies of this intervention are available at the back of this room.

Annex 1 Experts' Group Letter & Framework for Analysis

1 November 1995

To: Chairman of the Ad Hoc Group on the Berlin Mandate

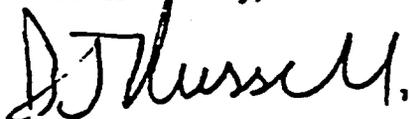
Dear Mr. Chairman,

On behalf of the Annex I Experts Group on the Framework Convention on Climate Change, we are pleased to submit the following document "Draft Framework for Assessment and Analysis of Common Actions". This document represents work in progress that will be subject to revision once Annex I Parties have had an opportunity to fully consider its contents. In addition, several Annex I Parties wish to consult with interested groups outside of the government for their comments.

Noting the Chair's and Secretariat's desire to move forward on these matters, this interim document is presented to provide useful input into the AGBM process at this point in time. However, Annex I Parties would like to emphasise that future inputs to the AGBM would need to go through a full review process as described in our intervention at the second session of the AGBM on 30 October.

It is our expectation that a revised version of this document will be submitted to the AGBM at its third session. We regard this framework for analysis as a living document that will continue to evolve as the work on the analysis of common actions progresses.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "D. Russell".

Douglas Russell

Chair, Annex I Experts Group on the FCCC

Draft Framework for Assessment and Analysis of Common Actions¹

Progress Report on the Common Action Study

Annex I Expert Group on the Framework Convention on Climate Change

Interim Report to AGBM2

Overall goal

The goal of the common action study is to broadly assess the relative potential of a range of policies and measures for common action by countries² and Parties listed in Annex I to the FCCC with a view to bringing forward this analysis to the Ad Hoc Group on the Berlin Mandate.

Context

A description of sectoral emissions trends and sectoral policy trends will be given where appropriate to set the context for assessment of each measure. The revised framework below provides the full range of information desired for broad assessment of selected measures. It may not always be possible to adhere to the framework fully as at times it may be beyond the resources of the project to find all of the necessary information (for example if modelling studies are needed).

Policy objectives

A brief description of the various policy objectives to which the measure is expected to contribute will be given. Policy objectives will not necessarily be primarily or wholly climate related, and can be expressed at various levels of specificity, and may vary from country to country.³

Approach and methodology

A brief description will be given of the approach used to assess the measure, and general methods used e.g. survey of the literature, modelling, or analysis based on estimates and expert judgement. In

¹ The range of definitions for common action includes the following:

- common actions could be specific policies and measures implemented by a group of countries together under some form of agreement, to increase the effect of the measure;
- common actions could involve co-ordination of action to implement the same or similar measures together;
- common action could be an agreement to take actions in a sector towards a given aim or target; or
- common action could simply be successful policies and measures that could be replicated by other Parties.

² Where this document refers to "countries" or "governments" it is also intended to include "regional economic organisations," if appropriate.

³ For example policy objectives for the measure "voluntary agreements with electricity utilities to purchase more wind energy" could be:

- reduced CO₂ emissions from energy (a general objective); or
- increased share of wind energy in electricity supply (a more specific objective); and greater diversity in electricity supply (a non-climate objective).

addition, methods used for specific aspects of the analysis such as the costs and effects of the measure will be described in those sections of the report, as indicated below.

Full Description of Measure

Each measure will be described as specifically and concretely as possible. This description will include information about any "package" the measure is part of - that is other measures that are associated with the measure being studied. The more carefully specified the measure, the more useful the analysis of its costs, effect, and other key criteria will be. The description will include the following information, where relevant, including a range of implementation options (e.g. how it is implemented, when it is implemented):

- A. level/rates at which it is applied;
- B. products/activity the measure applies to;
- C. extent and type of commonality;
- D. whether it is mandatory/voluntary;
- E. monitoring and enforcement details;
- F. other measures that are necessary or desirable for the success of the action;
- G. options for how any revenue is used;
- H. any incentives for compliance.

Rationale for common action

A brief description of ways the measure could be implemented will be given, including variations on the extent and type of commonality, to provide insights on the relative advantages and disadvantages of common action. Examples will be given of how the measure might be implemented at various: broad scale level, by all Annex I Parties, by a sub-set of countries; or as a national measure. The extent and type of commonality addressed will depend on what levels are feasible for the measure.

Analysis on how the measure performs at different levels of is important, but may be conceptual rather than quantitative if information is not readily available. The ideas about how the measure might be implemented and how effective it could be, with respect to the extent and type of commonality, are more useful than trying to provide uncertain numbers. Some possible advantages/disadvantages from common action are:

- A. changes in relative competitive advantage of an industry or the economy;
- B. increase/reduction in trade distortions, reduction in free-riding;
- C. greater collective effect if co-ordinated;
- D. measure may not be undertaken otherwise;
- E. reduce "leakage" of emissions (e.g. from industries moving off-shore);
- F. lower cost;
- G. lower barriers;
- H. increased political feasibility.

Possible participants and vehicles for action

Options for possible participants will be suggested for the measure, including consideration of the extent and type of commonality as described in the previous section. In many cases, measures will be implemented by governments; in other cases through private sector participants. Measures could also involve private sector participation or public/private partnerships.

Options for vehicles for action will be given considering variations on the extent and type of commonality. In some cases governments might achieve a policy objective directly through the instruments available to government. Even if industry or local government are to be the main implementers of the measure, governments may still need to harness their input through negotiating voluntary agreements, providing information on the benefits of the action, or passing a law requiring action. In these cases, the vehicle for their action needs to be clearly specified (e.g. business consultative mechanism, business partnerships through industry associations, twin city agreements by municipal governments). In some cases, the measure could be carried out by either government or non government participants or both, with each scenario involving different vehicles for action. Vehicles could be existing and/or new institutions that could be used to implement the measure. Examples of vehicles are:

- A. International organisations eg IEA implementing agreements on energy efficiency partnerships;
- B. Co-ordinating body eg International Organisation of Standardisation (ISO 14000 project);
- C. Legal framework eg European Union directives,
- D. International treaties eg Energy Charter;
- E. Voluntary business partnerships;
- F. Industry associations eg IATA.
- G. National government or inter-governmental agreements

Greenhouse gas emissions reduction potential⁴

The following information will be provided (including variations on the extent and type of commonality for each measure to be studied):

- A. assumptions about the emissions path if the measure were not implemented);
- B. the key assumptions underlying the estimates;
- C. the level of confidence associated with the estimates (in the analyst's opinion, or from a sensitivity analysis);
- D. the information that is needed for the estimates and whether it is available or not;
- E. the type of analysis or modelling that is relevant to assessing the effects of the measure.

Preliminary estimates of the effects of the measure on emissions will be made. Where information is available, the incremental emissions reduction potential of the measure will be presented as estimates of individual greenhouse gases in tons of CO₂ equivalent per year for the years 2000, 2005, 2010, and 2020. If possible, the full technical potential of the measure will also be given and

⁴ Other environmental benefits are covered under "other policy goals."

indirect effects of the measure on the greenhouse gas emissions, such as flow on effects to other sectors, or possible effects in countries not participating in the common action, will be discussed. Where relevant, specific examples of these indirect effects will be given.

Costs and macro-economic effects⁵

The following information will be provided (including variations on the extent and type of commonality for each measure studied):

- A. the key assumptions the cost estimates are based on;
- B. the level of confidence associated with the cost estimates (in the analyst's opinion, or from a sensitivity analysis);
- C. the information that is needed for the cost estimates and whether it is available or not;
- D. information on the variation of costs from country to country and factors influencing these differences;
- E. the type of analysis or modelling that is relevant to assessing the costs of the measure.

Preliminary assessments of the cost (e.g. high/medium/low) will be given. Where information is available, the incremental cost of the measure will be estimated in US dollars per ton CO₂ equivalent. The type of costs included in the analysis will be specified: cost to governments of implementing and enforcing the measure; cost to industry; cost to the general public; macro-economic effects (including effects on employment and trade, GDP, and investment). In some cases there may be economic benefits associated with the measure, which will be noted.

Political feasibility

The study will discuss political and institutional issues associated with the measure, such as whether the measure is likely to be politically sensitive (to governments, other participants, interest groups). Where relevant, the analysis will identify the political feasibility of measures (including variations on the extent and type of commonality), in different national and regional contexts, and comment on the relative merits of the measure for the groups most affected by it (governments, industry, interest groups).

Other policy goals

The effects (benefits and costs) of the measure on other social, economic, environmental policy goals will be discussed for each extent and type of commonality studied.

Barriers to successful implementation and options for addressing them

The case study will address questions related to the implementation of the measure, for example: whether there is a market for new technology developments; whether the necessary institutions exist; whether new infrastructure or behaviour change is needed before the measure can be successful; and what additional barriers might be relevant.

⁵ Other costs are covered under "other policy goals."

Time period

The case study will address the length of time it might take to implement the measure (e.g. to negotiate the voluntary agreement, or have legislation in place for standards); and when the effects of the measure are likely to be realised: now, to the year 2000, 2005, 2010 and 2020. This section will address whether measures are expected to give short-term emission reduction only, long-term emission reduction potential only, or a mixture of short and long term effects (for example a measure may have some effect on emissions in the short term but much greater effect in the longer term).

Impact on other countries

The impact of the measure on non-Annex I countries and non-participating Annex I countries, in terms of costs, trade impacts, greenhouse gas reduction, social, environmental and other impacts will be assessed to the extent possible.

Conclusion

The conclusion will focus on whether the measure is a good candidate for common action and why.

Key Interventions by Other Countries

U.S.A.
Agenda Item 1 (b) and (c)
Organizational Matters
Monday, October 30, 1995

Thank you Mr. Chairman.

At the AGBM's first meeting last August, the United States introduced a paper proposing the outlines of a workplan which would allow the group to move toward the adoption of a protocol or other legal instrument in 1997. As we are all aware, such a protocol/legal instrument is to decide the initial global response to the threat of climate change in the period beyond the year 2000. The United States views climate change as a serious threat, and is determined that the process initiated by the Berlin Mandate proceed in a logical, orderly manner so as to produce a result in the short time available that is both effective and broadly acceptable.

Mr. Chairman, building on the U.S. AGBM-1 paper (also circulated as part of AGBM/1995/MISC.1/Add.1) and on comments and discussions held both within the United States and with other countries during this interim period, we would like now to set forth some additional views on the AGBM workplan for both this and future meetings.

The United States remains convinced that analysis and assessment should be an integral part of the process, because it will be difficult for Parties to form positions without considering carefully their situations and that of others, and because we believe it will be vital to establish a credible process which builds confidence among all parties in taking next steps. We emphasize that analysis is not an end in itself, but rather a means of leading the AGBM to agreement on a course of action -- the goal of the Berlin Mandate.

Mr. Chairman, it is clear that the Parties are not yet prepared to adopt a next step. We have not yet been able to evaluate what any of the already proposed options might mean to our countries or to evaluate alternatives. In our view, we should use this session

to brainstorm -- to be creative in suggesting plausible new ideas for further consideration. Consequently, this meeting should agree on specific future work needed to advance toward the Berlin Mandate 1997 goal.

The United States is prepared to accept the agenda as set forth in document FCCC/AGBM/1995/3 and its Addendum 1. Substantively, it includes the key items before us: strengthening the commitments in Article 4.2(a) and (b) -- including discussions of both policies and measures, and discussions of quantified emission limitation and reduction objectives; continuing to advance the implementation of Article 4.1; and possible features of a protocol or other legal instrument.

However, a critical component of the process has not explicitly been included here. I refer to a review of historic trends in past emissions, and the projections of future emissions. Deciding on appropriate next steps requires a better understanding of current differentiated national circumstances -- and of the underlying causes of such differences. To this end, this session should begin with a substantive review of both historic and projected future trends in greenhouse gas emissions. Following that review, Parties will be better positioned to develop a set of criteria that will help in the consideration of a next step. We intend to make some remarks on this matter later this afternoon.

Analytical Workplan: Policies and Measures

To elucidate the questions surrounding policies and measures, a broad based approach would be best. Existing efforts (such as those undertaken by individual Parties, or by such organizations as the OECD in its common actions exercise) need to be brought to the AGBM for broader airing. We propose the following program of work:

- We note that the Secretariat has already prepared a report that lists the measures undertaken by or included in each Party's national communication, categorized by type and sector. However, the report is essentially a list only. We therefore request that for our February session, that the Secretariat expand on this report and should comment, to the

extent feasible, on the individual effectiveness of each measure.

- The Parties should also be asked to submit and the FCCC Secretariat to compile a miscellaneous document containing proposals on the most effective potential common measures. This compilation should contain the submitting Parties' assessments of how the measures would be implemented through convention mechanisms.
- A formal discussion of these documents should be scheduled for AGBM-3.

Analytic Workplan for Quantified Emission Limitation and Reduction Objectives

Considerable work has also been done to evaluate the effects of a range of emissions limitation and reduction objectives. Much of this work recently has been summarized by the Intergovernmental Panel on Climate Change (IPCC).

- A formal presentation of the results of the IPCC Second Assessment Report should be made at the February AGBM session.

A number of critical questions remain regarding quantified emission limitation and reduction options, including (1) how new approaches, on which we should focus some attention, compare with existing proposals, (2) how to evaluate the overall cost of different emission reduction objectives, and their effects on trade and productivity; (3) how different policies might perform in meeting greenhouse gas limitation objectives; and (4) how to structure protocols and national incentives with respect to such matters as burden sharing and equity.

Therefore, we recommend that:

- An informal session be held as part of the February AGBM to present the results of analyses, along with their impacts on global greenhouse gas emissions levels, and the assumed cost of meeting objectives. A presentation by the relevant analytic groups could be coordinated through the Secretariat.

- Analyses presented should, in addition to including a "base case" (i.e., a no mitigation policy case), evaluate the relative impacts (both environmental and economic) of undertaking a cumulative and a fixed year objective. Where possible, analyses should indicate what measures or set of measures would have to be implemented to achieve each of the objectives. We note that in most cases, analyses have been undertaken -- and that in other cases, individual parties may wish to develop their own analysis and share their results at AGEM-3.

It would be desirable to have analyses for a wide range of scenarios, including the following:

- o Stabilization at 1990 levels beyond 2000
- o Decreases of 5, 10 and 20 percent below 1990 levels by 2005, 2010, 2020 and longer term.
- o Decreases of 5, 10 and 20 percent below levels projected to be emitted in 2005, 2010, 2020 and longer term.

Advancing the Implementation of Article 4.1

Continuing to advance the commitments in Article 4.1 is an integral part of the Berlin Mandate. It is therefore necessary to prepare for an appropriate discussion on this issue, including where necessary, recommending analytical work that could support such a discussion. To this end, we propose:

- That a formal report of the current status of the implementation of commitments under Article 4.1 of the convention be presented to AGEM-3 by the chair of the Subsidiary Body on Implementation (SBI).
- That the AGEM consider, following the SBI presentation, what analytic work would support the further advancement of the implementation of Article 4.1 commitments.

Features of the Legal Instrument

Several issues related to the next steps apply to both individual policies and measures, and to quantified emission limitation and reduction objectives. These require separate efforts which should be coordinated by the Secretariat. We recommend the following program of work in this area:

- The Secretariat should commission groups of experts (nominated by governments through submissions to the secretariat no later than November 15, 1995) to complete short reports for distribution to the Parties prior to the February 1996 AGBM session providing a review of existing international agreements that include the following features:
 - o Binding vs. non-binding -- tradeoffs between stringency and breadth of participation.
 - o Common vs. differentiated responsibilities.
 - o Institutional structures (including those created to determine/monitor/verify specific policies and measures, and those designed for implementing objectives and timeframes for achieving them).

CONCLUSION

Mr. Chairman, we make these points to help focus our work. We will elaborate on each in the course of subsequent discussions this week. In each of these discussions, we urge that Parties bear in mind the outputs that will be needed. In addition, we must consider how, through both our discussion and the Secretariat's intersessional work, we can best chart a course to solve this difficult problem.

Thank you.

United States Statement on Policies and Measures
October 31, 1995

Mr. Chairman:

We have read with interest Parties' submissions to the Secretariat on implementation of the Berlin Mandate. These submissions suggest the wide range and variety of available options for specific policies or measures. They range from agreements to a particular expenditure or subsidy removal -- to agreement on specific levels of performance or the development of specific technologies. Approaches can focus on a particular sector such as personal transportation, power generation, or agricultural activities; a particular greenhouse gas, such as an agreement on methane; or on specific actions such as fiscal instruments or energy efficiency standards.

An agreement on policies and measures could complement a quantified emissions limitation and reduction objective. Specific actions could comprise the basis of a agreement or a "menu of options" approach. Although we urge full and broad consideration of these options, we feel it is premature to propose a structure or framework which specifies individual policies and measures that would be included in a possible agreement. Such a framework prejudices ongoing consideration of policies and measures in this and other fora.

As we indicated in our opening statement, we believe that it is important to broadly consider a wide range of options for policies and measures. Although there exists a variety of literature on specific, individual measures, little consideration has been given to the full range of opportunities in this area or to the feasibility of achieving agreement on any individual action. We believe that a full range of options should be considered and assessed. We believe that the criteria for assessing policies and measures should be similar to that used for assessing quantified emission limitation and reduction objectives.

The United States has developed the following preliminary list of such criteria. While the list is not exhaustive, it may generate useful discussion. Ultimately, however, we may recognize that no single action or set of actions will fulfill all criteria satisfactorily.

- Effectiveness (including in slowing rate of emissions growth)
- Cost and cost-effectiveness
- Effects on non-climate objectives
- Equity and distributional impacts
- Implementation difficulty
- Ability to hedge against uncertainties in the system
- Impetus to technological progress, including projected improvement in technology costs and opportunities.

Additionally, evaluation of options should include recognition that each country's unique circumstances and history may affect its willingness to commit to policies or measures affecting particular sectors and activities. Therefore, assessment of possible actions should also include consideration of commonalities and differences in national circumstances, emissions profiles and the factors driving emissions.

On the basis of these (or other) criteria, it may be possible to evaluate existing options for next steps -- and to use the existing options to generate new ideas that may better meet the criteria used. To help frame the assessment, the United States categorizes possible policies and measures as market mechanisms, technology approaches and sectoral approaches. We recognize that there may be significant overlap in these categories, particularly for technology and sectoral approaches. This set of alternatives is only illustrative of possible options. Further discussion among parties at this and subsequent AGBM sessions is likely to generate other -- and perhaps more promising -- approaches or variants.

Options available under a market mechanism approach include: elimination of subsidies that promote greenhouse gas producing fuels or activities; removal of regulations that interfere with the functioning of the market; tax reform that reduces tax rates on some productive factors and increases tax rates on consumption and/or intermediate inputs that are sources of environment damages or labeling of energy efficient products to better inform the market.

A technology approach would focus on programs for technology research, development, and diffusion (RD&D). These approaches promote the adoption or market penetration of advanced technologies, including renewable or efficient technologies already commercially available, and foster the development and commercialization of further technology improvements. Research and development initiatives include government-funded programs and mechanisms for redirecting private R&D activity, allowing for the development of technological options. Diffusion programs include information and outreach programs, "green programs", market identification and targeting. Both research and development and diffusion programs can include provision for mid-course correction or augmentation based on results achieved.

A sectoral approach would focus on policies, objectives and measures specific to particular sectors or industries. Examples could include standards for emissions/energy efficiency, voluntary agreements, agreement to implement specific policies (such as energy audits), or to improve a specific indicator in some sector (such as vehicle miles traveled). It will be useful to consider a wide range of opportunities, and to openly identify sectors where parties may already have successes.

To further elucidate the questions surrounding policies and measures, the United States believes a broad based approach would be best. Existing efforts (such as those undertaken by individual Parties, or by such organizations as the OECD in its common actions exercise) need to be brought to the AGBM for public airing. The United States recommends the following program of work:

- We note that the Secretariat has already prepared a report that lists the measures undertaken by or included in each Party's national communication. However, the report is essentially a list only. We therefore request that for our February session, that the Secretariat expand on this report and comment, to the extent feasible, on the individual effectiveness of each measure. Such comments might be based on the following criteria: magnitude of emissions reduced, cost, ability to promote technological change, ease of implementation, verification and monitoring of results and ancillary environmental and economic benefits.

- The Parties should also be asked to submit and the FCCC Secretariat to compile a miscellaneous document containing proposals on the most effective potential common measures. This compilation should contain the submitting Party's assessments of how the measures would be implemented through convention mechanisms. As part of their submissions, Parties should be asked to include an analysis of the impacts of the measures on various Annex I and non-Annex I countries -- or a proposal for how to evaluate these impacts.
- A formal discussion of these documents should be scheduled for AGBM-3.

We recognize that some costs will be associated with these requests, particularly our first proposal. An initial evaluation of the effectiveness of measures to be undertaken could simply be based on documentation in national communications. We note that the guidelines for the communications do in fact require such information, although few Parties have submitted such data. A second level of effort, would be to rely on the in-depth review now underway to generate such information. Finally, the current OECD project may identify effectiveness in those few measures it identifies.

United States Statement
Agenda Item 3(b)
Quantified Emission Limitation or Reduction Objectives
October 31, 1995

Thank You Mr. Chairman:

The Berlin mandate addresses two types of approaches to next steps for the period beyond the year 2000: (1) quantified emissions limitation or reduction objectives and (2) specific policies and measures. The United States earlier addressed the issue of policies and measures. We seek now to broaden our collective thinking regarding quantified objectives, and in particular, to urge Parties to consider alternative approaches that have not yet been tabled. The proposals that have been tabled to date are variations on a single approach: They call for a common emissions target, to be met on an annual basis, starting in the same year. The United States believes this is not the only approach to quantified objectives consistent with the Berlin mandate.

Approaches to quantified objectives may vary in the level, timing, and location of emissions reductions made. They may also vary as to whether the objective is binding or aspirational in nature. The United States wants to address three basic forms that quantified objectives might take:

- (1) annual objectives for individual Parties;
- (2) cumulative objectives for individual Parties; and
- (3) multi-Party objectives, either on an annual or cumulative basis.

So let us turn now to each of these types of approaches to quantified objectives.

(1) Annual Emissions Objectives for Individual Parties

The most familiar approach to quantified emissions objectives establishes a common objective to be met by each subject Party on an annual basis in, or beginning with, a target year. The existing articles 4.2(a) and (b), and several already tabled proposals for next steps follow this approach. They identify a specific aim for greenhouse gas reductions or removal to be achieved by each Party on an annual basis by a specific year, relative to that Party's emissions and removals in a given base year (for example, returning each Party's annual greenhouse gas emissions to 1990 levels in the year 2000, or to 1995 levels in the year 2010).

- One variant of this approach would be to establish a percentage reduction from a baseline to be achieved each year.

- Another variant would be to measure reduction objectives against projected emissions instead of against a fixed base year (for example, reducing emission levels below projected emissions for the year 2010).

These variants would maintain the focus on commitments for each Party measured individually and on an annual basis.

(2) Cumulative Emissions Objectives for Individual Parties

An alternative approach that the United States urges the Parties to consider would be to establish a limit on total emissions over a specified period. Each Party would then have flexibility in choosing any path of annual emissions that does not exceed its cumulative limit by the end of the specified period. Given different starting points and growth trends (for example, fuel mixes, sectoral growth patterns, etc.), it may be more attractive for one Party to make its reductions evenly through the period, for a second Party to make its reductions more aggressively early in the period, and for a third Party to make its reductions later in the period.

- As one variant to this approach, each Party could be required to provide the COP with a document detailing the emissions path and implementation measures that Party chose to meet its cumulative objective for the period in question. Actual emissions paths would be compared to such plans at intermediate checkpoints, with any significant discrepancies triggering a corrective mechanism. Corrective measures might involve commitments to take additional concrete actions to lower domestic emissions, commitments to make increased contributions to emissions mitigation on an international scale, or further commitments to support technology development.

In connection with cumulative approaches, it would be useful to consider whether to provide an incentive for early reductions, and if so, how. An emissions banking system, for example, might be considered for this purpose.

(3) Multi-Party Emissions Objectives, with Trading and/or Joint Implementation

Other approaches could provide Parties with greater flexibility in where emissions are reduced, compared with purely national objectives. Examples of such approaches include multi-party emissions objectives, coupled with emissions trading or joint implementation. Such approaches could allow for "burden-sharing" among parties that face dramatic differences in the cost of reducing emissions domestically.

- One variant of this approach would be a multi-party greenhouse gas "bubble." In this variant, a greenhouse gas objective would be established for a group of Parties considered as a whole. The Parties in the "bubble" could then negotiate individual, differentiated objectives among themselves.

- By allowing emissions trading within the "bubble," the Parties could take fuller advantage of low-cost opportunities to assure cost-effective emissions reduction.

Approaches that add spatial flexibility could be implemented in conjunction with the familiar approach of annual emissions objectives. They could also be combined with cumulative approaches, thereby maximizing flexibility in both the timing and location of emission reductions.

In order to better determine what approaches would be effective, acceptable, and successful, the Parties may wish to consider developing a set of criteria for evaluation. The United States has developed the following preliminary list of such criteria:

- Effectiveness (including in slowing rate of emissions growth)
- Cost and cost-effectiveness
- Effects on non-climate objectives
- Equity and distributional impacts
- Implementation difficulty (including whether the action is best implemented through binding or non-binding commitments)
- Ability to hedge against uncertainties in the system
- Impetus to technological progress, including projected improvement in technology costs and opportunities.

This list is intended to be neither exhaustive nor excessively confining, for we recognize that no approach may be able to fully satisfy all criteria simultaneously. Nonetheless, these criteria may generate useful discussion.

Returning to our intervention of yesterday, the United States would like to conclude by recalling and elaborating on proposed elements of the analytical workplan that we suggested for the next interval of the AGBM process. Once again, the United States would like to emphasize that analysis is not an end in itself, but rather a means to leading the AGBM to agreement on a course of action.

A number of critical questions remain with regard to quantified objectives, including --

- o how the new approaches discussed today compare with existing proposals,
- o the overall cost of different emission reduction objectives, and the effects on trade and productivity,
- o whether those costs and effects differ depending on whether cumulative or multi-Party approaches are used, and
- o issues related to the structuring of protocols and national incentives to agree (including on such matters as "burden sharing" and equity).

To explore these questions, the United States recommends that an informal session be held as part of the February AGBM for two main purposes:

- First, the United States recommends that this session include a presentation of the results of evaluations of a range of emission limitation and reduction objectives that have been undertaken by the Intergovernmental Panel on Climate Change (IPCC). The mitigation chapters of IPCC Working Group II provide detailed assessments of the technological options for each key greenhouse gas emitting sector, including, industry, transportation and energy supply. IPCC Working Group III's report reviews the economic literature, including both "top down" and "bottom up" models, focussing on overall emission levels at the national and international levels. As part of this presentation, the IPCC should be requested to include information on assumptions used in models, such as those concerning rates of technological innovation and the commercialization and diffusion of new technologies in determining future emissions paths and reductions possibilities.

The United States believes far too little of this valuable technical material prepared by the IPCC has been brought forward for consideration by the Parties -- particularly Parties which have not had the opportunity to undertake such work internally.

- Second, the United States recommends that the informal session include presentations of any new analyses of approaches to quantified objectives that Parties or other experts may have undertaken. Such presentations could explore alternative approaches (i.e., cumulative and multi-Party approaches) as well as the familiar approach of annual objectives for individual Parties. It would be desirable to have analyses of both familiar and alternative approaches for a wide range of scenarios, including the following:
 - o Stabilization at 1990 levels beyond 2000
 - o Decreases of 5, 10 and 20 percent below 1990 levels by 2005, 2010, 2020 and longer term.
 - o Decreases of 5, 10 and 20 percent below levels projected to be emitted in 2005, 2010, 2020 and longer term.

Such presentations should include a "base case" (i.e., a no mitigation policy case), and evaluate the relative impacts (both environmental and economic) of undertaking an objective. Results should include at least one emissions path in cases where a cumulative objective is assessed. Scenarios should be run to assume no new commitments by developing country parties. They should also assume the availability of emissions trading among Annex I parties, and also between Annex I and non-Annex I Parties. Where possible, analyses should indicate what measures or set of measures would have to be implemented to achieve each of the objectives.

Consistent with the request made of the IPCC, such presentations should include information on the importance of technological change in determining future emissions reductions possibilities. This should include an assessment of the rates assumed for autonomous technical change, and an assessment of the sensitivity of top-down and bottom-up model results to different assumptions about rates of progress in the development and diffusion of new technologies.

Model results should be provided in as transparent and disaggregated a way as possible -- including offering detailed information on country or regional costs and benefits, and detailed information with regard to sectoral impacts. Information should also be provided regarding the weaknesses of each analytic technique -- and to discuss the sensitivity of analyses to variations in the parameters which cannot be quantitatively assessed.

Presentations of such analyses at the informal session could be coordinated through the Secretariat. The Secretariat should seek to include in the presentation as broad as possible an array of models that have the capacity to produce credible results.

We have considered the Chairman's request to provide initial cost estimates for organizing the informal session proposed here. We believe the first task -- bringing forward the IPCC's results) could be easily absorbed as part of the cost of the AGBM-3 meeting. The effort required for the second task would depend primarily on the number of new analytical presentations offered by Parties and other experts. The United States would intend to offer an analytical presentation at this session, and we would be pleased to assist the Secretariat in organizing the session.

This intervention, coupled with our earlier statement on policies and measures, is by no means an exhaustive list of the options that might be considered in the analytical and assessment phase -- or during the negotiating phase. Rather, the intent has been to set out some of the issues which are now unresolved -- and which, without further resolution, will obstruct the parties ability to reach agreement on next steps. It is our desire that these analyses help lead to agreement on a next step which will move us further toward meeting the convention's ultimate objective.

We look forward to discussing these ideas with other Parties here, and to agreeing on a workplan that will set the stage for even more productive consideration of alternative approaches at AGBM-3.

United States

QELRO: Analytic Workplan and Presentation Proposal

The United States recommends that a presentation on the QELROs be developed for AGBM-3. We urge that the following two items be included in the agenda:

1) A presentation by the IPCC on its work in the area of modeling of the effects of various targets – recently summarized as part of the IPCC WG III Report. A request would be made to the co-chairs of WG III of the IPCC to coordinate this presentation – possibly drawing on the lead authors for the appropriate chapters of the Second Assessment Report.

2) A presentation on the results of recent analyses, including analyses of impacts on global greenhouse gas emissions levels, the assumed cost of meeting objectives, and any sensitivity analysis on important parameters of the models. A presentation by the relevant analytic groups could be coordinated through the Secretariat (see U.S. intervention, attached, for details on substance of presentation) The following process could be used to coordinate presentations:

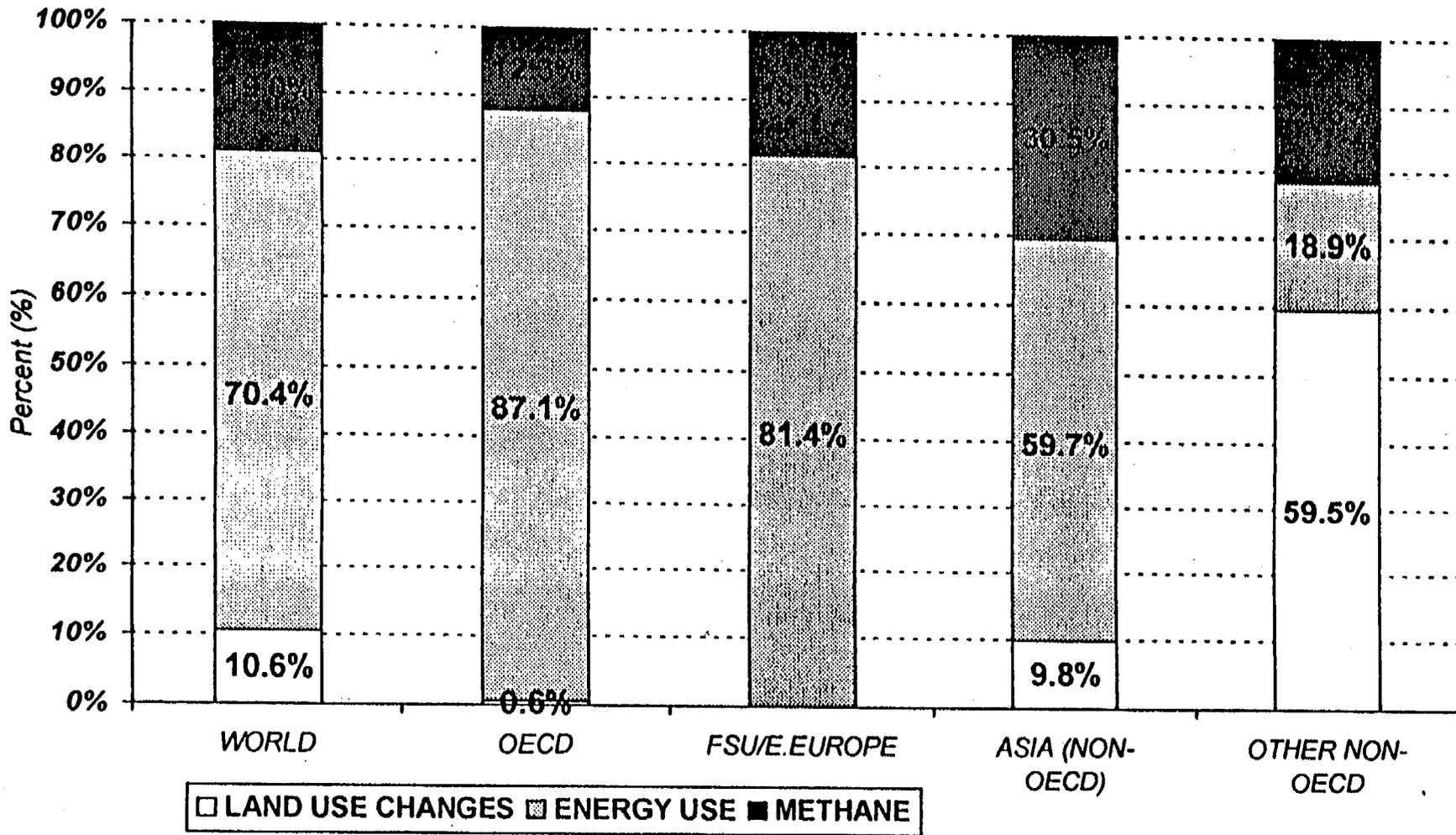
- The IPCC (through Working Group III) would be requested to propose the names of appropriate individuals to make presentations;
- Countries would be requested to submit additional nominations for individuals who might make presentations and suggest questions and/or criteria around which the presentations could be organized. To facilitate timely organization of presentations at AGBM3, we suggest that such submissions be made to the Secretariat by December 1, 1995.
- If too many names are submitted (i.e., more than 6-8), the Bureau of the SBSTA would be requested to narrow the list to the final number based on a breadth of analytical efforts, the need to assure broad geographic representation in presentations, and substantive assurances that the presentations cover the broad array of options that are currently analyzed or being discussed by the Parties.
- Each presentation would total approximately 15-20 minutes. Following formal presentations, (all 6-8), Parties would be invited to ask questions. Then, individual Parties may choose to make their own presentations – we would expect these would focus on the national impacts of the various proposals – or possibly, present new and different analyses than those that had been formally presented by experts.
- If possible, a short paper including the results from each model presentation would be circulated as part of a miscellaneous document in advance of the session; if this is not possible, presenters would be requested to bring copies of their papers with them to the meeting, for distribution at that time. Presenters would not be paid for their work, although the Secretariat would be requested to fund the travel of experts to the sessions.
- It would be expected that the entire agenda item would be completed with approximately 1 1/2 days – to include approximately 1 day of the analytic presentations, and a second half day of country comments on position related to these issues. It would be helpful to the Secretariat, in organizing the meeting agenda, if it could be apprised in advance of the number of presentations that might be expected from individual Parties.

U.S. Delegation Presentation
on Greenhouse Gas Emissions Trends

October 30, 1995

1991 Emissions by Major World Groupings

Energy Use, Land Use Changes and Methane

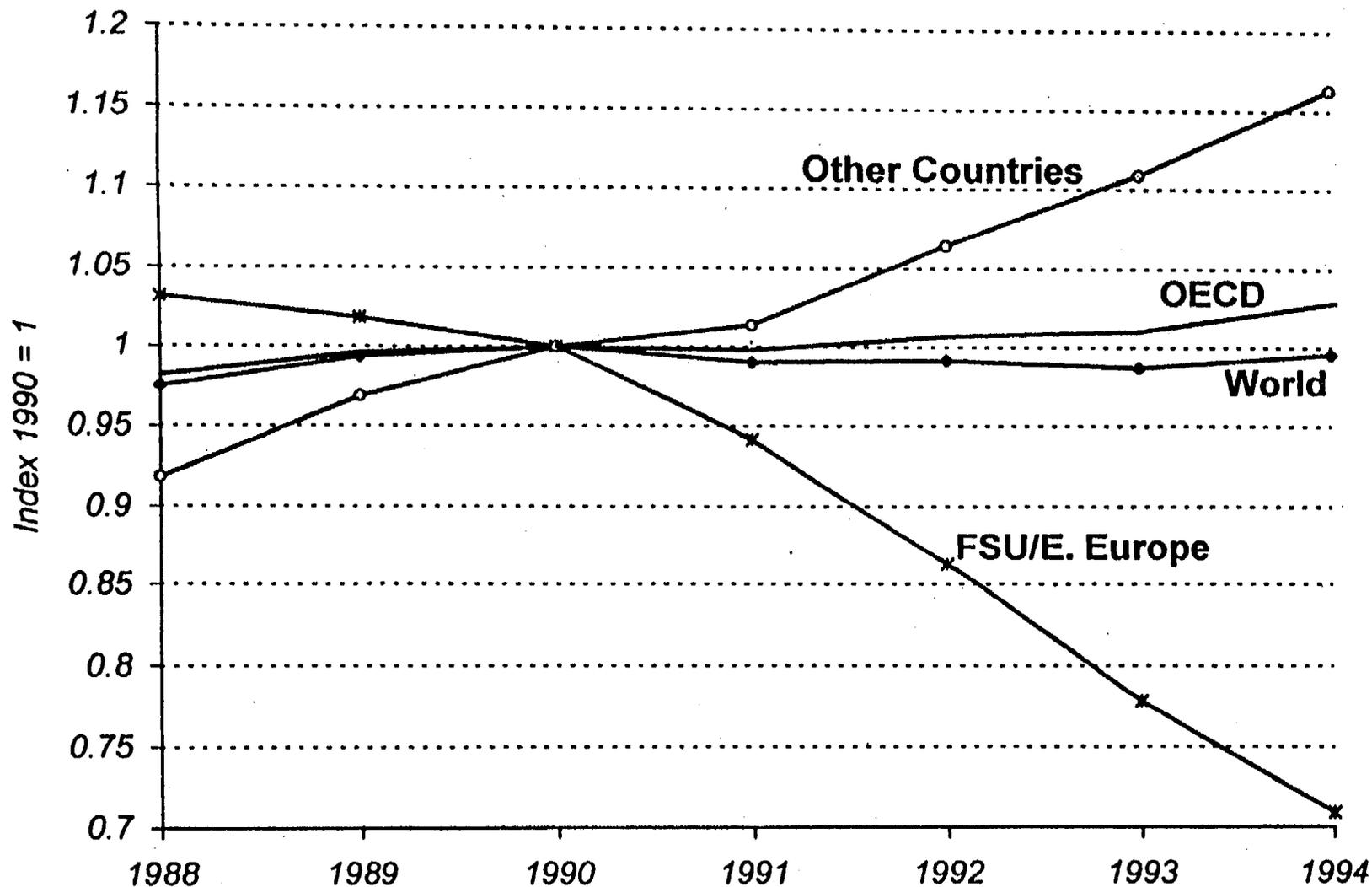


Note: Land use changes data not available for FSU/E. Europe nor for the OECD, except the U.S.
 Source: World Resources 1994-1995, World Resource Institute

- **GREENHOUSE EMISSIONS SOURCES VARY WIDELY BY REGION (1991 Example)**
 - **In the OECD Area, energy-related emissions are the predominant GHG emissions source.**
 - **In other regions, land-use changes and methane emissions have greater significance.**
 - **Efforts towards mitigation may need to have a varying emphasis in different regions.**

Energy-Related Carbon Emissions

Major World Groupings

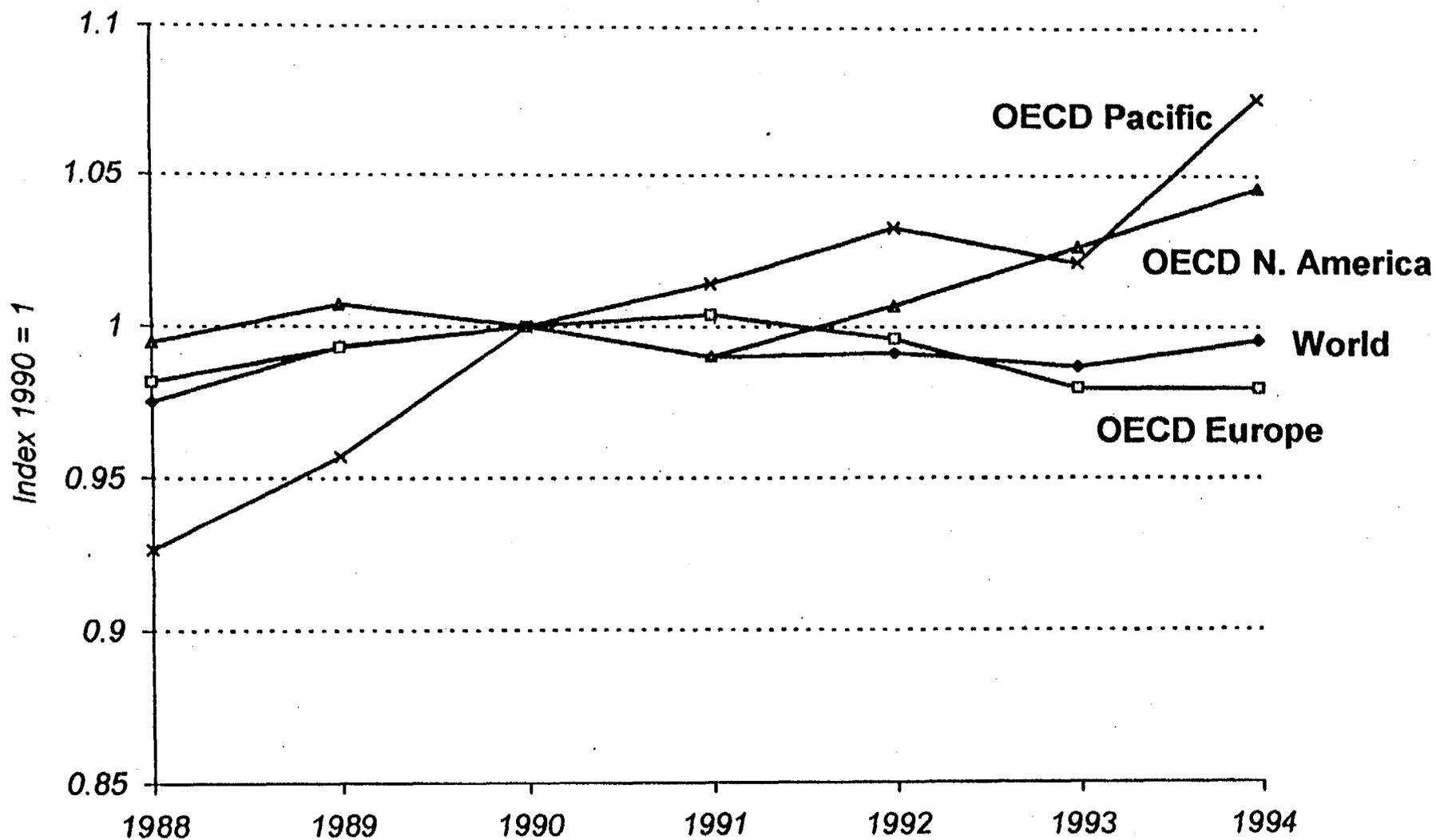


Source: BP Statistical Review of World Energy, British Petroleum, June 1995

- **THERE ARE MAJOR REGIONAL DIFFERENCES IN EMISSIONS TRENDS SINCE 1990.**

Emissions in the former Soviet Union and Eastern Europe fell by 29 percent, offsetting modest emissions growth in the OECD and rapid emissions growth outside of Annex I.

Energy-Related Carbon Emissions OECD Groupings



Source: *BP Statistical Review of World Energy*, British Petroleum, June 1995

- **THERE ARE MAJOR DIFFERENCES IN RECENT (1990 TO 1994) GROWTH IN ENERGY-RELATED EMISSIONS WITHIN THE OECD REGION**

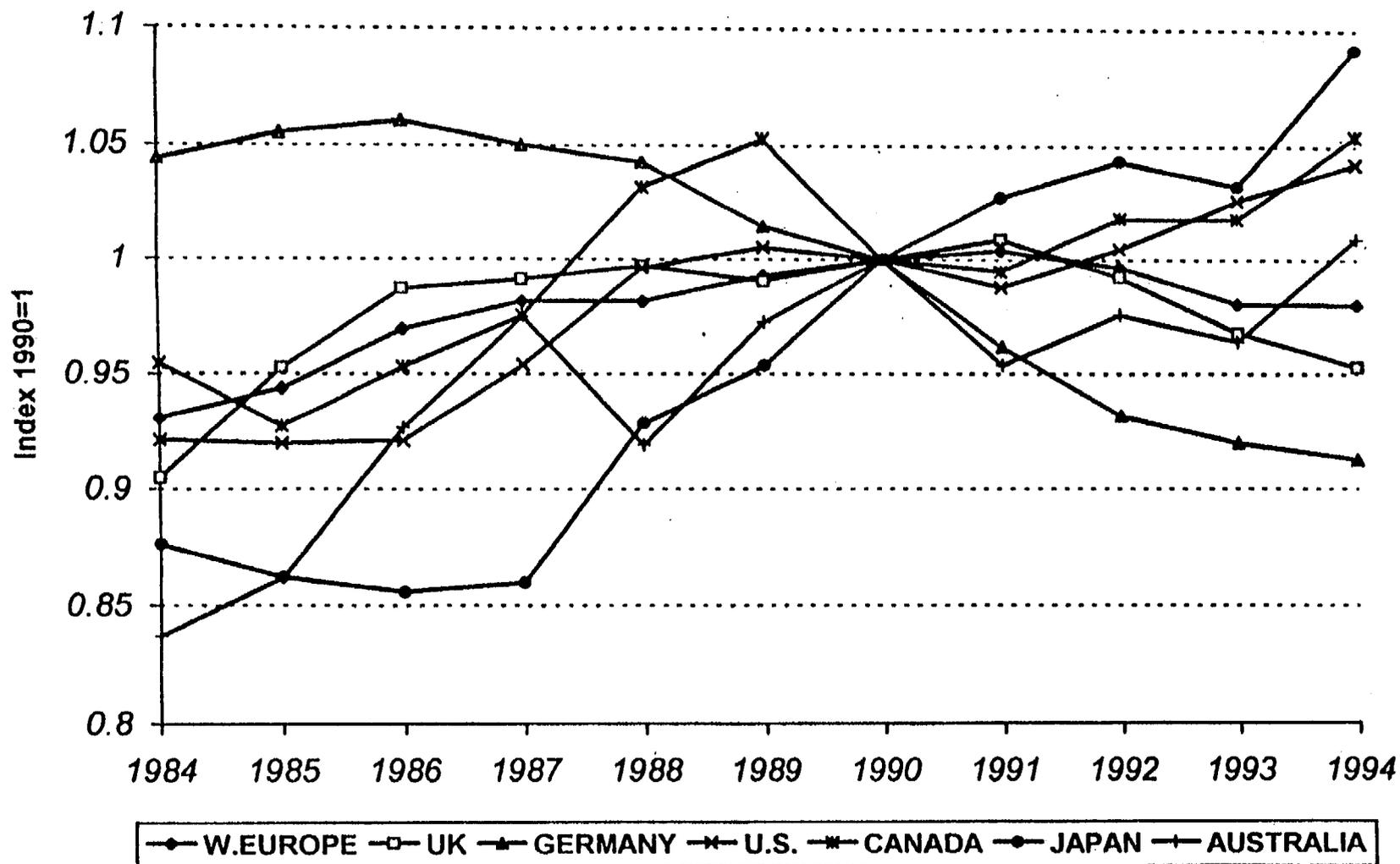
Emissions in OECD Europe fell almost 2 percent. Emissions grew by 4.6 percent and 7.6 percent respectively in the OECD North America and OECD Pacific regions.

(Most of these differences reflect baseline differences rather than policy actions undertaken pursuant to the Framework Convention on Climate Change)

- **ENERGY-RELATED EMISSIONS EXHIBIT SIGNIFICANT YEAR-TO-YEAR VARIABILITY**

As demonstrated in energy use data for OECD countries, emissions growth patterns are irregular. Underlying causes include weather fluctuations, economic growth cycles, and energy price fluctuations. These factors make it difficult to project or target the level of emissions in any given year (but present a lesser barrier to objectives expressed in terms of average or cumulative emissions).

Carbon Emissions Trends in Selected Countries 1984-1994



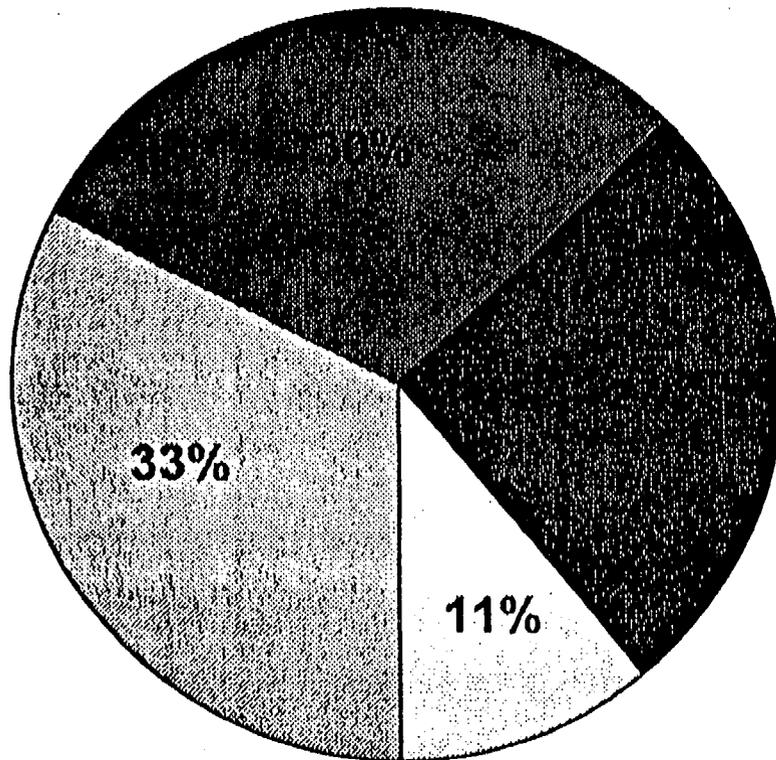
Source: *BP Statistical Review of World Energy*, British Petroleum, June 1995

- **DIVERGENCES IN RECENT EMISSIONS TRENDS ARE MOST APPARENT AT THE LEVEL OF INDIVIDUAL PARTIES**

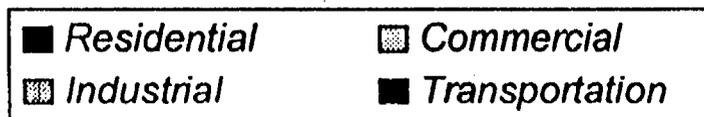
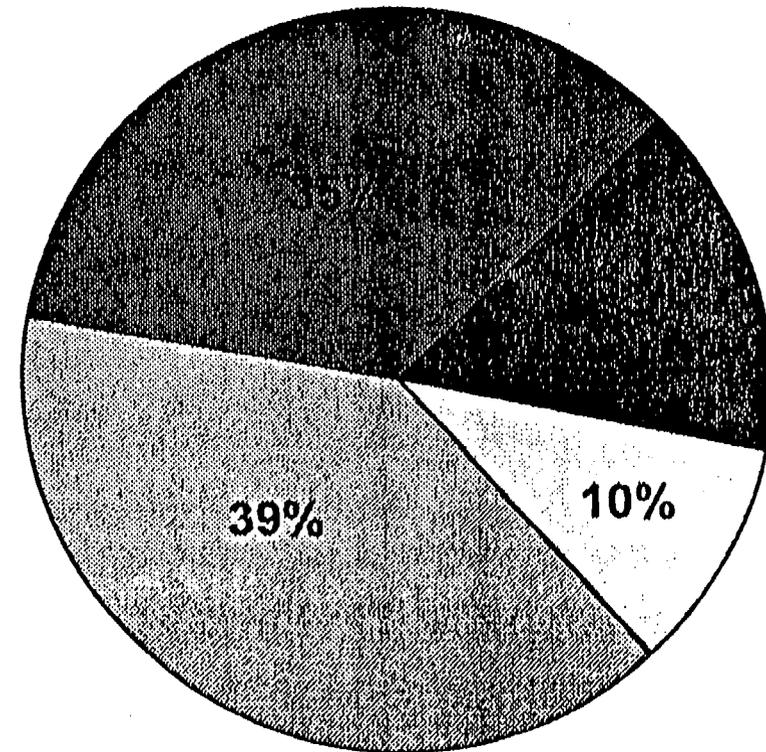
Energy-related emissions for selected individual parties also show significant differences in trends and substantial year-to-year variation.

1992 Final Energy Consumption by Sector

European Union



United States



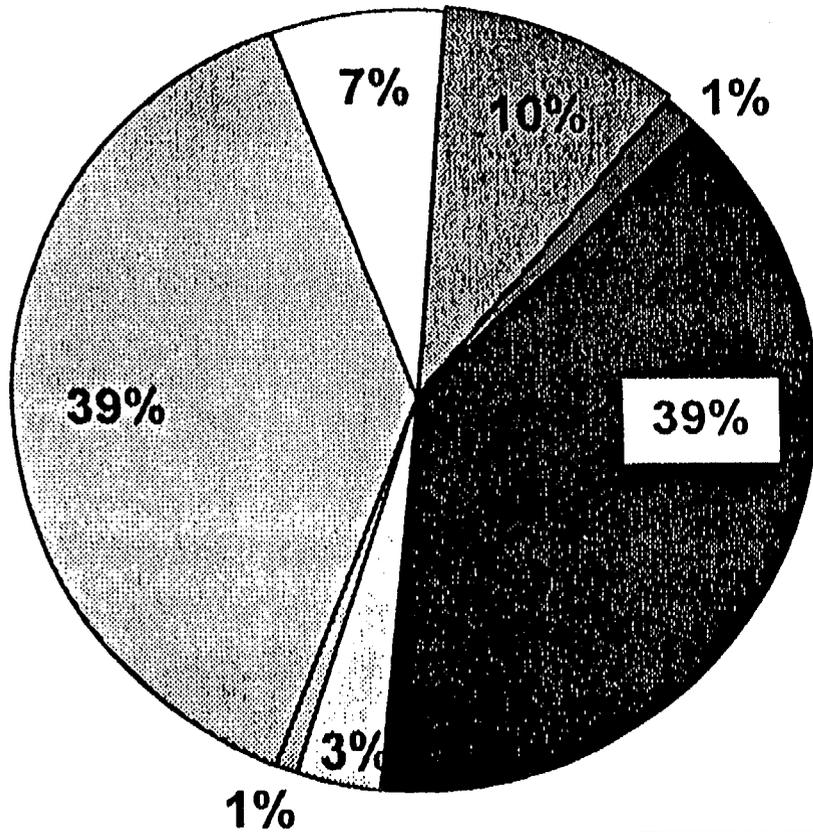
Sources: EU Data: World Energy Service: European Outlook, DRI/McGraw-Hill, June 1995
 US Data: Annual Energy Outlook 1995, Energy Information Administration, 1995

- DIFFERENCES AMONG COUNTRIES IN THE SECTORAL ORIGINS OF ENERGY-RELATED EMISSIONS ARE ALSO APPARENT.

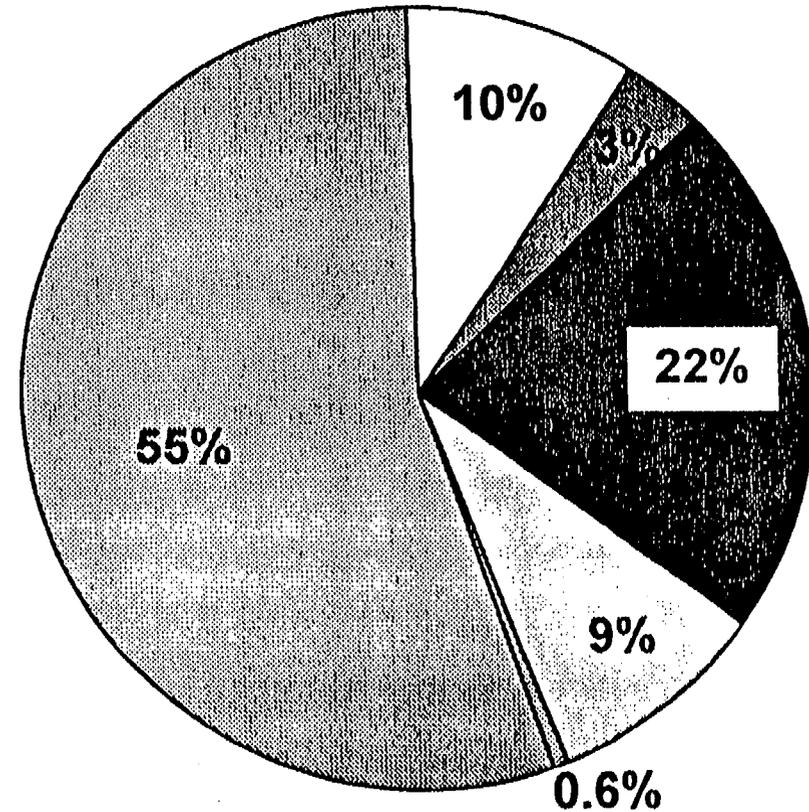
Comparisons of 1992 data between the U.S. and E.U. show considerable differences in sectoral shares of final energy consumption

1992 Electricity Fuel Input Mixes

European Union



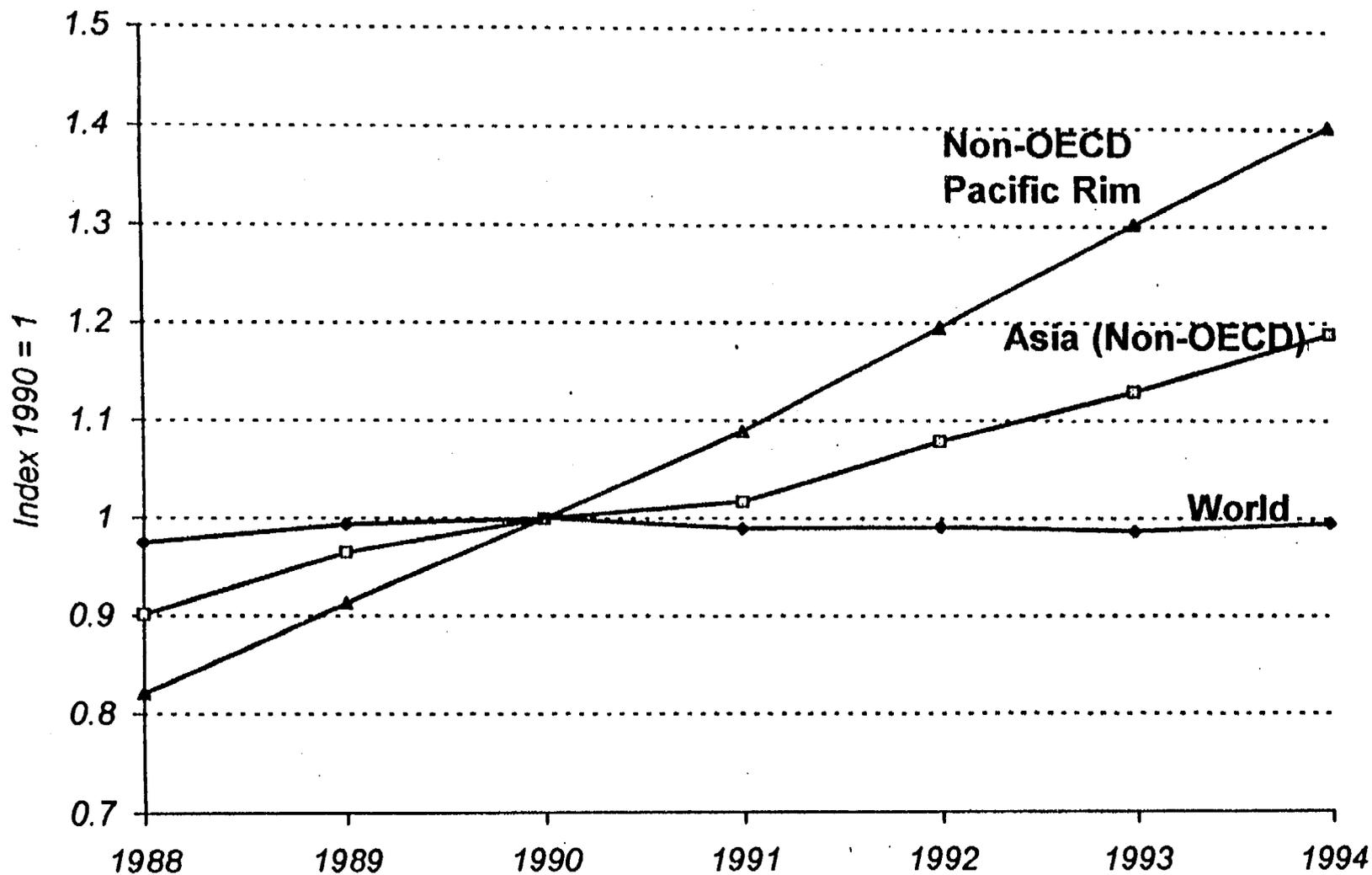
United States



Sources: EU Data: World Energy Service: European Outlook, DRI/McGraw-Hill, June 1995
 US Data: Annual Energy Outlook 1995, Energy Information Administration, 1995

There were also considerable differences in the fuel mix used for electricity generation in 1992.

Energy-Related Carbon Emissions ASIA AND PACIFIC RIM COUNTRIES



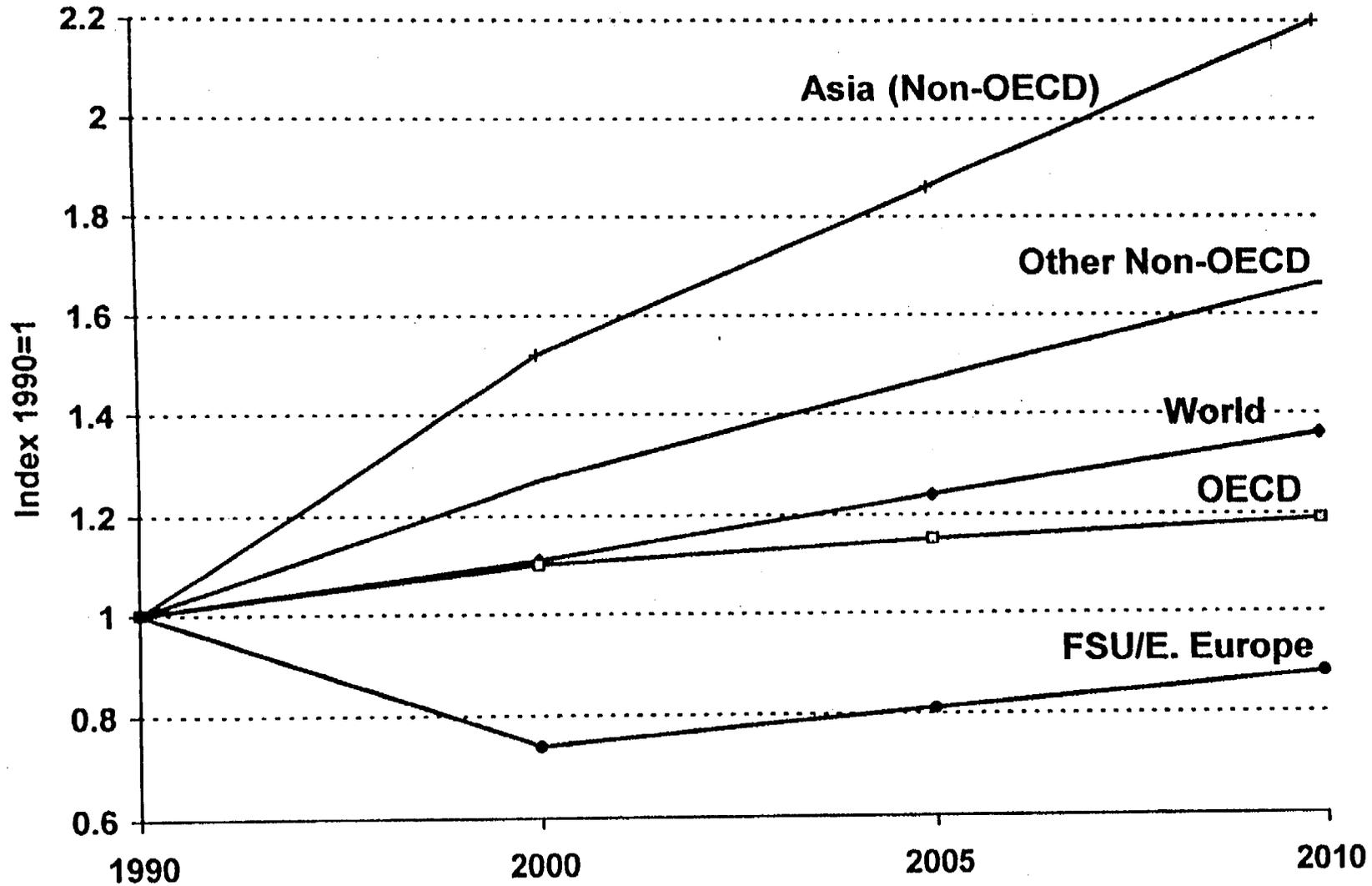
Source: *BP Statistical Review of World Energy*, British Petroleum, June 1995

THERE ARE ALSO MAJOR EMISSIONS GROWTH DIFFERENCES WITHIN ASIA

Emissions growth in the non-OECD Pacific Rim has been faster than growth in non-OECD Asia as a whole

Note: Non-OECD Pacific Rim includes the following: South Korea, Malaysia, Indonesia, Thailand, Hong Kong, Singapore, Taiwan. Non-OECD Pacific Rim included in non-OECD Asia.

8 *Energy-Related Carbon Emissions Forecasts: Major World Groupings*



Source: An average of the forecasts from the International Energy Outlook (EIA), World Energy Outlook (IEA), and DRI (only for U.S. and Europe).

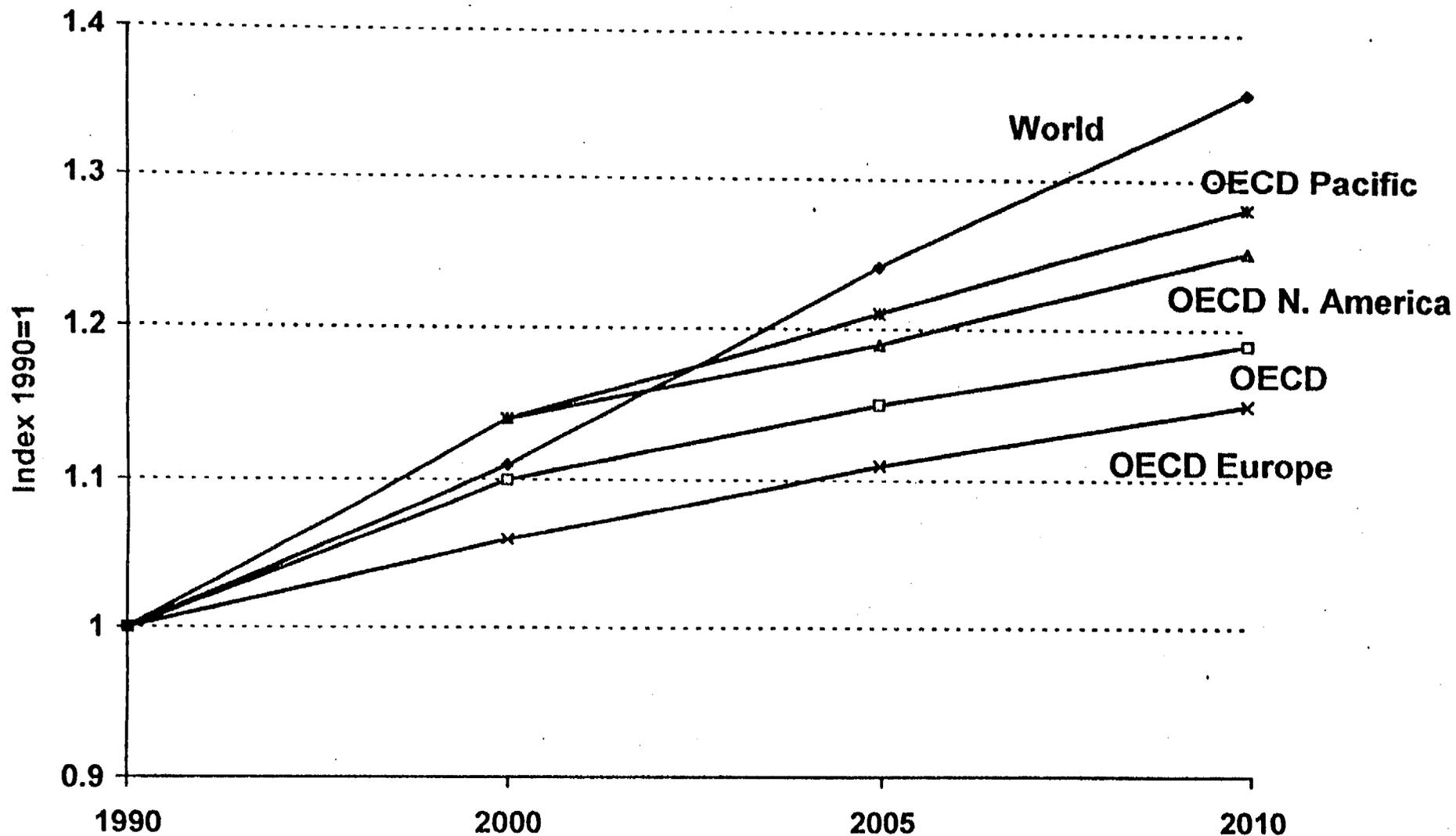
- **THE WORLD FACES A SIGNIFICANT CHALLENGE IN LIMITING EMISSIONS**

An average of projections suggests a rise of more than 35 percent in global emissions of energy-related greenhouse gases between 1990 and 2010.

- **FORECASTS, SCENARIOS AND PROJECTIONS FOR ENERGY USE AND ENERGY-RELATED EMISSIONS ARE IN MANY CASES SIGNIFICANTLY HIGHER THAN EITHER THE AIM OF THE EXISTING ANNEX I COMMITMENTS OR SCENARIOS INCLUDED IN NATIONAL COMMUNICATIONS**

Parties considering adoption and implementation of new commitments must take into account their likely respective starting points.

9 *Energy-Related Carbon Emissions Forecasts: OECD Groupings*



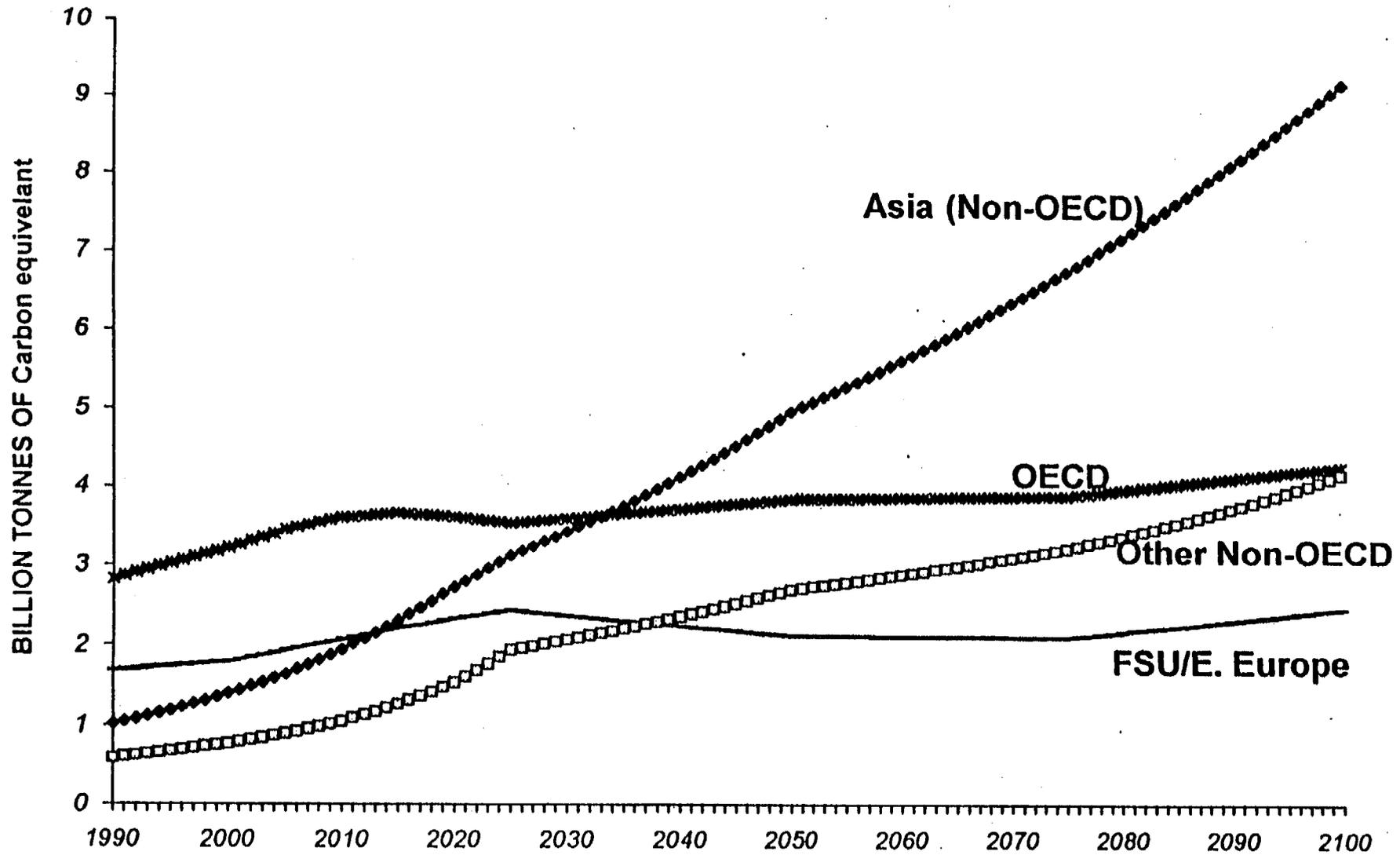
Source: An average of the forecasts from the International Energy Outlook (EIA), World Energy Outlook (IEA), and DRI (only for U.S. and Europe).

- **MANY FORECASTS, SCENARIOS, AND PROJECTIONS SUGGEST LOWER "BASELINE" EMISSIONS GROWTH IN OECD EUROPE THAN IN OECD NORTH AMERICA OR OECD PACIFIC.**

This pattern is consistent with recent emissions experience over the 1990 through 1994 period discussed above. Individual forecasts, scenarios, and projections differ widely.

Annual Net GHG Emissions through 2100

(net CO₂, Methane, N₂O)

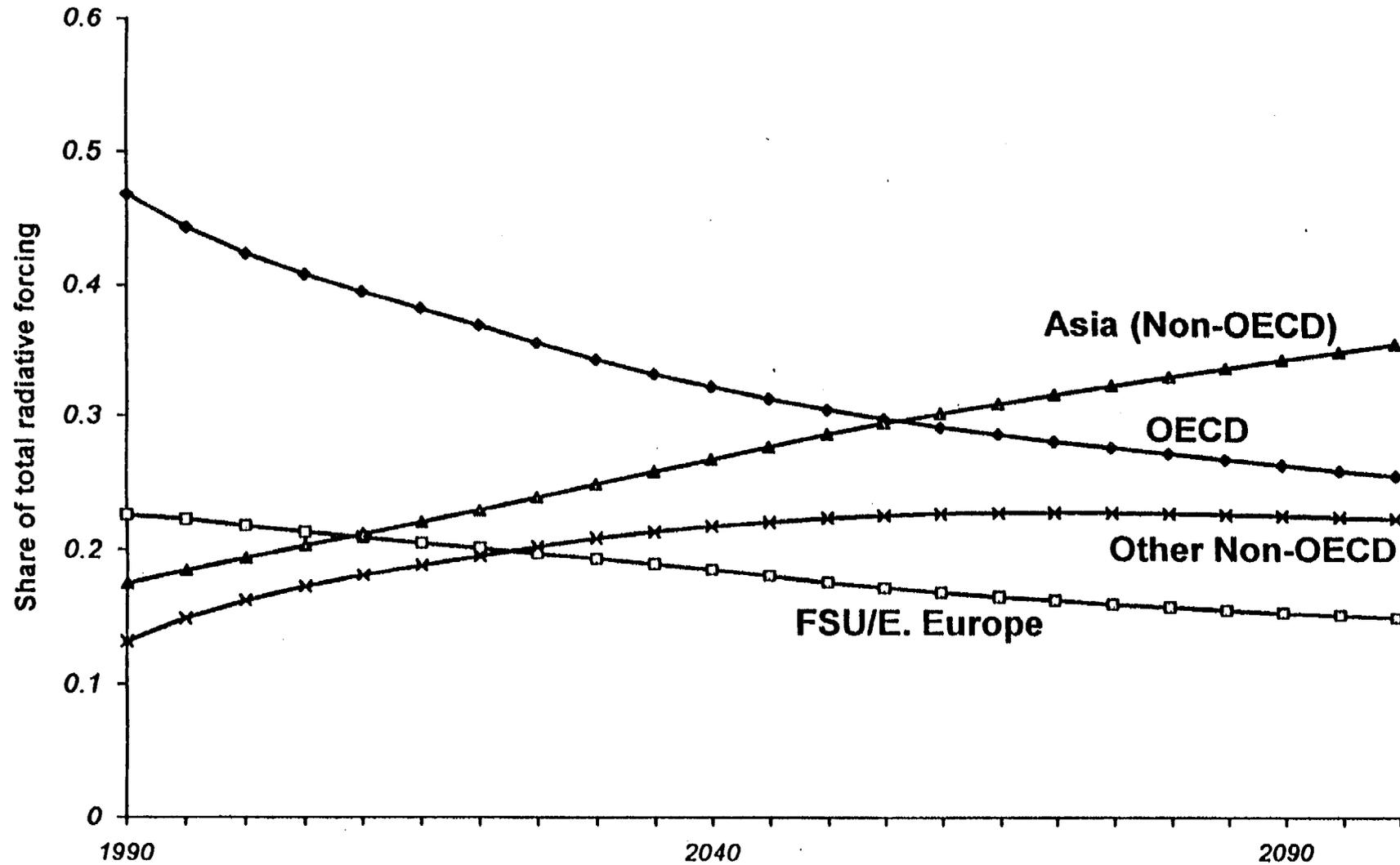


Source: U.S. EPA, IS92A Data Set

- IPCC SCENARIOS SUGGEST THAT THE CONTRIBUTION OF NON-ANNEX I COUNTRIES TO GREENHOUSE EMISSIONS ARE LIKELY TO SURPASS THAT OF ANNEX I COUNTRIES BY THE MIDDLE OF THE NEXT CENTURY

The figure illustrates IS92a, one of the “mid range” scenarios

Contributions to Total Radiative Forcing



Source: Pacific Northwest Laboratories calculation using U.S. EPA, IS92A Data Set. Radiative forcing calculated using MAGICC Model.

- **THE ANNEX I SHARE IN TOTAL RADIATIVE FORCING IN ANY ONE YEAR CONTINUES TO FALL UNDER THE IS92a SCENARIO.**

Forcing contributions are an index of the effect of the cumulative impact of emissions on the atmosphere. These calculations show that future emissions trends, if unchecked, eventually come to dominate the impact of past emissions on the atmosphere.

SUMMARY:

- EMISSIONS SOURCES, TRENDS AND PROJECTIONS VARY WIDELY BOTH ACROSS AND WITHIN REGIONS
- THERE ARE CONSIDERABLE DIFFERENCES IN BASELINE EMISSIONS GROWTH TRENDS ACROSS REGIONS AND COUNTRIES.

This is apparent both in recent emissions data and in many forecasts, scenarios, and projections of energy-related emissions.

There are considerable differences within the Annex I group that will be important in the consideration of further commitments.

One size does not fit all. It may be more useful to focus attention on the emission path and cumulative emissions rather than on emissions in any individual year.

- CLIMATE CHANGE MITIGATION EFFORTS MUST ULTIMATELY BE GLOBAL TO BE EFFECTIVE



AUSTRALIA

**SECOND SESSION OF THE AD HOC GROUP
ON THE BERLIN MANDATE
GENEVA
30 OCTOBER-3 NOVEMBER 1995**

**STATEMENT BY HE MS P A WENSLEY
PERMANENT REPRESENTATIVE TO THE UNITED NATIONS
AUSTRALIAN AMBASSADOR FOR THE ENVIRONMENT AND
LEADER OF THE AUSTRALIAN DELEGATION**

ITEM 3 (A): Policies and Measures

GENEVA

31 October 1995

CHECK AGAINST DELIVERY

Strengthening the Commitments in Article 4.2(a) and (b)

ITEM 3 (A) Policies and Measures

In line with the conclusions of the first session of the Ad Hoc Group on the Berlin Mandate which was held last August, Australia strongly endorses the initial emphasis in the Group's work on analysis and assessment. We do consider that analysis and assessment are essential for the development of an effective and credible outcome from these negotiations.

Assessment of the scope and impact of various options and how they will contribute to the achievement of the objectives of the Convention through action which we are going to determine in this next step is essential information for all Parties. Analysis and assessment of policies and measures will inform negotiations as to the most effective approaches. We expect the analysis and assessment work to give rise progressively to additional options and negotiating proposals.

We consider it important that the analysis and assessment must be guided by the relevant principles and elements of both the Convention and the Berlin Mandate, for example:

- the need for the Climate Change Convention and related instruments to be effective in reducing the threat of enhanced greenhouse warming
- account being taken of different national circumstances
- the need for policies and measures to be, feasible, sustainable and cost-effective
- and the need for equitable distribution of costs.

We consider also that policies and measures should be capable of being applied as widely as possible.

Mr Chairman, my delegation joins others in thanking the secretariat for the two very useful agenda papers prepared for this agenda item (documents FCCC/AGBM/1995/4 and FCCC/AGBM/1995/6). We are very conscious of the substantial work involved and also of the time constraints within which the secretariat had to work to produce these syntheses based on inputs by Parties. We commend the Secretariat strongly for an excellent product. I will now address some remarks structured around the headings identified in the annex to document FCCC/AGBM/1995/4.

(I) How to Identify Policies and Measures

Australia welcomes the listing of policies and measures contained in the appendix to the secretariat paper 1995/4. We consider it a useful starting point recognising that we can expect there to be an evolving list of policies and measures as the analysis and assessment work and the negotiations move forward.

We note the comment by the Secretariat in its paper that in compiling the list it has attempted to be comprehensive. The Australian delegation welcomes the inclusive nature of the list, but reflecting the conclusions of AGBM-1 that the analysis and assessment should be comprehensive, focused on priorities and open and transparent, considers that the list of policies and measures contained in the appendix should be expanded to include removals of greenhouse gases by sinks.

Australia considers that the analysis and assessment should be based upon a fully representative range of options for policies and measures.

The secretariat in FCCC/AGBM/1995/4 has suggested that policies and measures can be conceptually analysed and assessed under two possible scenarios - by category - internationally-oriented industrial processes or sectors, especially those which are energy intensive; internationally traded products; measures subject to competitiveness concerns; sectors where decisions may have long-term adverse effects on climate change; and policies and measures with other environmental benefits - or by listing specific policies and measures. Document FCCC/AGBM/1995/6 lists the various policies and measures identified in national analysis of policies and measures. In contrast, the Appendix to FCCC/AGBM/1995/4 groups specific policies or measures in ten broad areas, ranging from (a) dealing with energy efficiency to (j) dealing with fluorinated substances.

Australia believes that during the AGBM process it will be important to develop a representative priority listing of policies and measures which satisfies the test of comprehensiveness by covering both sectoral activities and classes of measures to enable the widest application and to meet the fullest range of country circumstances.

(II) Analysis and assessment of environmental and economic impacts of proposed policies and measures, of proposed objectives and of no action

In relation to the proposals in the secretariat paper, priority should be given to analysing and assessing the impact of policies and measures on greenhouse gas emissions; other environmental impacts; economic, market, trade, investment, employment, social and financial issues; and the relationship of policies and measures to achievement of quantified objectives within relevant timeframes. Also very important are the GDP/welfare consequences of greenhouse gas abatement measures.

We note too, that the United States has set out in its paper on "Additional US Views" proposed issues for attention in assessing various policies and measures for greenhouse gas reductions. We were particularly interested in their proposals on a set of criteria for evaluation and see this as an important area for examination by our working group. We are very interested to learn of any proposals on this aspect from other countries.

Considerable analysis can be done and has been done on examining sectors and areas of technology to identify areas of opportunity for cost-effective action to reduce emissions. In particular, the IPCC WG II report includes several chapters (organised sectorally) on mitigation options, and will clearly be a major resource in this area for the AGBM. Essentially, each of these chapters comprises a technical review of the relevant technologies and practices for that sector, on the basis of which each country can decide which of these would be useful to pursue in the circumstances of that country. The IPCC has also produced a set of technical guidelines to facilitate such national analyses. On specific measures to encourage the take-up of best practice, IPCC WGII has much less to say, giving only a short general description of the different categories of instruments, such as regulations and fiscal instruments. Analysis of the "technical potential" in each area gives some guidance as to the maximum impact on emissions that could technically be obtained; however, it needs to be noted that the technical potential can be much larger than what is feasible and achievable in practice.

Analysis and assessment of specific measures that have been, or can be adopted by each national government should be an important feature of our work. It will be important for countries to bring to these negotiations information and assessments of their own experience

with particular measures. We believe these assessments of national inputs are fundamental in informing the negotiations about the variety of particular national circumstances of countries (for example, fossil fuel dependent economies) and about relevant equity considerations.

In addition to national inputs and in line with the outcomes of AGBM1, we would support inputs from relevant international bodies, particularly, the IPCC, the OECD and the IEA, and from groups such as the Annex I experts group. I was particularly pleased to hear Malaysia's endorsement of this view.

Australia supports an ongoing approach to analysis and assessment of policies and measures, which should produce sound, timely and comprehensive inputs into the negotiations. Analysis should not cease at a set time, but as new issues are identified during the course of negotiations the process should be flexible enough to allow for any necessary additional issues and options to be addressed.

We are acutely aware that results are required in the next 6 to 12 months. This means that no totally new work can be expected to make a contribution. Australia believes that it would be useful to commission new runs of existing models, but with different parameters or reviews of existing data. It will be important to have the best range of analysis carried out, using analysis based on top down and bottom up approaches. Colleagues may recall our statement to AGBM1 where we drew attention to a number of relevant international and Australian models.

(III) Nature of policies and measures to be the focus of the Berlin Mandate process

In considering the possibility for Annex I parties coordinating policy instruments, the reference to "as appropriate" in paragraph 2(d) of the Berlin Mandate is important as it allows the AGBM to assess each instrument on a case-by-case basis in determining their appropriateness or possible applicability for coordinated action after analysis and assessment. Australia considers it essential that the particular circumstances of individual parties and the environmental and economic impacts of given policies and measures that may be appropriate for harmonised action are fully taken into account in such analysis.

Australia has taken an active interest in the establishment and proposed work of the SBSTA technical advisory panels. We believe these panels can contribute valuably to work on analysis and assessment or policy measures. We look forward to early agreement on the arrangements for these technical advisory panels.



AUSTRALIA

**SECOND SESSION OF THE AD HOC GROUP
ON THE BERLIN MANDATE
OF THE FRAMEWORK CONVENTION ON
CLIMATE CHANGE
GENEVA
30 OCTOBER-3 NOVEMBER 1995**

**STATEMENT BY MS MEG McDONALD
ALTERNATE LEADER OF THE AUSTRALIAN DELEGATION**

ITEM 4: CONTINUING TO ADVANCE THE IMPLEMENTATION OF ARTICLE 4.1

GENEVA

1 November 1995

CHECK AGAINST DELIVERY

AGENDA ITEM 4

CONTINUING TO ADVANCE THE IMPLEMENTATION OF ARTICLE 4.1

The CoP Decision on the Berlin Mandate I/CP.1, to strengthen the commitments of Annex I Parties, while noting that it will not involve new commitments for non Annex parties, includes as part of the process the reaffirmation of existing commitments in Article 4.1 with the advancement of "the implementation of these commitments in order to achieve sustainable development, taking into account Article 4.3, 4.5 and 4.7".

Australia considers that a number of issues relating to this element of the mandate should be given consideration in the analysis and assessment of policy options. This will provide an important guide to enhance the results achieved under the Convention.

The suggestions made by the Secretariat with respect to this Agenda item and those issues identified by Parties as benefiting from analysis and assessment (FCCC/AGBM/1995/4) are a helpful guide to how the AGBM might approach this issue.

We have a number of observations and views in relation to each of these:

Identify activities undertaken by all Parties in fulfilment of obligations to advance the implementation of Article 4.1

Progress under the Convention will be advanced through Article 4.1 directly through development and implementation of national programs containing mitigation measures to reduce greenhouse gas emissions and enhance greenhouse gas sinks, including through the preparation of national communications. Reducing uncertainties, increasing understanding and promoting co-operation will further contribute by improving government, and community understanding of the issues and generating support for action to address climate change. Preparation of national communications is an important part of drawing together the experience of all Parties and creating wider understanding of opportunities for action.

Australia notes the benefits to be gained from existing international efforts and country programs and the valuable contribution of the international programs undertaken by WMO, UNEP and IPCC.

We believe that in short term the emphasis for funding should be on emissions limitations and sink enhancement across all relevant sectors combined with an initially limited and focussed set of adaptation activities such as planning, capacity building and institutional strengthening.

Australia considers that Article 4.1 (e) relating to cooperation in preparing for adaptation to the impacts of climate change, and for the protection and rehabilitation of areas affected by drought and desertification, as well as floods, should be given priority, particularly with respect to financial assistance to developing countries that are particularly vulnerable to adverse effects of climate change.

Role of financial and technological assistance

Australia notes the positive statements made under this item, indicating the many non Annex I parties committed to implementing national action plans to address climate change. GEF funding and programs supported by other donors have assisted many non Annex I countries

to outline their national plans to mitigate or reduce greenhouse gas emissions and to develop measures to adapt to the impacts of climate change and to assist in the preparation of national communications. Technological assistance also plays an essential role in enabling countries to undertake their commitments under 4.1.

A simple example, which is common to the experience of many parties, is through the training of experts at technical workshops and the continuous technical assistance has helped to improve the understanding of the scientific base of climate change issues and to strengthen endogenous capacity.

The Australian Government encourages and provides support for activities in developing countries. Our overriding goal is to assist developing countries in their equitable and environmentally sustainable economic development. Multilateral organisations to which Australia provides funding for climate change activities include the International Rice Research Institute which is studying greenhouse gas emissions from rice paddies and the potential impact of climate change on rice production, the Centre for International Forestry Research and the International Centre for Research on Agroforestry who are working on technologies that provide alternative sources of fuelwood and other timber products to conserve natural tropical forests and the UNIDO Centre for Applications of Solar Energy (CASE) to stimulate appropriate application of solar energy technologies and solar energy related industrial development within developing countries.

Australian agencies are closely involved in working with South Pacific countries with their climate networks and climate monitoring. In this context, Australia would like to register its strong support for the work of the South Pacific Environment Program (SPREP) in this field. Our very positive experience of regional cooperation through SPREP activities is one which we would hope could become common in other regions.

At present Australia represents the South Pacific and Southeast Asian countries on the Bureau of the IPCC and is in close contact with them on IPCC matters. Australia also works closely through the WMO Region V (Southwest Pacific) and other machinery to assist developing countries in other aspects of climate work including climate data processing, natural disaster studies, long range forecasting and the like.

Financial assistance

In addition to the provision of new and additional finances, through its contribution to the GEF, Australia is a partner with developing countries in various bilateral and multilateral programs providing financial assistance for other climate change activities.

Diffusion of technology and technology choices

Australia looks to ensuring that, in maximizing the benefits of technology transfer to developing countries, under the Convention. We want to create the right conditions to facilitate the development of appropriate arrangements for technology transfer, including an appropriate balance of bilateral, regional and multilateral programs. Capacity building is an important precondition for technological transfer.

We recognise that in setting their development priorities, the technology choices made by countries have a major impact on the future emissions of greenhouse gases. Technology

transfer and available technology diffusion pathways provide an array of opportunities for developing countries to adopt 'no regrets' measures which will effectively address long term greenhouse gas emissions.

Australia supports the view that the extent and focus of technology transfer under the Convention should be consistent with identified program priorities. It should take place in the context of specific projects through market means. Under the Convention, technology should still be transferred through normal commercial processes, whether subsidised by aid funds or otherwise (ie the terms of the transfer must include suitable financial or other return to the holders of intellectual property). The involvement of the private sector is critical.

Role of country studies and national programs

Australia considers that the experience and record of non Annex 1 parties with various country studies is instructive and important guidance relevant for all parties. These programs provide significant cross fertilisation of ideas and measures across countries. They also assist in improving the understanding of the scientific base of climate change and in strengthening endogenous capacity through human and institutional capacity building.

Experience to date demonstrates the willingness of many countries (both developing and those with economies in transition) to be involved, and have uncovered a range of cost effective methods of mitigating greenhouse gas emissions and at the same time contributing to the sustainable economic development of participating countries.

Extent of participation with Annex I Parties in efforts to coordinate actions.

The benefits of coordinated action on climate change between developed countries are well known amongst OECD countries, the European Union and other groups. Global benefits are also reaped from strong coordination between developed and developing member countries of various United Nations bodies such as the World Meteorological Organization. Time will clearly demonstrate the benefits which will be derived from collaboration amongst Parties in fulfilment of their commitments under a range of Article 4.1 elements, such as development of national inventories and national programs to mitigate greenhouse gas emissions and elaboration of adaptation strategies.

Diffusion of technology

Much scope exists for coordinated action in respect of the development and diffusion of technology, benefits can be accrued to both the providers and the recipients. Coordinated action with respect to technology diffusion should improve access for developing countries and export opportunities for providers. This aspect of the Convention would benefit from analysis and assessment of the issues as we pursue fulfilment of this element of the Berlin Mandate

Australia is interested in exploring opportunities for coordinated action with respect to technology transfer, including through the IPCC the IEA and other international bodies. Already, in the WMO and regionally through the South Pacific Regional Environment Program (SPREP), Australia is extensively involved in assisting South Pacific countries with their climate networks and climate monitoring which involves training of meteorological staff.

Economic, environmental and social aspects

Continuing international work on economic, environmental and social aspects for all parties will be essential to ensure that the social, environmental and economic impacts of climate change or measures to mitigate climate change are properly reflected in the negotiated outcome. Such an understanding will allow approaches to deal with climate change which minimise adverse impacts. We believe the analysis and assessment could examine the scope for other forms of coordinated cooperation, involving all Parties, in order to contribute to advancing their commitments under Article 4.1 of the Convention.

Implementation of policies and measures favourable to economic development

Australia supports implementation of policies and measures to promote the uptake of any 'no regrets' measures that reduce the quantity of greenhouse gases, recognising that Annex II countries are obliged to take all practical steps to promote, facilitate and finance, as appropriate the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties.

We also see considerable benefits from improved energy efficiencies by fostering capacity building and awareness raising amongst policymakers and managers in the power supply and distribution sectors and increasing the uptake of new accessible renewable energy options. Australia places emphasis on helping developing countries to establish appropriate planning and institutional frameworks, with a focus on capacity building.

Australia believes that the analysis and assessment of policies and measures favourable to economic development should examine ways in which these initiatives can be progressed and expanded. This is an important objective for us all in the fulfilment of the Berlin Mandate and towards the achievement of the ultimate objective of the Convention itself.

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Ad Hoc Group on the Berlin Mandate

Second Session

STATEMENT

by

**Cornelia Quennet-Thielen
German Delegation**

**on item 3
"Strengthening the commitments in Article 4.2 (a) and (b)"**

a) Policies and measures

Geneva, 30 October - 3 November 1995

31 October 1995

Check against delivery

Mr. Chairman,

Germany fully supports the statement of the European Union as delivered yesterday by the distinguished delegate of Spain.

Germany has presented its position on the issue of strengthening Annex I-Parties' commitments in some comprehensiveness already at the last AGBM session. You will find these texts in Doc. FCCC/AGBM/1995/Misc. 1/Add. 1.

Therefore, I will only stress four important points relating to this item 3 a:

1. We think that policies and measures (p + m) are an important element of the protocol or instrument we have to negotiate - together with quantified limitation and reduction objectives within specified timeframes in a combined approach. To adopt policies and to take measures is at the core of what countries must do to effectively limit and reduce greenhouse gas emissions. At the same time, in developing and implementing our national programme on climate protection we experienced how important it is to set a clear target for emission reductions within a specified timeframe. Only this can give the necessary guidance and direction to all the activities, the planning and investment decisions of governments and the other actors in society. Our national target of reducing the 1990 level of CO₂ emissions by 25 % by the year 2005 has forced and will force us constantly to develop and implement p + m to meet this ambitious objective. We think this is an important lesson learned: p + m should be driven by the need to meet an agreed limitation and reduction objective within set timeframes.
2. We are all aware that there is a large variety of p + m to effectively limit and reduce the various greenhouse gas emissions in the relevant sectors. This is well illustrated e.g. in the excellent Doc. 6 the Secretariat prepared for this meeting. Doc. 6, the synthesized list of p + m identified by Annex I-Parties in their national communications, shows the plethora of opportunities by describing well over a 1.000 p + m already taken or firmly envisaged by these countries.

It seems impossible to us to analyse, assess and negotiate them all at a time. And we also feel that this is not necessary. We can and we should concentrate on the most promising and needed options in this first round of strengthening the Convention in order to fulfill our work in a targeted and success-oriented way.

The EU already in Berlin - after internal analysis and assessment - tabled an indicative list of selected p + m that it would like to see as part of an protocol. Work is under way to further specify our proposals. In addition, Germany in its elements paper of September

1994 - which is still valid as far as its section II on p + m is concerned - identified the sectors and respective policies and measures which - after thorough analysis and assessment - we want to give priority attention to as future Annex I-Parties' commitments. Many of them are encompassed already in Secretariat Doc. 4, although e.g. the sectors of agriculture and forestry are not mentioned there at all. In addition to these already proposed p + m, the criteria mentioned by the delegation of the Netherlands merit consideration for narrowing down the range of p + m to be considered for inclusion in a protocol or instrument.

3. We already expressed earlier that a purely optional menu of p + m would not justify the tremendous effort associated with the identification and negotiation of p + m for a legal instrument. We fully share this position with our colleagues in the EU. That is why in the EU's outline of the possible protocol structure presented yesterday you find several categories of commitments regarding p + m. We all would like to see:

- An annex A containing p + m to be taken by all Parties. This annex would be legally binding. It should contain p + m that require international coordination but would also be open for as many as possible of those p + m that benefit from coordinated implementation or are effective and necessary for Parties to meet their commitments.
- Two more Annexes, B and C, which will guide Parties in developing and implementing their national programmes. One would identify p + m that would specifically benefit from early international coordination (but could not be agreed for Annex A yet), while the other should contain p + m having proven effectiveness or potential to limit and reduce emissions.

The Annexes may possibly still be rather small when we adopt the protocol in 1997. But with the proposed constant review in a dynamic, evolving structure they should grow quickly over time.

The elaboration we just heard from Ambassador Slade, Samoa, on more detailed elements of the coordination mechanism proposed in the AOSIS draft protocol deserves further careful consideration in this respect and possibly may be married with these ideas on the annexes and their dynamic and evolving structure.

4. Mr. Chairman,
having carefully listened to previous delegations and their proposals for further work, I think it is useful to remind all of us of our clear task given by the Berlin Mandate: The AGBM is asked to conduct, as a matter of urgency, a process of negotiations including an analysis and assessment with the view to adopting a protocol or another legal instrument at the 3rd COP in 1997.

We all know that this is a very difficult task, bearing in mind the broad range of interests and positions involved. The result will not easily fall into place. It will require intense exchange of information, analysis and assessment as well as interaction and negotiation between delegations. While good and thorough documentation from the Secretariat is a useful and indeed indispensable prerequisite that we always benefitted from, it will not bring us forward to load the Secretariat with all the work we ourselves, the delegations, have to deliver - both during our meetings and in responsibly preparing for them. It is not our Secretariat but essentially ourselves that need to analyse and digest all the available material and assessments and who possibly need to do further work of that kind to be well prepared for the necessary dialogue and negotiations. Only two weeks ago, IPCC's Working Groups II and III, for example, having clearly stated in their policy makers summaries agreed by governments that significant reductions in net greenhouse gas emissions are technically possible and can be economically feasible by utilizing an extensive array of technology and policy measures. They have also stated that significant "not regrets", no or low cost opportunities are available in most countries. Just one concrete example from these findings: Studies indicate that 15 - 30 % energy efficiency gains could be achieved at little or no cost in many parts of the world over the next two to three decades.

I think it is crucial that we all analyse and assess these new IPCC findings that will be available in full by December this year, as well as all the other relevant material, and come back well prepared for AGBM 3 discussions. The Secretariat cannot and should not do our own job as delegations.

Mr. Chairman,

we hope that these comments can contribute to making progress at this session. In view of the very limited time until COP 3 we think it is urgent to start developing a convergence of views at this session on

- firstly, how p + m should be dealt with in a protocol or other instrument, and
- secondly, how best to narrow down the range of p + m we should concentrate upon in these negotiations to establish a protocol, bearing in mind that it should be a dynamic instrument evolving over time.

Thank you, Mr. Chairman.

2ND SESSION
AD HOC GROUP ON THE BERLIN MANDATE
GENEVA 30 OCTOBER- 3 NOVEMBER 1995

NORWEGIAN STATEMENT

On Agenda Item 3 Strengthening the commitments in Article 4.2 (a) and (b)

Mr Chairman,

With reference to the Berlin Mandate (section III, paragraph 4), the Government of Norway is of the opinion that a thorough analysis and assessment phase is clearly needed. In this respect, we welcome document FCCC/AGBM/1995/4 and 6 from the Secretariat. The documents give a broad range of options for consideration. In our further elaboration, the challenge thus will be to narrow down the range of aspects to be analysed to ensure that sufficient time be given for the upcoming negotiations. (Reference to the statements from the Netherlands and Canada).

In our submission on this item, compiled in document FCCC/AGBM/1995/MISC.1/Add.1, we have focused on particularly two important aspects that would benefit from further analysis and assessment: First, the need for equitable and appropriate contributions by each of the Parties, and second, the need for cost-effective, coordinated economic instruments. In this respect, our submission is dealing with both Agenda Item 3 (a) "Policies and measures," and Agenda Item 3 (b) "Quantified emission limitation and reduction objectives within specified time-frames." As pointed out by the Secretariat in the annotations to the agenda, these two elements are closely related; there is an evident link between the adequacy of policies and measures and the achievement of quantified objectives within specified time-frames.

Concerning the need for equitable and appropriate contributions by each of the Parties, this represents an important part of the foundation on which the main objectives of the AGBM process is based. According to paragraph 2 (a) of the Berlin Mandate, the process of strengthening the commitments for Annex I Parties (Article 4.2 (a) and (b)) shall take into account "the differences in starting points and approaches, economic structures and resource base, ..., as well as the need for equitable and appropriate contributions by each of these Parties...." Henceforth, a paramount challenge ahead of us will be to operationalize this clause of the Berlin Mandate. In this respect, we have noticed with interest the proposal from Switzerland on this aspect in their submission (Reference also to their statement), and interesting elements in the submission from Iceland.

The Government of Norway has advocated a common emission target for a group of Parties, such as the OECD, which is to be achieved through "equitable and appropriate contributions by each of these Parties." In practical terms this would mean that the emission targets for each of the Parties would be differentiated on the basis of their "differences in starting points and approaches, economic structures and resource bases." In terms of total economic loads, however, there should in principle be no differentiation among the Parties being part of such

common emission target. Thus, an important task of the analysis and assessment phase will be to elaborate further the concept of equitable and appropriate contributions.

In our opinion, it would in this respect be useful to draw on the competence of the OECD. OECD should be requested by the AGBM to extend its work in this field and initiate a project particularly related to the cost of action in different countries.

Norway would certainly like to contribute to the further process on this issue. We are on a national level preparing some projects with the aim to identify potential challenges related to the idea of "a fair distribution of the costs," and suggestions as to how these challenges could be met. We will do our best to ensure that relevant studies will be finalized in due time to be considered in the AGBM process.

Concerning Agenda Item 3 (a) "Policies and measures," the Berlin Mandate specifically asks that consideration be given to the possibilities for coordinating policy instruments (section II, paragraph 2 d). In the Norwegian view, the need for cost-effective measures is the main reason why coordinated economic instruments as well as the concept of activities implemented jointly (AIJ) will be of importance in a new agreement. In this respect, we would specially like to refer to the work being carried out for Annex I - countries by the Joint OECD/IEA project on national communications relating to policies and measures for "Common Action." The AGBM should carefully study the outline of this work in parallel with considering the need for additional projects in this field.

Norway has some experience with the use of CO₂ taxes that we would like to share with you, and a short summary of our experience so far is compiled in document MISC.1/Add.1. In the long term it is of vital importance that such economic measures be introduced by more countries in a coordinated way.

Focusing particularly on the energy market, OECD studies show that a restructuring of existing energy taxes and subsidies would be cost efficient and result in reduced emissions. The studies carried out by the OECD also show that a replacement of the current biased taxation of energy with real green taxes which better reflect environmental costs, will change the existing energy-mix to one that is environmentally sounder, and will lead to higher consumption of oil at the expense of coal. Elimination of energy subsidies would also lead to a better mix, in addition to a cleaner environment. These aspects should be considered and analysed in the further work of the AGBM.

We also see a need for further analyses and assessments related to voluntary agreements. Knowing that other countries have quite long experience with such instruments, it would be useful if these countries could provide the AGBM with appropriate information.

Mr Cairman,

Norway has furthermore noticed with appreciation the extensive proposal from the US on further work up to AGBM III. In our view, our own proposals for further analysis and assessment would fit well into the outline presented by the US.

However, as we expressed at the first session of AGBM, we are also concerned that we need sufficient time for the negotiation process and we should therefore work effectively to ensure

that the analysis and assessment phase will provide results within the given timeframe. We should therefore remind ourselves of one of the conclusions from the first session of the AGBM, that the very purpose of the analysis and assessment phase is to assist the negotiation of a protocol or another legal instrument. (Reference to the statement made by Germany).

Finally, Mr Chairman, I would like to stress that comprehensiveness in accordance with the Convention as well as the Berlin Mandate should be a guiding principle for this process.



España
1995

AD HOC GROUP ON THE BERLIN MANDATE

SECOND SESSION

GENEVA, 30 OCTOBER - 3 NOVEMBER 1995

STATEMENT BY THE REPRESENTATIVE OF SPAIN

ON BEHALF OF THE EUROPEAN UNION

ON ITEM 3 OF THE AGENDA

GENEVA, 30 OCTOBER 1995

**EU STATEMENT ON THE STRUCTURE OF A PROTOCOL
OR OTHER LEGAL INSTRUMENT**

The EU believes that in order to make progress in these AGBM discussions it is important to have a clear idea of the possible end product. To that end we have tabled today a possible outline for the structure of a protocol or other legal instrument, which we would like to commend to other Parties.

What we have proposed is an outline only. It does not make specific proposals on particular policies and measures, or on objectives and timeframes. These are for separate discussion. But we hope that by defining a possible structure for the outcome of those discussions, this may help to focus and clarify thinking, and to enable us to make more rapid progress in the limited time we have available for completing our task under the Berlin Mandate. It may also provide a useful framework for further analysis and assessment work.

In drawing up the proposal we have been guided by three main principles:

first, consistency with Berlin Mandate;

second, the importance of setting in place a dynamic instrument, which has the flexibility to develop and evolve over time - recognising that there are practical limits to what can be achieved ahead of our COP3 deadline; and

third, linking the instrument as closely as possible to the principles, procedures and mechanisms of the existing Convention - so that we do not have to waste time renegotiating what is already agreed, and so as to avoid the potential for overlap and confusion between the two legal instruments.

The third principle allows us to envisage a rather short instrument. Wherever possible and appropriate the existing provisions of the Convention would be cross-applied. To give just one example, information about the implementation of any new commitment in a protocol would best be included in the communications already to be supplied under Article 12 of the Convention, not in separate, parallel communications.

A key element of the proposal are the annexes containing lists of policies and measures. The model we envisage would for the time being have three such annexes. The first would include policies and measures which all Annex I Parties agreed to adopt and include in their national programmes. The second would contain a list of policies and measures which it was agreed would benefit from early international coordination, and which should be given high priority consideration for inclusion in national programmes. The third would include policies and measures which are identified as having proven effectiveness or potential, and which should be considered for inclusion in national programmes as appropriate to national circumstances.

It is this element of the proposal, the annexes on policies and measures, which is intended in particular to give it a dynamic structure. We envisage that the annexes would be frequently, if not continually, reviewed and up-dated in the light of further analysis and assessment, technological progress, and agreements reached on the coordination of instruments in this or other international fora. We envisage further policies and measures could be added to the annexes over time, and existing ones further specified or amended.

Let me also shortly touch on another important element of our proposed structure: the quantified limitation and reduction objectives within specified timeframes. The EU has always been committed to a combined approach meaning that the protocol or other legal instrument should contain both commitments regarding policies and measures as well as quantified limitation and reduction objectives within specified timeframes. This approach is reflected in our proposed elements (a) to (c).

Other features of the proposed structure are, I hope, self-explanatory and are largely consistent with concepts and approaches already found in the Convention. They are also, as I have indicated, intended to be fully consistent with both the spirit and the letter of the Berlin Mandate.

Copies of our proposal are being circulated. We would be interested to have the comments of other Parties on it.

AD HOC GROUP ON THE BERLIN MANDATE

SECOND SESSION

GENEVA, 30 OCTOBER - 3 NOVEMBER 1995

STATEMENT BY THE REPRESENTATIVE OF SPAIN

ON BEHALF OF THE EUROPEAN UNION

ON ITEM 3(B) OF THE AGENDA:

QUANTIFIED EMISSION LIMITATION AND REDUCTION OBJECTIVES

WITHIN SPECIFIED TIME-FRAMES

GENEVA, 31 OCTOBER 1995

On behalf of the European Union I would like to address a few aspects of this important element of the Berlin Mandate. We are fully aware of the fact that we are facing a challenging task. The EU's efforts to achieve stabilisation of CO₂ emissions at 1990 levels by the year 2000 in the EU as a whole are being evaluated on an annual basis. The second evaluation, which takes into account the most recent developments at both Community and individual member States level, is in preparation. EU member States' reports, based on the latest preliminary analysis by the European Commission, indicate that the EU is on course to return its CO₂ emissions to 1990 levels in the year 2000 - though further efforts on a national and Community level are still required to ensure that the stabilisation objective is achieved. The final results will be available by the end of this year. They will be submitted to the FCCC Secretariat as a token of the EU's willingness to share its experiences with the AGBM as regards the CO₂ stabilisation target.

General

As we indicated when expressing our views about the structure of the protocol, the EU strongly believes in a combined approach of both policies and measures as well as quantified emission limitation and reduction objectives for Parties included in Annex I. The Berlin Mandate is very clear about this. It is no longer the question whether these objectives for emissions by sources and removals by sinks within specified time-frames are necessary. The only question still is how these objectives should be formulated and what time frames should be chosen.

Limitation and reduction objectives should be ambitious enough to reflect the change in emission trends in Annex I Parties needed in order to progress towards the ultimate objective of the Convention. In the light of the Convention's ultimate objective, the absolute level of emissions and removals must play an important role, but also relative objectives such as efficiency criteria should be explored.

Coverage of greenhouse gases

Another question that has to be resolved is the coverage of the various greenhouse gases. Although the Berlin Mandate clearly indicates that all greenhouse gases, both sources and sinks as well as all relevant sectors should be addressed in the protocol, there is still a choice to be made between a so called gas-by-gas approach and an approach where gases are put in one basket using the IPCC's Global Warming Potential to determine their total. The EU is not taking a formal position on this question at this stage. The two possibilities are being pursued in the EU.

Specified time-frames

On the question of the time-frames to go with quantified emission objectives the Berlin Mandate suggests the years 2005, 2010 and 2020. There are two important aspects to take into consideration:

- (1) in view of the ultimate objective of the Convention and IPCC's message that overall global emissions below the current levels will be required to meet that objective, a protocol should encourage fundamental changes in the trends of greenhouse gas emissions; this would call for longer time-frames to create a reliable strategic framework for planning and investment decisions
- (2) in view of the need for accountability of Parties and to facilitate regular stock taking regarding the development of overall emissions shorter time frames are also important.

The EU therefore considers it appropriate to include in the protocol the time-frames specified in the Berlin Mandate: 2005 and 2010 as preferable and 2020 as a possible longer term perspective.

Incentives for early action

In this context some further thought should be given to the possibility of creating incentives for Parties to take early action, especially since IPCC indicates that it is the cumulative emissions (sum of annual emissions over period of time) that will determine the future level of greenhouse gas concentrations. Early action would be particularly relevant in case of investment decisions with a long-term impact, such as replacement or addition of a power plant, new transportation infrastructure and energy efficiency provisions in new buildings. Over the life-time of such infrastructural investments significant amounts of greenhouse gases can be avoided. We believe that AGBM should further explore in the context of its further work the potential and promotion of these incentives.

Quantification of objectives

Mr.Chairman, this completes the easy part of our statement. The most difficult questions no doubt are related to the determination of the exact level of the limitation and reduction objectives and also to the question of how to distribute them.

Quantified limitation and reduction objectives in the protocol should be determined by the need to reduce the risks of climate change (based on IPCC's scientific assessment), by the technical potential to realise reductions and by the costs and the economic impact. Let me address a few aspects of these issues now:

*** What does the science tell us?**

IPCC's scientific assessments point to the need for overall global emissions of greenhouse gases to go down well below current levels if we are to stabilise greenhouse concentrations at a level below tripling the pre-industrial values. This might already be too high in view of the ultimate objective of the Convention. It could for instance bring the average world temperature to levels the earth has not experienced in the last tens of thousand of years. We also know that the share of

global emissions originating in developing countries will grow to meet their social and development needs.

The message is clear: industrial countries need to continue to take the lead in gradually reducing emissions for decades after the year 2000, leading to a significant reduction by the middle of the next century for all industrialised countries together. But on the basis of the upcoming Second Assessment Report of IPCC the figures should be determined more precisely, in order to provide strategic guidance to the AGBM on the limitation and reduction of overall emissions through the protocol.

* **The technical potential**

The technical potential for emission reductions is determined by the technologies that are available. The analysis done by IPCC Working Group II on this aspect (which was recently accepted by the full Working Group) clearly indicates that there is a significant technical potential to reduce greenhouse gas emissions in the near future. This will therefore not be the limiting factor.

* **Costs and economic impacts**

The costs of policies and measures and the economic impacts (inside Annex-I Parties as well as on other countries) are very important in a political context. Before conclusions can be drawn, some aspects need further consideration. Two things are clear already:

(1) IPCC is confirming its earlier messages that climate change should be considered a serious risk, which will require progressive mitigation and adaptation measures over time. IPCC Working Group III confirmed in its recently approved summary report the large potential of policies and measures that can be warranted on other grounds ("no regret"). This "no regrets" potential needs of course to be fully used in the protocol. In view of the risks of climate change further policies and measures beyond "no regrets" are likely to have to be included in the protocol

as well. And everything should be done to take the necessary action at the lowest possible costs, that is in a cost-effective manner.

(2) The costs and economic impacts a Party will have to accept will be an important element. This will require careful consideration of how to achieve equitable and appropriate contributions by each Annex I Party to the global effort.

Character of objectives

The character of the quantified emission limitation and reduction objectives in the protocol is important. The Berlin Mandate specifies that both policies and measures as well as quantified objectives should be included. The task is serious, so the protocol cannot be built on good intentions alone. It is the result that counts - the result in terms of controlling emissions of greenhouse gases. And that can only be achieved through binding commitments to introduce policies and measures in the context of quantified limitation and reduction objectives.

EU PROPOSAL

OUTLINE OF POSSIBLE PROTOCOL STRUCTURE

ARTICLE 1

Commitments by developed country and other Annex I Parties:

(a) General commitment regarding policies and measures

- Commitment to adopt policies and take measures within national ⁽¹⁾ programmes referred to in FCCC Article 4.1(b) to limit and reduce greenhouse gas emissions from all relevant sectors, and to protect and enhance sinks and reservoirs.

(b) Further commitments regarding policies and measures

- Policies and measures in Annex A shall be common to all national programmes of Annex I Parties and applied as set out in the annex
- Policies and measures in Annex B shall be given high priority consideration for inclusion in national programmes; requirement to work towards early coordination of such policies and measures
- Policies and measures in Annex C shall be given priority consideration for inclusion in national programmes as appropriate to national circumstances.

(c) Commitment regarding limitation and reduction objectives

- Quantified limitation and reduction objectives to be set within specified timeframes, such as 2005, 2010 and 2020 for anthropogenic emissions by sources and removals by sinks

⁽¹⁾ This includes policies and measures adopted by regional economic integration organisations.

(d) Commitments regarding communication of information related to implementation

- Annex I Parties to include in communications under Article 12 of FCCC detailed description of the policies and measures adopted and considered to implement commitments under (a) to (c), specific estimates of their effects, and resulting projected anthropogenic emissions .
- Date of next communication and periodicity thereafter.
- Communications to include results of reviews of national policies and practices referred to in Article 4.2 (e) (ii) and any significant changes identified.

(e) Voluntary application by non-Annex I Parties

- Based on Article 4.2 (g) of FCCC.

(f) Possible annexes on methodological questions

- eg list of GWPs, effects of measures, projection of emissions

ARTICLE 2

Commitments by all Parties

Provisions on continuing to advance the implementation of existing commitments by all Parties.

ARTICLE 3

Conference of Parties to review the adequacy of these commitments in the light of FCCC Article 2, of the implementation of commitments contained in FCCC Article 4, of best available scientific information and assessment of climate change and its impacts, as well as relevant technical, social and economic information.

Date of first review and periodicity thereafter.

Conference of the Parties to take appropriate action within specified deadline

Annexes to be reviewed on entry into force and up-dated regularly (and more frequently) in the light of progress on the coordination of policies and measures between Parties, new scientific or technological advice, and other relevant developments.

ARTICLE 4

Provisions cross-applying relevant articles of FCCC, eg on definitions, secretariat, finance, settlement of disputes, etc.

ARTICLE 5

Provisions on amendments, including simplified procedures for amending the annexes.

ARTICLE 6

Final clauses (entry into force, etc)

ANNEX A

POLICIES AND MEASURES TO BE COMMON TO NATIONAL PROGRAMMES OF ALL ANNEX I PARTIES

List of policies and measures to be adopted and implemented by all Annex I Parties.

ANNEX B

POLICIES AND MEASURES TO BE GIVEN HIGH PRIORITY FOR CONSIDERATION

List of policies and measures which would benefit from common or coordinated application (together with guidance on manner of application, if appropriate) and which must be given high priority consideration by Annex I Parties for inclusion in their national programmes and for early coordination.

ANNEX C

NATIONAL POLICIES AND MEASURES LIKELY TO BE EFFECTIVE IN REDUCING EMISSIONS TO BE CONSIDERED AS APPROPRIATE

List of policies and measures of proven or potential effectiveness which should be given priority consideration, as appropriate, by Annex I Parties for inclusion in their national programmes (with possible indications of potential).

Strengthening the commitments in Article 4.2(a) and (b)

Item 3(b): Quantified emission limitation and reduction objectives

STATEMENT BY UK DELEGATION

The UK would like to endorse the statement already made by the representative of Spain on behalf of the European Union. We would in addition like to make some further comments on the subject of objectives and timeframes.

New quantified objectives for the years beyond 2000 are an essential part of the outcome of the process we are now engaged in. They must go hand in hand with any new commitments on policies and measures. Experience shows - and not just from our own country - that the existence and political endorsement of an overall quantified objective, or target, for greenhouse gas emissions is an essential pre-requisite for developing effective national programmes to limit those emissions.

At the same time, we recognise that to set legally binding targets could pose real practical problems. As we have noted before, emissions that are directly linked to the economic activity and structure of a country cannot suddenly be turned on or off like a tap; they will fluctuate, sometimes substantially, from year to year; and individual countries' ability to meet them will vary according to circumstances and over time. To accommodate all these factors it would be necessary to build in substantial safety margins if we were to go for targets that all Parties were bound to deliver as an absolute legal requirement.

The solution in our view is an approach which puts the legal requirement on the development of a national programme, and on the adoption of policies and measures aimed at delivering a particular objective, coupled with an effective reporting and review mechanism. This would represent an elaboration and strengthening of the current approach in the Convention. It is an approach we have previously characterised with the phrase "hard commitments to achieve soft targets".

The approach we have advocated has the virtue of simplicity as well as practicality. It is also equitable in the sense that each Party's efforts are measured against its historic levels of emissions. Differences in starting points and national circumstances are thus already reflected in the emissions figures for the base year. The emphasis then is on improving performance and changing emissions trends over time, taking advantage of the potential which exists in all Annex I countries.

We recognise that this is not the only way of approaching the concept of equity, and that it is indeed a fairly crude one. But we fear that any solution which sought to define equity in other, more complex terms, for example through differential targets, would raise many other complications, and seems to us unlikely to succeed in reaching universal agreement - certainly within the

next two years.

Countries should of course continue to have the right for their particular national circumstances to be taken into account, as Article 4.2 (a) currently provides. As now, there should be a strong requirement in return for them to demonstrate through their national programmes and communications that they are adopting appropriate policies and making commensurate efforts to control greenhouse gas emissions.

As to whether any new objectives should apply gas by gas, or across all greenhouse gases, our view is that there is no longer any reason not to adopt a basket approach. For some countries - though not the UK - non-CO2 gases are very significant in the contribution they make to global warming. We should therefore ensure that the next stage of the Convention gives countries the flexibility to address their overall greenhouse gas emissions in the most appropriate and cost-effective manner.

As regards timescales, we share the view of those who believe that future targets need to be set sufficiently far ahead as to enable a balanced and comprehensive response. Significant changes in energy production and consumption, in patterns of transportation, and in behaviour, cannot be achieved solely through measures designed to achieve short term goals. At the same time, timeframes stretching out to 2020 and beyond are so far into the future that the uncertainties inherent in any projections or objectives begin to make them relatively meaningless.

For this reason we take the view that 2010 is the most appropriate timeframe for the next quantified objective for reducing developed country emissions - though interim targets might also be appropriate, and the adequacy of such a target would need to be reviewed well before then. In that context, we have already suggested that agreement on a figure in the range 5 to 10% below the 1990 base year by the year 2010 would represent a credible and appropriate next step under the Convention.

Finally, we would endorse the comments made by Germany and others about the importance of not overloading the Secretariat with impossible levels of work on analysis and assessment. Much of this work can and should be done at the national level. Neither the Secretariat nor any other institution is better placed than national governments to assess the effectiveness of particular policies and measures, or their likely costs, or the optimum mix of measures to deliver a particular objective cost effectively, taking account of relevant political considerations and national circumstances. We should not attempt to impose on the Secretariat or SBSTA or anyone else the work which should properly be done at home.

Statement of The Netherlands on agenda item 3.a. policies and measures

Mr. Chairman,

I would like to make a few comments on this issue on behalf of the Netherlands. In addition to the statement made yesterday by Spain on behalf of the European Union - that we of course fully support - we would like to address some points suggested by the Secretariat in the annotated agenda, namely in paras 10-13 of AGBM/1995/3/Add. 3.

With regard to: contribution to the analysis and assessment (para 11 a)

On the national level, we are in the process of preparing an Second Memorandum on Climate Change, due to be published January 1996, with a view to policies and measures for the period after 2000. In the view of this process we make efforts in identifying the most promising and innovative policies and measures. A list will be made available to the Secretariat containing the Netherlands' material we use, as translated in English.

In the letter we distributed earlier we already pointed at some innovative and replicable instruments which we described in our National Communication. These are:

- 1) voluntary agreements with industrial and other public sectors, especially aimed at energy efficiency
- 2) additional to the existing energy/CO2 tax system, an additional regulatory tax on energy use, primarily on small scale consumption, will enter into force on January 1, 1996. We will provide you with up to date information soon.
- 3) An agreement with the energy distribution companies.
Besides this, we are elaborating i.a. the following important policies and instruments:
 - enhancement of the use of new and renewable sources of energy; we aim at least at a tenfold increase over the next 25 years
 - sustainable building, that is inter alia making use of energy performance standards.

With regard to: narrowing the range of policies and measures (para 12)

As described in the EU proposal we envisage the policies and measures to be structured in three annexes of a protocol or another legal instrument. In view of the array of potential policies and measures available to respond to climate change, the AGBM needs to narrow the range of policies and measures relevant for the AGBM process and for analysis and assessment and to focus the Berlin Mandate process. For this purpose we suggest AGBM to develop criteria for selection, taking account of experiences and impacts.

Therefore, we propose the following criteria for selecting promising policies and measures:

- i. potential for effective greenhouse gas emission reduction or sinks enhancement;
- ii. potential for improvement of energy efficiency;
- iii. potential significant benefits in terms of addressing other problems;
- iv. policies and measures subject to competitiveness concerns;
- v. policies and measures concerning globally oriented industrial sectors;
- vi. policies and measures in sectors where decisions may have long term adverse effects on climate change and which therefore call for early action.

Building on these criteria, in our opinion, priority should be given to policies and measures, necessary to be agreed upon internationally or which need international coordination, in the following areas:

- * internationally traded products such as automobiles and appliances;
- * internationally oriented energy intensive industrial processes such as steel, aluminium and chemicals manufacturing
- * HFC and PFC use (see also our proposals for guidelines on fluorocarbons in FCCC/CP/1995/Misc.1 @45)
- * international airline and marine transport.

For this purpose, we attach great importance to sector specific work, to be provided by SBSTA, as underlined yesterday by Spain in its statement on behalf of the European Union.

With regards to: considering possible vehicles for analysis and assessment (para 13).

In addition to the establishment of panels and expert groups under the SBSTA, we recommend, as the United States did earlier, to hold informal sessions as part of an AGBM meeting or intersessionally, in order to bring experts together of specific issues and to share the available information with all Parties. As the Executive Secretary pointed out in his introduction yesterday, AGBM should not wish to do the technical work itself, but it could organise useful work under its umbrella.

Such sessions could have the format of a workshop or e.g. a meeting of a contact purpose, the AGBM could select some topics for consideration; building on the above-mentioned criteria, examples of specific items could be:

- costs of policies and measures, building on the IPCC and OECD material;
- air and marine transport.

Thank you Mr. Chairman

Geneva, 31 October 1995

Check against Delivery

Statement of The Netherlands on "Quantified emission limitation and reduction objectives"

Mr. Chairman,

While The Netherlands is of course fully supporting the statement made by Spain on behalf of the European Union, we would like to elaborate on a few aspects of this important question.

Implementation of current commitments

Let me begin with the implementation of the current commitments, which is in fact the foundation on which the future protocol will be built. As outlined in our first National Communication we have implemented a broad array of policies and measures and we are continuing to broaden that array. As strong energy conservation is a corner stone of our policy we have experienced how important it is to use a multi-dimensional approach through a combination of communicative, regulatory, voluntary and fiscal instruments. We have also experienced that continuous monitoring of the effectiveness of established programmes is an absolute must. Since our first programmes were put in place in 1990 we went already twice through an extensive review (the last one this year). In both reviews it became clear that our policies and measures are effective as they are. But projections also made clear that these policies and measures had to be reassessed because of changes in the economic situation and other external circumstances. In both cases that led to approval of additional policies and measures in order to stay on track to our national emission objectives. I refer to the regulatory energy tax from 1996 onwards mentioned already this morning under 3A. I cannot overstate the importance of such an intensive system of "reviews and adjustments". We think the Convention's review process should encourage such an approach by all Parties.

The need for drastic reductions by industrialised countries

IPCC's scientific assessment points to the need for global emissions to go down far below current levels even if we are to keep greenhouse gas concentrations within a range of tripling pre-industrial values. What does IPCC actually tell us?

First, since developing countries are in a need to increase their economic development and unavoidably their gas emissions, emissions from industrialised countries need to go down even further.

Second, since greenhouse gases put into the atmosphere will stay there for a very long time and it is the cumulated emissions (the sum of emissions over the years) that are determining future atmospheric concentrations, we cannot postpone decisions on emission reductions any longer.

Third, doubling concentrations is already roughly equivalent to an average temperature increase of more than 2 degrees Celsius above pre-industrial levels before the end of the next century. This temperature level is higher than the earth has seen since history started. Even without an extensive analysis of the scientific basis for determining the maximum allowable concentration level on the basis of article 2 of the Convention, the precautionary

principle alone would be sufficient to take a 2 degrees average temperature increase of the earth as the maximum we can tolerate.

Fourth, this would lead to the conclusion that industrialised countries together will have to reduce their total greenhouse gas emissions for decades after the year 2000 with an average of roughly 1-2% per year. Developing countries will be asked and assisted to develop economically in a more (environmentally) sustainable manner, that is, energy-efficient and climate friendly.

Powerful incentives for early action

Mr Chairman, let me now give some thoughts on the issue of necessary incentives for early reduction of greenhouse gas emissions of which Spain, on behalf of the European Union, suggested to explore its potential. This concept is based on firstly, the urgent call of the IPCC for fundamental changes of the global trends of emissions and secondly on the needs for cost effectiveness so as to ensure global benefits at the lowest possible cost. Investments with longer term impact result in avoiding significant amounts of greenhouse gas emissions. However, short time emission objectives might not really require such investments and they may therefore be postponed, unless something like a "savings-account" could be introduced.

If reductions by a Party below an agreed level could be kept "saved" by that Party for use against a later benchmark, the flexibility for Parties to determine the appropriate timing of investments will grow. You could say that the Party that is ahead of 'schedule', should be allowed the credits.

The idea of a "savings account" could for instance be implemented through a system of so called emission budgets, i.e. built by e.g. the following elements:

- an allowance for a certain amount of emissions added up over a period of time, (say 5 years);
- combined with the possibility of transferring unused budgets to the next (5-year) budget period;
- providing a (small) premium for early reductions;

Moreover, besides the early greenhouse gas reductions this savings account system would promote, we see the merits of the system in stimulating investment in technology research and development and in providing Parties and also enterprises with the rationales and flexibility for 'biting' early reductions where and when it is cost-effective to do so.

Thank you, mr Chairman

Geneva, October 31, 1995

**STATEMENT DELIVERED BY THE PHILIPPINES
ON BEHALF OF THE GROUP OF 77 AND CHINA**

Second Session of the Ad Hoc Group
on the Berlin Mandate, 31 October 1995

Agenda Item 4: Continuing to advance the implementation of
Article 4.1

by: Mrs. Bernarditas de Castro-Muller

I have the honor to speak on behalf of the Group of 77 and China under this item which we see as comprising the contribution of non-Annex I Parties to the Berlin mandate process.

We have earlier stated our understanding that this item corresponds to paragraph 2 (b) of the Berlin Mandate, contained in Decision 1/CP.1, which states that the process will not introduce any new commitments for non-Annex I Parties, but reaffirm existing commitments in Art. 4.1, and continue to advance the implementation of these commitments in order to achieve sustainable development, taking into account Article 4.3 (on financial resources), 4.5 (on transfer of technology), and particularly 4.7 which states that "the extent to which developing country Parties will effectively implement their commitments...will depend on the effective implementation by developed country Parties of their commitments...related to financial resources and transfer of technology," taking full account that economic and social development and poverty eradication are the first and overriding priorities of developing country Parties.

It is in this context that we fulfil our commitments under the Convention.

Mr. Chairman,

We share your understanding that one of the most important commitment of developing countries is that of preparing and submitting initial national communications, as laid out in Art. 12.1 of the Convention.

Also under the Convention, in Art. 4.3, the necessary resources shall be provided to meet the agreed full costs incurred by developing countries in complying with their obligations in Art. 12.1. These resources are provided through the interim operating entity of the financial mechanism, the Global Environment Facility (GEF). However, putting the resources in the GEF is not necessarily the same as making it available to developing country Parties.

There is, for one, the problem of timing. We have deadlines for the submission of initial communications. For some of us, these communications are due in 1997, less than two years' time. And yet, it takes at least six months to prepare a project brief, another six months perhaps to have this project approved by the GEF, under the best circumstances.

Moreover, conditions are set. The funding of preparations for national communications is put together with the funding available for projects submitted for addressing adverse effects of climate change. Similar conditions are therefore set for funding both. This is contrary to the provisions of the Convention, in Art. 4.3 as earlier stated.

Still, Mr. Chairman, non-Annex I Parties are already in varying stages of preparations for national communications. In document Misc.40, we laid out the constraints that we face in fulfilling this commitments, but now we are moving forward.

We are not privileged to have a forum, such as the Annex I Parties had in the OECD, to assist us in putting together a format for national communications. Perhaps the AGBM process could provide us the opportunity to have such a forum, to meet, exchange information, share experiences, discuss needs and problems, and in the process evolve guidelines for national communications, including those countries for which no timeframes are given, the least-developed countries. They too are committed to fulfil their obligations under the Convention.

As a first step, perhaps the very able Secretariat could provide us with draft guidelines, taking full account of document Misc. 40.

Mr. Chairman, we would consider this our contribution to the process, to meet our commitments, and through our national communications, provide a full picture of the global situation on climate change.

We also find the AGBM process a way through which we can advance implementation of those commitments related to technology transfer. We note that the synthesized list in doc. /6 of policies and measures identified by Annex I Parties in their national communications does not in any way mention a single policy or measure related to facilitation of access, or transfer of technology. Perhaps the in-depth reviews would reflect this, as we feel that, as stated earlier, it has direct relevance to this process.

We have therefore proposed at the first AGBM session, to move forward the consideration of a report on the innovative, state-of-the-art technologies and know-how to AGBM3, early next year. We look forward to this report.

It is also for this reason that we were deeply disappointed that the TAPs were not set up at SBSTA 1. We are approaching the ongoing consultations on the establishment of these panels with openness, flexibility and good will, and hope to receive the same openness, flexibility and good will from our partners.

To sum up, we reaffirm our desire to meet our commitments under the Convention, indeed we are in the process of preparing our national communications in fulfilment of these commitments. We would like to see a forum for non-Annex I Parties to exchange experiences and evolve guidelines for these communications, and as a first step, would like to request the Secretariat to prepare these draft guidelines.

We would also see the need to include, as an important part of continuing to advance the implementation of Art. 4.1, the question of transfer of technology, and await the report on this at AGBM3. Finally, we hope that in the meanwhile, progress can be made in setting up the TAPs.

Rollande:

please type.

Done.

The Chinese views on Item 5

Nov. 1.

1. The aim of BMT is very clear, namely to enhance the ~~obligations~~^{commitments} of the Annex I parties undertaken under Article 4, 2 (a) and (b). The current discussions on the substances of the issue are yet adequate. Therefore, it is premature to address the ~~question of the features of the future legal instrument~~^{now}. So far there are some suggestions put forward on the issue, e.g. EU's proposal, the U.S. suggestion, which are constructive, and need to be further studied. Whatever the form of the instrument, it should focus on the policies and measures, as well as quantified limitation and reduction by the Annex I parties.

2. The future instrument should be adopted within the framework of the Convention. ^{In addition,} No ~~new~~^{the instrument} institutional mechanism is necessary, as ~~it~~^{it} only serves to ~~amend~~^{amend} and supplement the existing regime set up thereunder. The current regime is a comprehensive,

and balanced institution. ~~Whether~~ The legal instrument
AGBN is to adopt ~~it~~ should not affect the integrity
of ~~the~~ regime.

3. In view of the above considerations, the
future instrument should be ~~as~~ simple and clear,
directly addressing the issue relating to Article 4.2(a) & (b).

AGBM 3 Consideration of National Communications

AGBM 3 - Consideration of national communications

The AGBM, at its first session, decided to consider at its third session (4-8 March 1996), those aspects of the national communications of Annex I Parties and related in-depth review (IDR) reports relevant to its work, together with any related conclusions or advice that the SBSTA and the SBI may provide (FCCC/AGBM/1995/2, para. 19 (k)).

The SBSTA, at its first session, requested the secretariat to present the first elements of the synthesis report of the IDRs for consideration at its second session (26 February - 1 March 1996) with a view to finalizing the report at a later session for transmission to COP 2. Relevant conclusions would be forwarded to the AGBM in accordance with that request (FCCC/SBSTA/1995/3, para. 32 (c)).

Consequently, the AGBM will have available, at its third session, the following information relevant to national communications:

- national communications, in the original language, submitted by Annex I Parties (27 as of 31/10/95; up to 33 by February 1996)
- executive summaries of national communications in the six official languages of the United Nations (18 as of 31/10/95; up to 33 by February 1996)
- up to 12 IDR reports (in English only) and their 1-2 page summaries in the six official languages of the United Nations
- first elements of the synthesis report of the IDRs in the six official languages of the United Nations
- first compilation and synthesis of first national communications (A/AC.237/81)
- any comments from the SBSTA and the SBI
- synthesized listing of policies and measures identified in the national communications (FCCC/AGBM/1995/6)

Taken together, these will provide significant information on the implementation of commitments by Annex I Parties.

In preparing the documentation requested for AGBM 3, the secretariat will take into account areas of emphasis suggested by the AGBM.

Annex

The IDR reports provide considerable updated information in addition to that contained in the national communications and they generally follow the indicative outline approved by COP 1 in its decision 2/CP.1 (FCCC/CP/1995/7/Add.1, annex III). The IDRs have provided an opportunity for Parties to explain in greater detail their national circumstances and the progress achieved as well as the difficulties encountered in the implementation of the Convention, including with respect to the aim of returning to their 1990 levels the anthropogenic emissions of CO₂ and other greenhouse gases by the end of the present decade.

The IDR reports contain:

- a section on inventories where, whenever applicable, updates and improvements and deficiencies in inventories of national greenhouse gases are presented
- a section on policies and measures describing what the teams consider to be the most relevant measures being implemented or planned, their status of implementation and specific reduction effects, if available
- a section on projections explaining how the Party projects its greenhouse gas emissions for 2000, and further, where appropriate, describing briefly the models and approaches used; it attempts to qualify the figures found by drawing attention to critical underlying assumptions for some of the key macroeconomic and energy figures
- sections containing information relevant to Convention commitments related to information on vulnerability studies, adaptation measures, research and systematic observation, education, training and public awareness
- information on the latest ODA contributions by the Party, its contributions to the GEF, bilateral and other multilateral programmes and technology transfer under Article 4.5 of the Convention

Reports of the AGBM



AD HOC GROUP ON THE BERLIN MANDATE
Second session
Geneva, 30 October - 3 November 1995
Items 3 and 4 of the provisional agenda

**STRENGTHENING THE COMMITMENTS IN ARTICLE 4.2(A) AND (B)
CONTINUING TO ADVANCE THE IMPLEMENTATION OF ARTICLE 4.1**
Annotated compilation of information relevant to the Berlin Mandate process

Note by the secretariat

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I. INTRODUCTION

1. At its first session, the Ad Hoc Group on the Berlin Mandate (AGBM) pointed to the wide array of currently available information relevant to the Berlin Mandate process, and to the analysis and assessment in particular. The entities responsible for such information were invited to make this information available to the AGBM to assist in the process (FCCC/AGBM/1995/2, para. 19 (g) and (h)). The AGBM requested the secretariat to prepare for the second session an annotated compilation of information relevant to the Berlin Mandate process (FCCC/AGBM/1995/2, para. 19 (h)(ii)). This annotated compilation will be updated for future sessions as additional information becomes available to the secretariat.
2. In compiling relevant material, the secretariat has taken the following approach:
 - (a) Information compiled in document A/AC.237/83 is not explicitly repeated in this document but should be considered as implicit in the present compilation;
 - (b) Information currently under consideration by the Intergovernmental Panel on Climate Change (IPCC) has not been included; it will be included in subsequent editions once approved and available to the secretariat. Some information on the IPCC Special Report, 1994 has been included in this compilation;
 - (c) Reports submitted by Parties pursuant to a communication by the Executive Secretary dated 13 September 1995 have been taken into consideration in the preparation of this compilation;
 - (d) Approximately 30 intergovernmental organizations were invited to submit relevant material. Any information received has been taken into consideration, taking into account paragraphs 3 and 5 below;
 - (e) In a limited number of cases, information from intergovernmental organizations which is available in the reference unit of the climate change secretariat but which had not been specifically identified by the organization concerned, has also been included.
3. The secretariat was hampered by a number of constraints in the preparation of this document, principally the limited time between the first and the second sessions. In addition, it sometimes proved difficult to obtain copies of documents in time to draft annotations.
4. One non-governmental organization, the Edison Electric Institute, provided copies of a number of studies it considered relevant to the Berlin Mandate process.

II. SCOPE OF THE NOTE AND ACTION BY THE AD HOC GROUP ON THE BERLIN MANDATE

5. The annotations consist of descriptions of the contents of compiled documents: they are not intended to summarize the information provided in the document but to give an indication of the issues addressed. In some cases, the annotations were provided by the submitting organization; in others they were prepared by the secretariat. In no case should they be interpreted as representing the views of the secretariat. Some documents that have been made available are not annotated but are only listed (see appendix). In some cases, this was for technical reasons or shortage of time; in others, it was because the scope of the document was too limited.
6. The compilation should not be seen as an exhaustive listing of relevant documents but as an initial attempt to assist the AGBM in identifying and considering the wide range of information relevant to the Berlin Mandate process that is currently available. The secretariat continues to welcome suggestions for additional relevant information which could be used in the preparation of any future editions of the annotated compilation.
7. The AGBM is invited to make use of this compilation at its second session as background information to the discussion under items 3 and 4 of the provisional agenda.
8. The AGBM is further invited to provide guidance to the secretariat on the approach used and on the preparation of any further editions. Bearing in mind the resource-intensive nature of this work and the benefits derived therefrom, the AGBM may wish to indicate the priority to be attached to it.

Annex

COMPILATION OF RELEVANT LITERATURE

A.I. REPORTS SUBMITTED BY PARTIES

Protecting the earth: A status report with recommendations for a new energy policy, German Bundestag (ed.), Bonn, 1991. 2 Vols. Third Report Of The Enquete Commission Of The 11th German Bundestag "Preventive Measures To Protect The Earth's Atmosphere".

1. This two-volume, 1600-page study was prepared by the Enquete Commission of the German Bundestag. It examines both national and international measures designed to reduce energy-related emissions of greenhouse gases in a number of sectors. Issues such as energy efficiency, renewable energy, fuel substitution and nuclear power are addressed, reflecting, in some instances, a range of opinions. The study includes some analysis of the potentials of individual emission reduction measures until 2005 and 2050.

Climate change - threat to global development: acting now to safeguard the future, German Bundestag (ed.), Bonn: Economica Verlag; Karlsruhe: Verlag Müller, 1992. First Report Submitted By The Enquete Commission Of The 12th German Bundestag "Preventive Measures To Protect The Earth's Atmosphere".

2. This study, a continuation of earlier work (see above), while focusing on the science of Climate Change and on possible impacts, also includes some discussion of quantified objectives and time-frames. It also reviews some measures being implemented or proposed at the national, regional and global levels. Particular attention is paid to the energy, transport forestry and agricultural sectors.

Protecting our green earth: how to manage global warming through environmentally sound farming and preservation of the world's forests, German Bundestag (ed.), Bonn: Economica Verlag, 1995. Third Report Submitted By The Enquete Commission Of The 12th German Bundestag "Preventive Measures To Protect The Earth's Atmosphere".

3. This study examines the contributions of the forest and agriculture sectors to Climate Change in terms of sectoral greenhouse gas emissions. In addition, it discusses the possible impacts of Climate Change on these sectors. Ways and means of reducing emissions of CO₂, CH₄ and N₂O in from agriculture are analysed. Much of the discussion relating to forests is addressed to the international context, including that with regard to possible mitigation actions. The study includes differing views of Commission members where these existed.

A.II. REPORT BY THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), JOINTLY ESTABLISHED BY THE WORLD METEOROLOGICAL ORGANIZATION (WMO) AND THE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

Summaries for Policymakers and Other Summaries, Intergovernmental Panel on Climate Change, Geneva (Switzerland), 1994. See 3.1 A Report of Working Group III of the IPCC: an evaluation of the IPCC IS92 emission scenarios, pp. 41 - 46.

4. Six scenarios provide estimates of direct and indirect greenhouse gas emissions, by source, for four regions over the period 1990 - 2100 and cover a wide range of values for key input assumptions. This evaluation deals mostly with non-intervention scenarios that do not assume any climate policies to reduce greenhouse gas emissions (although they may assume emission controls for other environmental reasons). The recommendations of the working group include the following:

- New reference scenarios are needed to explore a variety of economic development pathways.
- Policy scenarios are needed to explore a variety of climate policies, instruments and programmes, already developed or yet to be developed, and their results in terms of greenhouse gas emission reductions.
- Endogenous capacity building is crucial. Special effort is needed to improve the capabilities of researchers to analyse and develop scenarios, especially in developing countries and in countries with economies in transition.

A.III. REPORTS BY OTHER UNITED NATIONS AGENCIES

A. Department for Policy Coordination and Sustainable Development (DPCSD)

Report of the Secretary-General on "Structural change in the world economy: implications for energy use and air emissions". (A/47/388)

5. The report is a topic oriented study on selected aspects of long-term structural change in the world economy, energy use and consequent emissions of CO₂, SO₂, and NO_x. Projections of production and air emissions to the year 2020, under different scenarios for economic growth, make particular reference to the energy-intensive economic sectors. Future changes in the world economy are determined by the projected trends in the level and composition of investment, foreign trade and consumption, and by the assumed interregional patterns of moderated technology infusion. These trends in turn determine different rates of growth of economic activities, and thus of energy and materials requirements and levels of air emissions via the inter-industry relationships among and within regions.

Report of the Secretary-General on "Changing global energy patterns".
(E/C.13/1994/2)

6. The report analyses changes in global energy consumption and production patterns. Energy consumption is expected to increase at higher rates in developing countries than in the developed market economies. By the year 2020, the share of developing countries in the consumption of fossil fuels may reach 48 per cent of the total world consumption, from the current level of 28 per cent. High energy intensities are expected to continue in developing countries in view of the higher growth rates in economic output. A rapid rise in global energy consumption, especially of fossil fuels, gives rise to environmental concerns.

Report of the Committee for New and Renewable Sources of Energy and on Energy for Development on its first session. (E/1994/25)

7. The United Nations Committee for New and Renewable Sources of Energy and on Energy for Development, at its first session, discussed, *inter alia*, energy and sustainable development, including the linkages between energy and development; environment; security and finite resources; issues concerning overall energy development, with particular emphasis on developing countries; new and renewable sources of energy; and efficient utilization of energy resources; and development of strategies for future energy systems compatible with sustainable development and policies for their implementation.

Report of the Committee for New and Renewable Sources of Energy and on Energy for Development on its special session. (E/1995/25)

8. The United Nations Committee for New and Renewable Sources of Energy and on Energy for Development met in a special session in order to provide advice on energy for rural development to the Commission on Sustainable Development at its third session, to initiate and encourage a process of environmentally sound energy transition in rural communities, from unsustainable energy sources to structured and diversified energy sources, by making available alternative new and renewable sources of energy. The Committee concentrated on recommendations for sustainable energy in the rural areas of developing countries, including small island developing States.

Report of the Secretary-General on "Changing consumption and production patterns".
(E/CN.17/1995/13)

9. The report identifies the environmental, social and economic impacts of present production and consumption patterns, including a summary of recent projections and studies, as well as an analysis of policy measures aimed at promoting sustainable production and consumption patterns with a focus on the use of economic instruments. It also reviews recent experiences of a selected number of countries and organizations in changing unsustainable production and consumption patterns, including measures taken toward reduction of CO₂ emissions.

B. United Nations Conference on Trade and Development (UNCTAD)

Combating global warming: possible rules, regulations and administrative arrangements for a global market in CO₂ emission entitlements, Tietenberg, T.; Victor, David; Sandor, Richard; Cole, Joseph; Kelly, Eileen, Geneva (Switzerland), 1994, UNCTAD/GID/8

10. This paper suggests that a global warming agreement be concluded among an initial group of participants (the United States, the European Union and Japan). The agreement would specify the conditions under which other signatories could participate in a proposed tradeable CO₂ entitlement programme. It argues that economic history and theory, as well as the early experience of the SO₂ entitlement programme, suggest that such a programme will provide the least cost solution to the global warming problem.

11. An essential component of effective implementation is the development of clear legal and statutory authority for the international trading and transfer of CO₂ emission credits. An international clearing house must also be established. Trading in CO₂ emission credits will naturally gravitate to the most efficient, least cost trading forum. The design of an international market place should encourage competition between the various trading forums, such as organized exchanges, electronic trading systems and over-the-counter mechanisms.

12. The paper makes recommendations for the development of a global market for the trading of CO₂ emission credits in order to stimulate debate and promote further development of the concept.

Controlling carbon dioxide emissions: the tradeable permit system, United Nations Conference on Trade and Development, Geneva (Switzerland), 1995, UNCTAD/GID/11

13. Studies on tradeable CO₂ emission entitlements focus on the themes of feasibility and implementation. Extensive research has helped to clarify the former, while the latter has become a matter of overriding concern for Governments, international organizations, and non-governmental organizations, all seeking practical, cost-efficient mechanisms to deal with global and environmental problems and their financing.

14. The studies carried out by the UNCTAD secretariat have shown that tradeable permits are both an efficient means of controlling CO₂ emissions at minimum cost, and an effective mechanism for transferring resources to developing countries and to countries in transition to help them to contribute to the international effort to abate emissions of greenhouse gases. They have also revealed that a viable implementation strategy should begin with a simple pilot scheme based on the joint implementation of commitments, a facet of the Framework Convention on Climate Change, and evolve gradually to a more complete system on the basis of 'learning by doing'. Some of the major emitters need to act as pioneers.

C. United Nations Environment Programme (UNEP)

Climate change and energy efficiency in industry, United Nations Environment Programme, Industry and Environment Office; International Petroleum Industry Environmental Conservation Association, Paris; London, 1991

15. This publication is devoted to climate change and industry. In addition to a number of reports on activities from several organizations and countries, it includes short articles on subjects such as clean coal technologies, energy efficiency, climatic architecture, power development, innovative energy technologies and the insurance industry.

UNEP greenhouse gas abatement costing studies: analysis of abatement costing issues and preparation of a methodology to undertake national greenhouse gas abatement costing studies: Phase two report, United Nations Environment Programme, Roskilde (Denmark), 1993

and

UNEP greenhouse gas abatement costing studies: analysis of abatement costing issues and preparation of a methodology to undertake national greenhouse gas abatement costing studies: Phase two report: Appendix II: Country summaries, United Nations Environment Programme, Roskilde (Denmark)

16. The UNEP project on developing a common methodological approach for assessing the costs of limiting greenhouse gas emissions was initiated in 1991 in a bid to improve understanding of the subject, and to help lay the basis for national studies of the economic issues which would be accepted as objective, accurate and comparable between countries.

17. Economic studies of the issues have spanned a wide range, with some claiming that reducing CO₂ emissions would cripple economies and seriously damage growth in developing countries. Others have suggested much more modest impacts and even net economic gains arising from increased energy system efficiency and reduced vulnerability to volatile fossil fuel prices. Furthermore, it has been evident for a long time that national economic assessments would come to play an important role in international negotiations, and that the methodologies used, and the comparability of different national studies, would become important issues.

Climate change and industry, United Nations Environment Programme, Industry and Environment, Paris, 1994 (*Industry and Environment; Vol.17, No.1*)

18. This publication provides initial guidance to industrial management and Governments in exploring the potential benefits of voluntary agreements to improved energy efficiency. It is essentially an introduction to the process of energy auditing, supported by practical examples. The approaches described draw on the extensive experience of energy efficiency

management in the international oil industry, but the content focuses mainly on the small- to medium- sized operations in many sectors of industry, particularly in developing countries. This report does not address the question of energy efficiency in the energy generation industry or in the heavy industrial sector.

Transport and the environment, United Nations Environment Programme, Industry and Environment, Paris, 1993 (*Industry and Environment, Vol.16, No.1-2*)

19. The articles in this issue explore the theme of sustainability, as stressed in Agenda 21, and its implications on the transport industry. The articles reflect the diversity of opinion on policy and technical options. They underline the need for more intense dialogue between all parties, at the international and national level.

D. United Nations Economic Commission for Europe (UNECE)

Manual on financial engineering: sources of finance for energy efficiency projects (1994), ENERGY/WP.4/R.1

20. Many international institutions have financial resources available for economic development in economies in transition, including energy efficiency and environmental components. In this manual the major institutions for financial help and bilateral aid programmes as well as organizations which provide technical assistance, are discussed. The manual is designed to provide a key source of information about the sources of finance for energy efficiency projects.

Manual on business planning: how to construct a business plan for energy efficiency projects (1994), ENERGY/WP.4/R.2

21. This book is intended to answer questions likely to be raised by potential investors, sponsors and entrepreneurs considering an approach to financial institutions. The manual aims to provide information on financing methods adapted to the practices of the market economy for countries in the process of transition to a market economy, and who may have no tradition of these practices, or the requirements needed to obtain money to finance their projects in a commercial fashion.

The energy efficiency 2000 project and energy-efficiency demonstration zones in eastern and central Europe (1994), Natural Resources Forum 18 (4) 287-292

22. The concept behind the project is that environmental conditions throughout Europe can be enhanced by the introduction of energy-efficient technology in central and eastern Europe as existing energy using systems wear out and are replaced. The project has produced useful information on policies, technologies and databases on experts and businesses working in this field. In order to achieve this objective the project was designed to produce a professional network, information exchange, a list of technologies, pilot projects and the identification of energy-efficient practices.

Strategies and policies for air pollution abatement: 1995 review, UNECE, ECE/EB.AIR/44

23. This publication provides detailed information in a tabular form on: ambient air quality standards, fuel quality standards, and emission standards applied by Parties to the Convention on Long-range Transboundary Air Pollution. It publishes detailed data on emissions of sulphur dioxide, nitrogen oxides, ammonia, volatile organic compounds, methane, carbon monoxide and carbon dioxide. These data are provided for the years 1980 to 1994 and in the form of projections up to the year 2010. The different sources of emissions are separated and maps show their geographic distribution over Europe. The report also contains maps of Europe showing critical loads of acidity, an indication of different environmental sensitivities in different parts of Europe.

Draft guidelines for a common strategy regarding transport and the environment (1995), ECE/RCTE/PC/10/REV.3

24. The Governments of the ECE countries have undertaken to pursue the objective of sustainable transport development by helping to reduce the negative impact of transport on the environment and to promote the most environment-friendly modes of transport. In order to achieve this objective, transport development policies and strategies compatible with the protection of the environment and of health will need to take into account environmental, economic and social costs and benefits and to permit the internalization of external costs using appropriate instruments.

25. This document contains the draft guidelines as agreed upon by member States. These guidelines provide the basis for Governments of the ECE countries to draw up transport policies and programmes containing various types of measures, for example, promoting stricter measures on vehicle emissions in urban and other densely populated areas and ensuring that transport of dangerous goods and hazardous wastes is made safer.

Energy efficiency demonstration zones in central and eastern Europe: preparatory assistance phase (RER/94/G41), (1995)

26. Following on from the development objective, the immediate objective discussed in this paper is to implement viable energy efficiency strategies in three demonstration zones - the aim being to demonstrate, on a city-wide scale, the combined effect of energy-efficient technology, energy pricing policy, favorable tariff structures, advisory services, information campaigns, metering, monitoring and controls, energy audits, tax incentives, grants and government-guaranteed loan schemes, international technical assistance and trade development programmes. The intention is to replicate successful measures nationally once proven on a limited scale.

Integrated assessment modelling of nitrogen compounds (1995), UNECE, EB.AIR/WG.5/R.49, pp. 9-14

27. This report identifies conclusions and recommendations on issues relating to the implications for air pollution as discussed at the workshop on restructuring of energy systems. Specifically, the conclusions provide projections of energy developments in central and Eastern Europe, the potential effects of restructuring energy systems, energy pricing, and costs and benefits.

International legal instruments on the protection of the environment in the field of transport (1995), ECE/RCTE/PC/9/REV.1

28. This document contains a first list of ECE agreements and regulations in force which establish specific international requirements and/or limits for the reduction of the environmental impacts of road transport. It also lists a number of related ECE resolutions in the field of inland water transport. With regard to other modes, a first list of relevant legal instruments, resolutions and norms has also been elaborated by the secretariat on the basis of information obtained from other international organizations.

E. United Nations Economic Commission for Africa (UNECA)

African conference on policy options and responses to climate change: conference statement, Stockholm Environment Institute; African Centre for Technology Studies, Stockholm; Nairobi, 1995. Also available in French (Record Number 1788)

29. The conference considered that Africa's ecosystems and socio-economic systems are most valuable to possible adverse effects of climate change. It is a statement relating to the potential African positions on climate change, the building of capacity in various areas, the additional funds required by African countries in their contribution to international climate change mitigation efforts, the access to appropriate technology, and the question of joint implementation.

A.IV. REPORTS BY OTHER INTERGOVERNMENTAL ORGANIZATIONS

A. Organisation for Economic Co-operation and Development (OECD)

Markets for tradeable CO₂ emission quotas: principles and practice, Chichilnisky, Graciela; Heal, Geoffrey, Paris, 1995, (*Economics Department Working Papers No. 153*), OCDE/GD(95)9

30. This paper reviews a range of issues relating to tradeable carbon dioxide emission quotas (TEQs). It considers the economic principles on which they are based and compares them with the alternative carbon abatement policies, and reviews many aspects of how tradeable quotas would be implemented in practice. It explains why the issues are on the agenda and how they relate to current issues such as joint implementation.

31. It argues that the principal alternative to a TEQ regime is the adoption of carbon taxes: salient aspects of two policy approaches are compared and combinations of these analysed. The allocation of TEQs among participating countries is questioned and issues connected with the implementation of TEQs, analysing questions associated with design and management of a TEQ market, addressed.

Energy efficiency and the environment, OECD, Paris, 1991

32. This study reviews past energy efficiency developments and policies and examines the future scope for energy efficiency. It examines in detail the technical and market factors that are likely to determine the cost-effectiveness of energy efficiency improvements in a range of end-use sectors. In addition, on the basis of available country-specific studies of the scope and costs of energy efficient strategies, it is possible to assess the macroeconomic impact of measures designed to accelerate the penetration of energy efficient technologies. Finally, the study points to areas for further work, particularly in the terms of improved data and information on energy use and on the cost-effectiveness of energy efficiency investments.

Dialogue with vehicle manufacturers: joint declaration, ECMT, Paris, 1995, CEMT/CM(95)5/FINAL

33. The Council of the European Conference of Ministers of Transport (ECMT) and the vehicle manufacturing industry agreed on a Declaration on reducing CO₂ emissions from passenger vehicles in ECMT countries. The objectives of this voluntary agreement are to reduce fuel consumption of new cars and better manage vehicle use. The Declaration identifies a number of measures to be taken by Government (for example, provision of a policy framework, encouraging new technologies and road traffic informatics and improving fleet maintenance and replacement), by industry (for example, developing, manufacturing and marketing new cars), and by Government and industry jointly (for example, marketing, technology development, public education and information). The Declaration also provides for follow-up activities, including trend analysis and reporting.

B. International Energy Agency (IEA)

World energy outlook, International Energy Agency, Paris, 1995

34. The 1995 edition of the *World Energy Outlook* adds to the IEA's ongoing analysis of global energy markets until the year 2010. This year's edition presents two alternative scenarios: one which foresees capacity constraints which will put upward pressure on energy prices; and a second which examines the potential for energy savings to reduce the growth rate of energy demand. In both cases, world energy demand will grow over the next fifteen years, but more slowly than the rate of economic growth. The importance of the global transportation sector is examined in detail. The study also provides in-depth regional analysis of longer term energy prospects in OECD North America, South and Central America, Africa and South Asia. These regional studies follow on the work presented in last year's outlook on the rapidly changing Asia-Pacific regions and Central and Eastern Europe. The Outlook includes some discussion related to the environmental implications of the energy demand projections. This includes projections of increasing CO₂ emissions to 2010, with some regional breakdowns. There is also some discussion of world biomass consumption and renewable energy sources.

Energy policies of IEA countries: 1994 review, International Energy Agency, Paris, 1995

35. This 1994 edition contributes to the IEA's ongoing analysis of countries' energy policies and market developments. It reviews recent trends and developments in energy demand and supply, efficiency, technology and environment. This year's edition includes: critical reviews of all 23 IEA member countries, in-depth reviews of Finland, Ireland, Italy, Japan, Luxembourg and Switzerland; a synthesis report highlighting major energy policy developments and market trends in IEA member countries and an overview of significant energy developments elsewhere in the world; and an analysis of trends in key energy indicators over a twenty year period.

Energy technologies to reduce CO₂ emissions in Europe: prospects, competition, synergy (Petten, 11-12 April 1994), International Energy Agency, Paris, 1995

36. Even if currently available technologies are taken up to a significant extent, they can only be expected to provide a partial solution to the longer term concerns about global climate change. The development and deployment of new and improved technologies will be essential if atmospheric concentrations of greenhouse gases are to be reduced significantly. This volume of proceedings explores the prospects in Europe for a wide range of new and improved energy technologies, and examines the interrelationships between those technologies over the longer term under a scenario of drastically reduced CO₂ emissions.

Global climate change: policy statement and potential to reduce carbon dioxide emissions: technical report, International Energy Agency, Coal Industry Advisory Board, Paris, 1991

37. This document consists of two parts: a policy statement on the issue of global climate change and a technical report on the potential to reduce carbon dioxide emissions. The policy statement focuses on key principles to be taken into account in developing policies for dealing with global climate change policy, while the technical report identifies coal technologies that can bring substantial reductions in carbon dioxide emissions. It also quantifies the potential percentage reductions that can be achieved if these technologies are widely deployed.

Energy prices and taxes, International Energy Agency, Paris, 1995

38. This quarterly publication provides statistics on prices and taxes on all energy sources and main consuming sectors and selected data for some non-OECD countries. It includes details on recent energy price developments, import and export prices, price indices for crude oil, steam coal, caking coal and natural gas and trade regulations and duties.

39. It provides energy end-use prices, taxes and price indices in national currencies for all OECD countries and a number of non-OECD countries for a number of products including automotive fuels, light fuel oil, heavy fuel oil, electricity, natural gas, steam coal, caking coal, and, where applicable, prices for industry, electricity generation, and households.

Industry attitudes to steam cycle clean coal technologies: survey of current status, International Energy Agency, Paris, 1995

40. This study reviews the future prospects for coal-based power generation, the current and likely future development of pulverized fuel-firing and atmospheric fluidised bed combustion units, and the future of steam cycle technologies, based on an industry survey. Unlike other advanced clean coal technologies, these technologies use a steam cycle (but no gas turbine) to convert heat into power. The study shows that modern pulverized fuel plant can be both clean and efficient, and is likely to be the technology chosen by utilities throughout the world for the next generation of coal-fired power plant.

41. This is the second of a proposed series of three publications. The first *Industry attitudes to combined cycle clean coal technologies - survey of current status* (IEA 1994) covered the current status of coal-based generation using combined cycle technologies (integrated gasification combined cycle and pressurized fluidised bed combustion). The third study in the series (to be published soon) will bring together the results and identify the way forward for advanced clean coal technologies.

Reconciling transportation, environmental and energy issues (Budapest, 30 May - 1 June 1994), International Energy Agency, Paris, 1995

42. Striking a balance to meet the crucial objectives of transportation efficiency, environmental protection and energy security was the theme of a conference held in Budapest in 1994, where public and private-sector actors joined forces to seek ways to develop and implement public transportation options that are clean, fuel-efficient and environmentally sound.

Forthcoming:

Climate change policy initiatives. Volume II: non-OECD countries 1994-1995 update, International Energy Agency, Paris, 1995

43. This book will provide recent information on the development of national policies to limit energy-related emissions of CO₂ and other greenhouse gases of some 20 non-OECD countries (major developing countries and countries with economies in transition). It will give details on these countries' energy sectors, as well as trends in energy supply and consumption and related CO₂ emissions.

Comparing energy technologies, International Energy Agency, Paris, 1995

44. This publication considers the state of the art in methodologies for assessing and comparing energy technologies, and the strengths and weaknesses of current practice. It presents experts' reports on energy R&D approaches and assessment criteria strategies in Canada, Denmark, France, Italy, Japan, the Netherlands, the United Kingdom, the United States and the European Union.

Policy aspects of renewable energy in OECD and non-OECD countries, International Energy Agency, Paris, 1995

45. This report will give a global view of policy prospects for different renewable energy sources. It will provide a focused assessment of current trends and the scope for future exploitation of renewables in OECD countries and non-OECD regions. Policy options that have been employed to increase the use of renewable energies, as well as approaches that might be appropriate for the future will be examined, taking into account the changing nature of energy policy and the structure of energy markets, especially with respect to electricity.

Voluntary actions for energy-related CO₂ abatement, International Energy Agency, Paris, 1995

46. This study, the second in the series *energy and environment policy analysis*, will focus on the use of voluntary approaches in IEA countries as a policy tool to achieve energy and environmental goals, and their potential contribution to achieving, *inter alia*, greenhouse gas abatement objectives. The report will include a detailed annex on all IEA member voluntary programmes and initiatives in this area.

C. Organization of Petroleum Exporting Countries (OPEC)

**Energy taxation and economic growth, Seymour, Adam; Mabro, Robert, Vienna, 1994
(Pamphlet Series; No. 30)**

47. This report focuses on energy taxation, especially with regard to oil, as a policy tool in developing countries. However, it also addresses to some extent taxation issues related to environmental externalities, including policy responses to climate change. It also includes some case studies of energy, particularly oil, taxation in developed countries, including environmental taxes. The study's main thesis is that the case for oil taxation is being promoted without due consideration for the central role of energy in economic growth and development and its importance for the welfare of citizens.

D. Asian Development Bank (ADB)

A study of a least-cost greenhouse gas abatement strategy project (ALGAS), ADB

48. The objective of the ALGAS project is to help reduce emissions of greenhouse gases (GHG) from the Asian region. Key ALGAS activities include:

- Developing and improving the national and regional capacity to prepare baseline inventories of GHG emissions and sinks to meet the standards and requirements of the United Nations Framework Convention on Climate Change;
- Improving the reliability of GHG emission and sink inventories for the region;
- Developing national and regional capacities to identify, formulate, and analyse GHG abatement initiatives for several Asian countries (China, India, Indonesia, Republic of Korea, and Thailand);
- Developing and implementing national and regional least-cost GHG abatement strategies through the preparation of national mitigation plans and a portfolio of viable, least-cost GHG abatement projects that will dovetail the country's economic development strategy.

Climate change in Asia: executive summary, Qureshi, Ata (ed.); Hobbie, David (ed.), Manila: Asian Development Bank, 1994 (Regional Study on Global Environmental Issues)

and

Climate change in Asia: thematic overview, Qureshi, Ata (ed.); Hobbie, David (ed.), Manila: Asian Development Bank, 1994 (Regional Study on Global Environmental Issues)

49. These studies investigate the implications of climate change for coastal zones, agriculture, forestry, water resources, energy and other vital sectors, in eight countries of the Asian Pacific region, namely, Pakistan, India, Sri Lanka and Bangladesh in south Asia and Indonesia, Malaysia, Viet Nam and the Philippines in south-east Asia. A volume containing a summary of these findings has been devoted to a thematic overview of climate change implications and responses for agriculture, forestry and land use, water resources and coastal areas, national inventories of greenhouse gases mitigation measures and socioeconomic impacts.

E. South Pacific Regional Environment Programme (SPREP)

Summary report of the first coastal protection meeting, South Pacific Regional Environment Programme; South Pacific Applied Geoscience Commission, Apia (Western Samoa), 1994 , First Coastal Protection Meeting, 21-23 February 1994, Apia, Western Samoa

and

Summary report of the second coastal protection meeting, South Pacific Regional Environment Programme; South Pacific Applied Geoscience Commission, Suva (Fiji) - Second Coastal Protection Meeting, 16-20 May 1994, Apia, Suva, (Fiji)

50. SPREP in collaboration with South Pacific Applied Geoscience Commission convened two workshops to examine the provision of adequate coastal protection systems in the region. The meeting considered options ranging from managing natural coastal systems through to the use of man made structures and barriers to prevent coastal erosion and degradation. Among its recommendations, the participants identified the need for an integrated coastal zone management programme to combat the problems identified.

Appendix

ADDITIONAL REPORTS BY INTERNATIONAL ORGANIZATIONS

A. Asian Development Bank (ADB)

Climate change in Asia: Malaysia, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: India, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Indonesia, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Philippines, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Pakistan, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Bangladesh, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Sri Lanka, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

Climate change in Asia: Viet Nam, Qureshi, Ata (ed.), Manila: Asian Development Bank, 1994, (*Regional Study on Global Environmental Issues*)

National response strategy for global climate change: People's Republic of China: final report of the technical assistance project, Argonne National Laboratory, East-West Center; Tsinghua University, Argonne (II), 1994.

Preparation of a national strategy on global climate change: Thailand, Thailand Development Research Institute; Thailand Environment Institute, Bangkok, 1993 - Draft final report

B. Food and Agriculture Organization of the United Nations (FAO)

FAO Yearbook 1993: Forest Products 1982-1993 = FAO Annuaire 1993: Produits Forestiers 1982-1993 = FAO Anuario 1993: Productos Forestales 1982-1993, Food and Agriculture Organization, Rome, 1995, (*FAO Statistics Series; No. 122, FAO Forestry Series; No. 28*)

FAO Yearbook 1994: Production = FAO Annuaire 1994: Production = FAO Anuario 1994: Produccion, Food and Agriculture Organization, Rome, 1995 - (*Vol. 48; FAO Statistics Series; No. 125*)

Global climatic change and agricultural production: direct effects of changing hydrological and plant physiological processes, United Nations. Food and Agriculture Organization. Interdepartmental Group on Climate Change; United Nations Environmental Programme, Rome, 1993. Highlights from an Expert Consultation on Global Climatic Change and Agricultural Production: Direct Effects of Changing Hydrological and Plant Physiological Processes, 7-10 December 1993, Rome

World agriculture: towards 2010: an FAO study, Alexandratos, Nikos (ed.), Rome: Food and Agriculture Organization; Chichester: John Wiley and Sons, 1995

C. Organisation for Economic Co-operation and Development (OECD)

Background paper prepared for the OECD workshop on sustainable consumption and production: clarifying the concepts, 2-4 July 1995, Rosendal, Norway, OECD, Paris, 1995

Climate Change: designing a practical tax system, OECD, Paris, 1992

Climate Change: designing a tradable permit system, OECD, Paris, 1992

A comparison of carbon taxes in selected OECD countries, Haugland, T., Paris: OECD, 1993, (*OECD Monographs Series*)

The costs of cutting carbon emissions: results from global models, OECD, Paris, 1993

Developed countries views concerning environmentally sound technology transfer and information, Yakowitz, H., Paris, OECD, 1994. A paper presented to the UNCSO workshop on the promotion and access to and dissemination of information on environmentally sound technologies, Seoul, Korea

The economic costs of reducing CO₂ emissions, OECD, Paris, 1992, (*OECD Economic Studies; No. 19*)

Economic instruments and climate change, OECD, Paris, 1993

- Electric vehicles: technology, performance and potential**, OECD, IEA, Paris, 1993
- Energy conservation policies and technologies in Japan: a survey**, OECD, Paris, 1994
- Environment-economy policy integration: a progress report**, OECD, Paris, 1995 (forthcoming)
- Environmental taxes in OECD countries**, OECD, Paris, 1995
- Global warming: economic dimensions and policy responses**, OECD, Paris, 1995
- Global warming: the benefits of emission abatement**, OECD, Paris, 1992
- Greenhouse gas emissions: the energy dimension**, OECD, Paris, 1991
- Internalising the social costs of transport**, OECD, ECMT, Paris, 1994
- Motor vehicle pollution: reduction strategies beyond 2010**, OECD, Paris, 1995
- OECD government experts meeting on climate change: annotated agenda and issues paper**, OECD, Paris, 1993, Env/epoc(93)13
- OECD workshop on development assistance and technology co-operation for cleaner industrial production in developing countries**, OECD, Paris, 1994, OECD/GD(95)42
- Promoting cleaner production in developing countries: the role of development assistance**, OECD, Paris, 1995 (Forthcoming)

D. United Nations Conference on Trade and Development (UNCTAD)

Accounting for sustainable forestry management: a case study, United Nations Conference on Trade and Development, Geneva, 1994, UNCTAD/DTCI/4

E. United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)

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STRENGTHENING THE COMMITMENTS IN ARTICLE 4.2(A) AND (B)
POLICIES AND MEASURES

Synthesized list of policies and measures identified by
Annex I Parties in their national communications *

Note by the secretariat

1. At its first session, the Ad Hoc Group on the Berlin Mandate (AGBM) requested the secretariat to prepare for consideration at the second session "a synthesized listing of policies and measures, also by sector, identified in the national communications of Annex I Parties" (FCCC/AGBM/1995/2, para. 19 (h) (iv)). This synthesized list is found in the annex to this note.
2. The synthesized list has been prepared on the basis of an examination of 27 national communications submitted by Annex I Parties as at 2 October 1995 (see appendix for a list of these Parties). Well over 1,000 policies and measures are described in these national communications; in order to reduce repetition, where these vary only slightly, they have been included as a single measure. While this has reduced the amount of detail provided on these initiatives, the list nevertheless preserves a sense of the range of policies and measures reported by Annex I Parties.

* The term "national communications" includes communications from the regional economic integration organization included in Annex I to the Convention.

3. It should also be noted that the secretariat did not seek supplementary information from Parties on policies and measures reported, even though they are often described at very different levels of detail in the communications. As a result, some policies and measures may not have been placed in the correct categories of the synthesized list and some policies and measures for which little information was provided may not be included in the list. Information from the in-depth reviews has been included to the extent possible.

4. Finally, the list attempts to cover policies and measures which have either been implemented or for which implementation is planned. Policies and measures that are clearly only under study at this time have been excluded.

5. The synthesized list has been structured in a manner consistent with the earlier document "Compilation and synthesis of national communications from Annex I Parties" (A/AC.237/81). Accordingly, the list has been categorized under the following sector headings:

- I. Energy and transformation industries
- II. Industry
- III. Residential, commercial and institutional
- IV. Transportation
- V. Industrial processes
- VI. Agriculture
- VII. Land use change and forestry
- VIII. Waste management and sewage treatment
- IX. Cross-sectoral economic instruments

6. Under each sector heading, a number of subheadings are provided that describe areas of opportunity or overall policy objectives for greenhouse gas emission reductions. Policies and measures that Annex I Parties have reported on with respect to the exploitation of these opportunities are listed under these subheadings and are further categorized by the policy instrument used:

- ▶ regulations and guidelines
- ▶ economic instruments and incentives
- ▶ voluntary agreements and actions
- ▶ information, education and training
- ▶ research, development and demonstration

The secretariat believes that this approach has the merit of providing a greater breadth of description. At the same time, however, it leads to repetition of policies and measures under different categories and subheadings.

7. The synthesized list also attempts to provide an indication of the number of Annex I Parties that reported on a specific policy or measure in their national communication. The following annotation system has been used:

- ¶ reported by 1-5 Annex I Parties;
- ¶¶ reported by 6-10 Annex I Parties;
- ¶¶¶ reported by 11-15 Annex I Parties;
- ¶¶¶¶ reported by more than 15 Annex I Parties.

It must be stressed that references to the number of Annex I Parties that have reported on specific policies and measures is illustrative and a reflection of the data available. The annotation system does not attempt to demonstrate the relative importance of different policies and measures in terms of their greenhouse gas mitigation potential.

8. While it is not proposed that this document be considered in depth at the second session, delegations may wish to use it as a tool to facilitate the discussions under relevant items of the provisional agenda, and in particular, item 3 (a).

Annex

SYNTHESIZED LIST OF POLICIES AND MEASURES

I. ENERGY AND TRANSFORMATION INDUSTRIES

A. Restructuring energy markets

Regulations and guidelines

- ▶ regulatory reform that increases competition by providing access to the grid for small and independent power producers (for example, through laws that break up producer monopolies, open up transmission and distribution networks, or provide an increased or guaranteed price for power from new producers) ¶¶¶
- ▶ regulatory reform that requires utilities to practice least-cost planning and/or integrated resource planning ¶
- ▶ regulatory reform that removes barriers to the transmission and distribution of natural gas ¶

Information, education and training

- ▶ providing information on the practice of integrated resource planning ¶

Research, development and demonstration

- ▶ research on the potential role of the international electricity trade in CO₂ reductions ¶
- ▶ research into the development of tools to facilitate least-cost planning ¶

B. Existing facilities: improving energy efficiency and reducing fugitive emissions

Regulations and guidelines

- ▶ NO_x and SO_x emission control standards for power generation facilities ¶¶¶
- ▶ regulations requiring energy efficiency improvements in power generation facilities ¶

Economic instruments and incentives

- ▶ financial support and incentives for the installation of combined heat and power generation in existing facilities (for example, subsidies for feasibility studies and construction, lower tax rate on the fuels used in cogeneration) ¶¶¶
- ▶ financial support to make energy efficiency improvements in existing facilities or to convert them to more efficient technologies (for example, coal, nuclear, hydro) ¶¶
- ▶ NO_x or SO_x emission charges ¶

Voluntary agreements and actions

- ▶ voluntary agreements to reduce flaring and venting in natural gas production ¶
- ▶ voluntary agreements to undertake energy efficiency improvements at energy supply and transformation facilities ¶
- ▶ voluntary agreement to promote and implement combined heat and power facilities ¶
- ▶ voluntary agreements to reduce NO_x and SO_x emissions ¶

Information, education and training

- ▶ providing information on combined heat and power opportunities ¶

Research, development and demonstration

- ▶ research into energy efficiency improvements in energy supply technologies (for example, clean coal, peat) ¶¶
- ▶ research on CO₂ capture and injection ¶
- ▶ research to enhance the efficiency of natural gas production ¶
- ▶ research into combined heat and power production ¶
- ▶ research on NO_x or SO_x emissions control technology ¶

C. Increasing the use of non-fossil fuel energy sources and low-carbon fossil fuels

Regulations and guidelines

- ▶ requirements that utilities produce a certain percentage of power from renewable sources ¶
- ▶ obligations to close inefficient, high-polluting power generation facilities (for example, brown coal) and replace them with low carbon or no carbon energy sources ¶
- ▶ regulations requiring the production of energy from coalmine methane ¶

- ▶ relaxation of regulatory requirements for siting renewable energy facilities ¶
- ▶ requirements to use biomass fuels as a power source in agricultural facilities ¶
- ▶ regulatory reform that removes barriers to the construction of new nuclear power plants ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies, tax relief, loans, removal of duties) to promote the development of new renewable energy production facilities, particularly biomass, solar and wind technologies ¶¶¶¶
- ▶ financial support for new nuclear power plant construction ¶
- ▶ financial support for new hydroelectric power plant construction ¶
- ▶ financial incentives to switch to natural gas as the energy source in existing facilities ¶
- ▶ financial support for the construction of new natural gas power generation facilities ¶
- ▶ financial support for the construction of pipelines to provide access to natural gas ¶
- ▶ financial support for the construction of new, more efficient coal-based power plants ¶

Voluntary agreements and actions

- ▶ voluntary agreements to use coal-bed methane as an energy source ¶
- ▶ voluntary agreements to use biomass as an energy source in the agriculture and forestry sectors ¶
- ▶ voluntary agreements to switch to natural gas as an energy source in existing power generation facilities ¶
- ▶ voluntary partnerships to develop and commercialize renewable energy technologies ¶

Information, education and training

- ▶ providing information on renewable energy supply technologies ¶¶

Research, development and demonstration

- ▶ research into renewable energy supply technologies, particularly biomass, solar and wind technologies ¶¶¶¶
- ▶ research into fuel cell technologies ¶
- ▶ research into nuclear energy technologies ¶
- ▶ research into converting coalmine methane into energy ¶

D. Energy transmission and distribution

Regulations and guidelines

- ▶ regulations promoting more effective monitoring, maintenance and repair of natural gas pipelines ¶¶
- ▶ regulated distribution transformer standards ¶
- ▶ regulations to optimize use of transmission lines ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies) to promote the adoption of district heating within groups of existing buildings ¶¶
- ▶ financial support for upgrading transmission lines ¶
- ▶ financial support for repairing natural gas pipelines ¶

Voluntary agreements and actions

- ▶ voluntary agreements to reduce natural gas leakage from pipelines ¶
- ▶ voluntary agreements to implement more efficient distribution transformers ¶
- ▶ voluntary commitments to install more efficient new transmission lines ¶

Information, education and training

- ▶ providing information on district heating opportunities ¶

Research, development and demonstration

- ▶ district heating and cooling research ¶
- ▶ reducing fugitive natural gas emissions from pipelines ¶
- ▶ research to improve electricity distribution ¶

II. INDUSTRY

Regulations and guidelines

- ▶ regulated minimum energy efficiency standards for industrial equipment ¶¶¶
- ▶ regulated emission standards for equipment (for example, boilers), products (for example, storage of petroleum products) and processes (cleaning with solvents, waste incineration) ¶¶¶
- ▶ regulated standards for energy management firms ¶

- ▶ requirements to monitor and report on energy use by industry ¶
- ▶ regulated standards for energy management firms ¶
- ▶ regulated emission standards for waste incineration plants ¶

Economic instruments and incentives

- ▶ financial incentives (subsidies, tax relief, low interest loans) for investments in energy-efficient or renewable energy technologies ¶¶¶¶
- ▶ financial assistance for industrial energy audits ¶¶
- ▶ taxes targeted specifically at industrial energy use or emissions ¶
- ▶ economic incentives (for example, "golden carrot" or subsidy programmes) for the development and commercialization of energy-efficient technologies ¶
- ▶ electricity pricing reform (for example, prices increase with the quantity used or the time of use) to promote energy efficiency ¶
- ▶ financial support for the purchase of emission control technologies ¶
- ▶ financial incentives (for example, subsidies, tax relief) to encourage fuel switching from coal, electricity or oil to natural gas ¶

Voluntary agreements and actions

- ▶ voluntary commitments by industry or voluntary agreements with industry to report on energy use and improve energy efficiency (for example, industry simply agrees to take action, industry agrees to meet a specific energy efficiency or emission reduction target, or industry agrees to implement all energy efficiency actions that have a specific payback period) ¶¶¶
- ▶ voluntary commitments by industry to improve the energy efficiency of their motors, lighting or other specific energy using equipment ¶
- ▶ voluntary commitments to switch from existing equipment to more energy-efficient natural gas equipment ¶

Information, education and training

- ▶ providing information on energy efficiency opportunities in industry ¶¶¶
- ▶ provision of audits of industrial management energy use and the training of industrial energy managers ¶¶
- ▶ industrial equipment energy efficiency labelling ¶
- ▶ promoting a switch to more energy-efficient natural gas equipment ¶
- ▶ promoting renewable energy technologies ¶
- ▶ promoting emission control technologies ¶
- ▶ promoting electric heating ¶

Research, development and demonstration

- ▶ research and demonstration projects on energy management, energy efficiency improvements and renewable energy technologies in the industrial sector ¶¶¶

III. RESIDENTIAL, COMMERCIAL AND INSTITUTIONAL

A. Improving the energy efficiency of new buildings

Regulations and guidelines

- ▶ strengthening the energy efficiency and renewable energy content provisions of building codes for the construction of new buildings ¶¶¶¶
- ▶ requiring metering of water and space heating on an individual unit basis ¶¶
- ▶ obligations to plant trees around new buildings ¶

Economic instruments and incentives

- ▶ financial incentives to design and construct more energy-efficient buildings ¶¶
- ▶ financial incentives to purchase more energy-efficient buildings through the provision of "energy-efficient" mortgages and loans ¶

Information, education and training

- ▶ energy efficiency rating systems for new buildings or methodologies to make the calculation ¶
- ▶ education and training to increase the incorporation of energy efficiency considerations and renewable energy sources in building design ¶

Research, development and demonstration

- ▶ research into technologies that will improve the energy efficiency of buildings ¶¶
- ▶ demonstration projects for energy-efficient buildings and buildings that use renewable energy technologies ¶¶¶

B. Improving the energy efficiency of existing buildings

Regulations and guidelines

- ▶ commitments by Governments to undertake energy efficiency retrofits of government buildings ¶¶
- ▶ requiring metering of water and space heating on an individual unit basis ¶¶
- ▶ regulated energy efficiency standards for building retrofits ¶
- ▶ changing to daylight saving time to minimize heating and cooling needs ¶
- ▶ ban on conversion to electric heating when alternatives are available ¶
- ▶ requirement to monitor and report on energy use in large buildings ¶
- ▶ requirement to produce energy efficiency plans in order to receive a permit for a building retrofit ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies/loans/tax relief) for energy efficiency retrofits in existing buildings ¶¶¶
- ▶ tax increases specifically targeted at energy use by households ¶
- ▶ financial incentives for fuel switching from coal to gas, oil or district heating ¶
- ▶ financial support for home energy audits ¶
- ▶ financial support for energy efficiency improvements in social housing ¶

Voluntary agreements and actions

- ▶ voluntary agreements to seek out energy efficiency opportunities and implement energy efficiency retrofits in existing buildings ¶¶
- ▶ voluntary planting of trees around existing buildings ¶

Information, education and training

- ▶ public education on energy efficiency opportunities in existing buildings ¶¶¶
- ▶ networks of energy efficiency consulting and information centres ¶¶
- ▶ provision of energy audits for existing buildings ¶¶
- ▶ promotion of electric heating ¶

C. Improving the energy efficiency of appliances and equipment

Regulations and guidelines

- ▶ minimum energy efficiency standards for appliances and equipment ¶¶¶¶

Economic instruments and incentives

- ▶ subsidies and other financial incentives (lowering the tax rate) for the purchase and installation of energy-efficient and/or renewable energy equipment and appliances (in some cases, subsidies for the removal of inefficient appliances and equipment are also provided) ¶¶¶¶
- ▶ financial incentives to develop more energy-efficient equipment and appliances (for example, "golden carrot" programmes) or financial support for the commercialization of energy saving technologies ¶
- ▶ tax increases specifically targeted at energy use by households ¶
- ▶ financial incentives (for example, subsidies, tax relief) to encourage the replacement of existing equipment and appliances with natural gas products ¶
- ▶ electricity pricing reform (for example, price variability depending on the quantity used and the time of use) to promote energy efficiency ¶

Voluntary agreements and actions

- ▶ procurement policies that focus on energy-efficient equipment and appliances and voluntary agreements that create a market for these technologies ¶
- ▶ voluntary commitments to replace existing equipment and appliances with natural gas products ¶

Information, education and training

- ▶ energy efficiency labelling for appliances and equipment ¶¶¶
- ▶ promoting the replacement of existing equipment and appliances with natural gas products ¶
- ▶ promoting renewable energy technologies ¶
- ▶ promoting electrical heating ¶

IV. TRANSPORTATION**A. Improving automobile fuel efficiency***Regulations and guidelines*

- ▶ reducing speed limits or strengthening their enforcement ¶¶
- ▶ regulated fuel efficiency standards for new automobiles ¶
- ▶ compulsory fuel efficiency standards for corporate and institutional automobile fleets ¶
- ▶ compulsory installation of speed limitation devices for trucks and buses ¶

Economic instruments and incentives

- ▶ increased taxation of gasoline and/or diesel fuels ¶¶¶
- ▶ financial incentives to purchase less powerful, fuel-efficient vehicles that are applied at registration, purchase or when obtaining insurance for an automobile ¶¶
- ▶ financial incentives to help commercialize technologies that will reduce fuel consumption in automobiles ¶

Voluntary agreements and actions

- ▶ voluntary agreements on fuel efficiency standards for new automobiles ¶
- ▶ voluntary agreements to use fuel-efficient vehicles in corporate automobile fleets ¶

Information, education and training

- ▶ providing information to consumers on fuel-efficient automobiles and fuel-efficient driving practices ¶¶¶
- ▶ vehicle fuel efficiency labelling programmes ¶
- ▶ tyre fuel efficiency labelling programme ¶
- ▶ fuel efficiency indicators in automobiles ¶

Research, development and demonstration

- ▶ research to improve automobile fuel efficiency ¶

B. Increasing the use of alternative transportation fuels

Regulations and guidelines

- ▶ regulations requiring the use of alternative fuels in specific applications/geographic areas ¶

Economic instruments and incentives

- ▶ increased taxation of gasoline and/or diesel fuels ¶¶¶
- ▶ financial incentives to purchase alternative fuels (for example, lower taxation than on conventional fuels) ¶¶
- ▶ financial support for the purchase of alternative fuel vehicles (for example, electric, natural gas) ¶
- ▶ financial support to produce alternative fuels ¶
- ▶ financial support to develop an infrastructure for alternative fuel vehicles ¶

Voluntary agreements and actions

- ▶ voluntary agreements with companies to use alternative fuel vehicles in automobile fleets ¶

Information, education and training

- ▶ providing information on alternative transportation fuels ¶

Research, development and demonstration

- ▶ research into alternative transportation fuels ¶¶

C. Strengthening vehicle emission controls*Regulations and guidelines*

- ▶ regulated vehicle emission standards and requirements for the use of catalytic converters ¶¶¶
- ▶ compulsory vehicle inspection and maintenance programmes for some categories of vehicle or for all vehicles ¶¶

Economic instruments and incentives

- ▶ subsidies to scrap old vehicles ¶
- ▶ financial incentives (for example, subsidies, tax relief) to purchase less polluting vehicles ¶
- ▶ financial incentives (for example, subsidies, tax relief) to purchase pollution control equipment ¶
- ▶ financial support for the electrification of rail traffic ¶

Voluntary agreements and actions

- ▶ voluntary agreements to use low emission vehicles in corporate automobile fleets ¶

Research, development and demonstration

- ▶ research to improve emission control technologies ¶
- ▶ research to reduce pollution from air transport ¶

D. Increasing the use of alternative modes of transportation

Regulations and guidelines

- ▶ privatization of the railway network ¶

Economic instruments and incentives

- ▶ increased taxation of gasoline and/or diesel fuels ¶¶¶
- ▶ financial support for upgrading/expanding public transport both within and between cities (particularly rail networks) ¶¶¶
- ▶ financial incentives to use public transport or the removal of financial incentives promoting the use of the automobile (for example, ensuring tax policy favours public transport over private automobiles) ¶¶
- ▶ financial support (for example, subsidies, removal of taxes on fuels) for demonstration projects in public transport ¶
- ▶ financial incentives (for example, tax treatment) to invest in public transportation ¶
- ▶ financial support for pedestrian and cycle paths ¶

Voluntary agreements and actions

- ▶ voluntary agreements by institutions to implement telecommuting ¶

Information, education and training

- ▶ public education on the environmental impacts of the car and the promotion of alternative modes of transportation ¶

Research, development and demonstration

- ▶ research into alternative transportation technologies ¶

E. Increasing the efficiency of freight transportation

Regulations and guidelines

- ▶ restrictions on road freight transportation or regulations that increase access to or require the use of other modes of freight transportation (intermodal transport) ¶¶
- ▶ regulated fuel efficiency standards for ships ¶

Economic instruments and incentives

- ▶ increased taxation of gasoline and/or diesel fuels ¶¶¶
- ▶ financial incentives to improve freight transport efficiency by encouraging a move from road to rail transport or the use of intermodal transport (for example, changing the relative taxation of road and rail transport, financial support for the purchase of intermodal equipment) ¶¶
- ▶ financial support for the construction of intermodal freight transportation hubs and/or distribution centres ¶
- ▶ increased taxation of aviation fuels ¶

Voluntary agreements and actions

- ▶ voluntary agreements by companies to improve freight transportation efficiency ¶

Information, education and training

- ▶ promotion of alternatives to freight transport by road ¶
- ▶ training on fuel-efficient driving practices for truckers ¶

Research, development and demonstration

- ▶ research on energy efficiency improvements in freight transportation and intermodal transport ¶

F. Improving transportation and urban land use planning

Regulations and guidelines

- ▶ regulations to improve transportation efficiency and traffic flow at the local level (for example, implementing bus only lanes, more efficient traffic signals, requirements to design more compact urban communities) ¶¶¶
- ▶ regulations restricting automobile use (for example, car-free zones, limiting parking spaces and stricter enforcement of measures to control illegal parking) ¶

Economic instruments and incentives

- ▶ financial support to improve road infrastructure ¶¶
- ▶ road pricing ¶

Voluntary agreements and actions

- ▶ voluntary agreements to control international road traffic ¶

Information, education and training

- ▶ providing information to local authorities on transportation planning ¶
- ▶ providing drivers with information on traffic congestion ¶

Research, development and demonstration

- ▶ traffic management technologies and practices ¶

V. INDUSTRIAL PROCESSES

Regulations and guidelines

- ▶ regulations to reduce emissions from HCFC manufacture ¶
- ▶ regulations restricting the production of high GWP HFCs ¶
- ▶ regulations restricting N₂O emissions from adipic acid and nitric acid production ¶

Voluntary agreements and actions

- ▶ voluntary agreements to control HFC emissions in HCFC production ¶
- ▶ voluntary agreements to control PFC emissions from aluminium smelters ¶
- ▶ voluntary agreements to reduce CO₂ emissions from cement manufacturing processes ¶
- ▶ voluntary agreement to reduce N₂O emissions from adipic acid production ¶

Research, development and demonstration

- ▶ research on the reduction of PFC emissions from aluminium production practices ¶
- ▶ research on methods to reduce N₂O emissions from industrial processes ¶
- ▶ research on methods to recycle CO emissions within the production process ¶

VI. AGRICULTURE

A. Reducing emissions from enteric fermentation in animals

Regulations and guidelines

- ▶ regulations to reduce and/or limit livestock numbers ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies or subsidy removal) to reduce and/or limit livestock numbers ¶

Information, education and training

- ▶ education to improve the efficiency of animal product production ¶
- ▶ education on improved animal feeding practices ¶

Research, development and demonstration

- ▶ research into animal digestive processes and improved animal feeding practices ¶

B. Reducing emissions from animal wastes in agriculture

Regulations and guidelines

- ▶ regulations to reduce and/or limit livestock numbers ¶
- ▶ regulations requiring the use of animal waste as a fuel ¶
- ▶ regulations on the management of animal wastes that minimize methane emissions ¶

Economic instruments and incentives

- ▶ financial incentives to reduce and/or limit animal production or livestock numbers (for example, subsidies or subsidy removal) ¶
- ▶ financial incentives to reduce emissions from animal manure ¶
- ▶ financial incentives to use animal waste as a fuel ¶

Voluntary agreements and actions

- ▶ voluntary agreements to improve animal waste management practices ¶

Information, education and training

- ▶ education to improve the efficiency of animal product production ¶
- ▶ education on alternative and/or improved animal waste processing systems ¶
- ▶ education on the use of animal waste as a fuel ¶

Research, development and demonstration

- ▶ research into improved animal waste management processes ¶¶

C. Reducing emissions from the use of nitrogen fertilizers

Regulations and guidelines

- ▶ regulations that restrict fertilizer use by setting limits on the nitrate levels in water or the amount of fertilizer that can be used per hectare ¶¶
- ▶ regulations requiring the setting aside of agricultural land ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies and subsidy removal) to set aside agricultural land or to practice less intensive agriculture ¶¶
- ▶ financial incentives to use organic farming practices ¶
- ▶ removal of subsidies for fertilizer use ¶

Voluntary agreements and actions

- ▶ voluntary agreements to improve the efficiency of fertilizer use ¶

Information, education and training

- ▶ education on efficient management of fertilizer use ¶

Research, development and demonstration

- ▶ research on how to use fertilizers more efficiently ¶
- ▶ research on how to enhance nitrogen uptake by plants ¶
- ▶ research on alternatives to nitrogen-based fertilizers ¶

D. Enhancing carbon dioxide sequestration and retention in agricultural soils

Regulations and guidelines

- ▶ regulations that require improved tillage practices and soil management ¶
- ▶ regulations requiring reduced fallow frequency ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies and subsidy removal) to practice less intensive agriculture ¶¶
- ▶ financial support for soil management initiatives ¶
- ▶ financial incentives to reduce fallow frequency ¶¶

Voluntary agreements and actions

- ▶ voluntary agreements to improve soil management ¶

Information, education and training

- ▶ education on improved soil management practices ¶¶

Research, development and demonstration

- ▶ research on improved soil management practices and the link between soils and greenhouse gas emissions ¶¶

E. Reducing methane emissions from rice production

Research and development

- ▶ research into farming practices that would reduce methane emissions ¶

VII. LAND USE CHANGE AND FORESTRY

A. Preserving biomass

Regulations and guidelines

- ▶ regulations on proper forest management practices or regulations that require the approval of forest management plans ¶
- ▶ regulations establishing protected areas ¶
- ▶ regulations that limit the clearing of forested land ¶
- ▶ regulations that require the restoration of wetlands ¶

Economic instruments and incentives

- ▶ financial support to develop forest management plans and financial incentives for improved forest management ¶¶
- ▶ financial incentives (for example, fees for the removal of trees) to preserve forests on private land ¶
- ▶ financial support for fighting forest fires ¶

Voluntary agreements and actions

- ▶ voluntary agreements to improve forest management practices ¶

Information, education and training

- ▶ education and/or training on improved forest management ¶
- ▶ promoting carbon sequestration through a greater use of wood products ¶

Research, development and demonstration

- ▶ research on improving forest management practices ¶
- ▶ research on studying the effect of pollution on forests ¶
- ▶ research on carbon storage in wood products ¶

B. Afforestation and reforestation

Regulations and guidelines

- ▶ regulations that require afforestation of unused or abandoned agricultural land ¶
- ▶ regulations that require reforestation ¶

Economic instruments and incentives

- ▶ financial incentives (subsidies, tax incentives) for afforestation on agricultural lands, waste lands or abandoned lands and tree planting in urban areas ¶¶¶¶
- ▶ financial incentives for reforestation ¶

Voluntary agreements and actions

- ▶ voluntary agreements to rehabilitate native vegetation ¶
- ▶ voluntary tree planting partnerships and programmes ¶

Information, education and training

- ▶ education to promote afforestation ¶

Research, development and demonstration

- ▶ research on methods to maximize carbon sequestration through afforestation ¶

VIII. WASTE MANAGEMENT AND SEWAGE TREATMENT**A. Promoting recycling and minimizing waste***Regulations and guidelines*

- ▶ regulations requiring waste minimization in the commercial and industrial sectors ¶¶
- ▶ regulations requiring recycling of waste in the commercial and industrial sectors ¶¶

Economic instruments and incentives

- ▶ financial incentives to reduce waste (fees on waste disposal, deposit schemes) ¶
- ▶ financial support for recycling programmes ¶

Voluntary agreements and actions

- ▶ voluntary agreements with industry to collect and recycle their products and/or packaging (for example, automobiles) ¶
- ▶ voluntary household and/or business recycling programmes ¶

Information, education and training

- ▶ education on waste reduction opportunities in residential, commercial and industrial facilities ¶
- ▶ promotion of recycling ¶
- ▶ information on wastes that can be recycled and used for energy production in industry ¶

Research, development and demonstration

- ▶ research into public attitudes towards recycling ¶
- ▶ research on improved waste management methods ¶

B. Reducing emissions from sewage treatment

Regulations and guidelines

- ▶ regulations on the production of energy from sewage wastes ¶
- ▶ regulations on treatment of sewage waste that will help minimize methane emissions ¶

Economic instruments and incentives

- ▶ financial support for the construction of more efficient sewage treatment facilities ¶

Research, development and demonstration

- ▶ research and demonstration projects on the production of energy from sewage wastes ¶

C. Reducing methane emissions from landfills

Regulations and guidelines

- ▶ regulations and guidelines that require the capture of methane from landfills for incineration or energy production ¶¶
- ▶ technical standards on the design and operation of landfills that will help reduce methane emissions ¶¶
- ▶ regulations and guidelines limiting the use of landfills as a waste disposal option ¶

Economic instruments and incentives

- ▶ financial incentives (for example, subsidies) to capture methane in landfills and produce energy ¶
- ▶ landfill waste disposal fees ¶
- ▶ financial support for composting projects ¶

Voluntary agreements and actions

- ▶ voluntary agreements to produce energy from methane in landfills ¶

Information, education and training

- ▶ promotion of composting ¶
- ▶ providing information on energy production from landfills ¶

Research, development and demonstration

- ▶ research to improve the efficiency of obtaining energy from methane in landfills ¶¶
- ▶ pilot projects to produce energy from methane in landfills or compost ¶

IX. CROSS-SECTORAL ECONOMIC INSTRUMENTS*Economic instruments and incentives*

- ▶ broad-based taxes (carbon taxes, energy/CO₂ taxes, energy taxes, sales taxes with special rates for energy) to reduce greenhouse gas emissions ¶¶
- ▶ removal of subsidies for consumers and producers of fossil fuels and subsidies for producers (allowing prices to be determined by the market) ¶¶

Research, development and demonstration

- ▶ research on carbon taxes ¶

Appendix

**LIST OF ANNEX I PARTIES WHOSE NATIONAL COMMUNICATIONS
WERE EXAMINED FOR THIS DOCUMENT**

Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Japan
Monaco
Netherlands
New Zealand
Norway
Poland
Portugal
Romania
Spain
Sweden
Switzerland
United Kingdom
United States

29 September 1995

CHINESE/ENGLISH/FRENCH only

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Ad Hoc Group on the Berlin Mandate
Second session
Geneva, 30 October - 3 November 1995

IMPLEMENTATION OF THE BERLIN MANDATE

Comments from Parties

Note by the interim secretariat

Addendum

In addition to the submission from France (on behalf of the European Community), contained in document FCCC/AGBM/1995/MISC.1, the interim secretariat has now received submissions from the following countries: China, France, Germany, Iceland, Japan, Netherlands, Norway, Poland and the Russian Federation, Switzerland, Trinidad and Tobago (on behalf of the Alliance of Small Island States (AOSIS)), and the United States of America. The interim secretariat has also received a French version of the above-mentioned submission from France (on behalf of the European Community).

These submissions are attached, and, in accordance with the procedure for miscellaneous documents, are reproduced in the language(s) in which they were received and without formal editing.

The interim secretariat has been advised by a Party that submissions made by Parties in accordance with Article 17 of the Convention should also be read in conjunction with this compilation. Two such submissions exist and were issued as documents of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (A/AC.237/L.23 and Add.1). As these documents continue to be documents of the Ad Hoc Group on the Berlin Mandate pursuant to the terms of the Berlin Mandate and are readily available, they have not been reproduced here.

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中国代表团关于“柏林授权进程”的初步意见
(一九九五年九月四日)

1、公约和柏林授权的原则和规定是柏林授权进程的法律基础，该进程应严格按照柏林授权所确定的范围开展活动。柏林授权进程是由执行公约第4条第2款(d)项的规定而引发并启动的。根据第4条第2款(d)项所规定的评审，公约附件一国家依公约第4条第2款(a)和(b)项的义务是不充足的，因而需要予以加强。在这方面，柏林授权明确规定了特设工作组的任务：确定附件一国家的政策和措施并设定可在一定时间段内予以完成的限制或减少其温室气体排放的目标。柏林授权明确规定磋商进程不得对发展中国家规定任何新义务。发展中国家依公约第4条第1款所承担义务可以加以重申，但其履行应在考虑公约第4条第7款的基础上加以推进。

2、根据柏林授权的规定，柏林授权的进程早期，应包括一“分析和评价”阶段，以确定附件一国家所应采取的限制和减少温室气体排放的可能政策和措施。我们认为，用一段时间来评价附件一国家所采取和将采取的政策和措施是非常必要的，它将有助于柏林进程就附件一国家所应承担的新义务进行有意义的谈判。在政府间谈判委员会会议上，我们曾多次强调附件一国家充分履行公约现有义务将是公约进程的根本步骤。从附件一国家所提交的已有国家通报中，我们没有看到所采取的政策和措施对减少温室气体排放所产生的具体效果的任何说明。在对附件一国家2000年后的政策、措施和目标进行分析和评价的同时，对这些国家2000

年前已采取和将采取的政策和措施的有效性进行适当分析和评价也是非常有益的。这既会促进现有公约义务的履行，同时也将为确定附件一国家的下步行动奠定基础。柏林授权关于“分析和评价”的规定是非常明确的，“分析和评价”是针对附件一国家的政策和措施而进行的。任何“分析和评价”超出柏林决定所授权的范围的企图和主张，对发展中国家是完全不能接受的，也是违反柏林授权第一部分第1段（g）款所规定的“各方诚信合作”的原则的。

关于“分析和评价”阶段的时间长短，我们认为应采取灵活态度。我们认为重要的是使这个阶段能够对确定附件一国家的新义务有所帮助，为柏林授权进程提供一个有意义的谈判起点，能够促进正式谈判尽快达成协议。各方的充分和有效参与将会保证这个阶段取得成功，从而为下步谈判提供良好的基础。但是，我们遗憾地注意到，支助发展中国家缔约方参加会议的特别志愿基金的资源已变得如此之少，以至于不能资助大多数发展中国家参加柏林授权进程。这在某种意义上严重妨碍发展中国家的充分和有效参与。为此，我们强烈呼吁公约附件一国家及有此能力的国际组织向该志愿基金提供更多的捐款。

3、柏林授权进程将涉及各缔约方在公约下的权利和义务。只有公约缔约方才有权成为该进程的成员。从法律上说，只有公约缔约方所表示的意见或提交的文件或建议才构成工作组谈判的基础材料。在这些材料的基础上并依照公约和柏林授权的原则和规定，可以经各方充分磋商后形成供工作组进一步谈判的综合案文。至于来自其他方面，包括非缔约方的、有关国际机构的和非政府组织的意见和信息，其对谈判进程无疑会发挥作用

，但这些意见和信息不能成为谈判基础材料的组成部分，只能用以参考的目的。

4、根据柏林授权的规定，柏林授权进程的结果应是一项有法律拘束力的文件：或是一项议定书，或是另外形式的法律文件。不管其形式或名称为何，最后所达成的法律文件的性质和内容在柏林授权中已得到确定。柏林授权起因于对公约第4条第2款（a）（b）项是否充足的评审和此评审所得出的“不充足”的结论，柏林授权的核心是纠正公约第4条第2款（a）和（b）项的“不充足”，加强公约附件一国家在此二项下的义务。柏林授权进程的实质是对公约第4条第2款（d）项规定的执行，这决定了其结果不应是一项全面性的法律文件，而是关于公约某一特定义务的修改和补充。这些新义务的履行在公约现有的机构安排下即可实现，没有必要在所达成的法律文件中予以重复或另立。

1995.9.4

**PRELIMINARY COMMENTS BY THE CHINESE DELEGATION
ON THE PROCESS OF THE BERLIN MANDATE**

I. The principles and the provisions of the Convention and the "Berlin Mandate" are the legal basis for the process of the Berlin Mandate; such a process should, therefore, unfold its activities within the scope as defined by the Mandate. The process of the Berlin Mandate was attributable to, and initiated by, the implementation of the provisions of Article 4.2 (d) of the Convention (FCCC). According to the conclusions of the review referred to in Article 4.2 (d), the existing commitments of Annex I Parties in Article 4.2 (a) and (b) of the Convention are inadequate and therefore need to be strengthened. In this connection, the Berlin Mandate has provided a precise and specific task for the AGBM, namely, to elaborate for Annex I Parties policies and measures and to set quantified limitation and reduction objectives within specified time-frames for their anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol. At the same time, the Berlin Mandate also clearly states that the AGBM will not introduce any new commitments for the developing country Parties though the existing commitments in Article 4.1 are to be reaffirmed and the implementation of which are to be advanced in the context of Article 4.3, 4.5, and 4.7 of the Convention.

II. According to the Berlin Mandate, the process will include in its early stages an analysis and assessment to identify possible policies and measures for Annex I Parties which could contribute to limiting and reducing greenhouse gases emissions. In our view, it is essential to devote a period of time to analyzing and assessing the policies and measures which have been and will be adopted by Annex I Parties in this regard. This will be helpful to AGBM's meaningful negotiations on new commitments for Annex I Parties. We stated repeatedly at INC meetings that the full implementation of the existing commitments by Annex I Parties is the first and essential step for the Convention process. In the national communications submitted by the Annex I Parties so far, we have not seen any detailed description of the

effects of their policies and measures on reducing and limiting their greenhouse gases emissions. Hence it is very useful to conduct appropriate analysis and assessment of the effectiveness of the policies and measures adopted by Annex I Parties before the year 2000, while identifying those possible policies, measures and objectives beyond the year 2000. This will not only promote the implementation of their existing commitments under the Convention, but also lay a good foundation for the identification of their further actions.

The Berlin Mandate has very clear provisions on "Analysis and Assessment". The Analysis and Assessment will apply only to the policies and measures for Annex I Parties. Any attempt at going beyond the Berlin Mandate in this process is not only unacceptable to the developing countries, but is also inconsistent with the principle that there is "the need for all Parties to cooperate in good faith" as set out in Part I paragraph 1 (g) of the Berlin Mandate. As to the duration of the Analysis and Assessment, we are for a rather flexible approach. In our view, what is most important is that the Analysis and Assessment are helpful to elaborating new commitments for Annex I Parties and providing a good starting point for the formal negotiations so as to promote reaching an agreement as soon as possible.

Full and effective participation by all Parties to the Convention will guarantee the success of the Analysis and Assessment process, thus laying a good foundation for further negotiations. Regrettably, we have noted that the Special Voluntary Fund for financing the participation by the developing country Parties is becoming so scarce that it is unable to provide financial support to majority of the developing country Parties for their participation in the AGBM process. To some extent this has severely hampered the full and effective participation by the developing country Parties. Therefore, we strongly appeal to Annex I Parties to the Convention and those international organizations in a position to do so, to make more contributions to the Special Voluntary Fund.

III. The process of the Berlin Mandate will inevitably deal with rights and obligations of the Parties to the Convention. In this connection, only Parties to the Convention can be parties to this process. Legally speaking, only inputs or submissions from the Parties to the Convention can constitute basic documents for AGBM's further negotiations. On the basis of these inputs

and submissions from Parties, and in accordance with the relevant provisions of the Convention and the Berlin Mandate, full consultations by all Parties can lead to formulation of a draft composite document for the AGBM's further work. As to the submissions or information provided by other sources, such as non-Parties to the Convention, relevant international organizations or NGOs, although undoubtedly useful to the process of the negotiations, these cannot be a component of the basic documents for negotiations, and can only serve as reference materials.

IV. According to the provisions of the Berlin Mandate, the process of the Berlin Mandate will end up with a legally binding document, either a protocol or another legal instrument. Whatever its form and nomenclature, the nature and content of the legal instrument to be formulated are clearly stipulated in the Berlin Mandate. The Berlin Mandate emanated from the conclusion of the review of the adequacy of Article 4.2 (a) and (b) to the effect that the commitments in Article 4.2 (a) and (b) are inadequate. Thus, the core of the Berlin Mandate is to correct the "inadequacy" of Article 4.2 (a) and (b) by strengthening the commitments of Annex I Parties in Article 4.2 (a) and (b). The essence of the Berlin Mandate process is to strengthen the commitments in Article 4.2 (a) and (b), and this determines that the final outcome of the process should not be a comprehensive legal document, but a legal instrument to supplement or strengthen a specific area of the commitments contained in the Convention. Therefore, the implementation of the strengthened commitments can be carried out through the existing institutional arrangements of the Convention. And there is no need to duplicate or to establish any new mechanism for implementation in the envisaged legal instrument.

* * *

PAPER NO. 2: FRANCE

Contribution française aux travaux du groupe ad hoc sur le mandat de Berlin (AGBM)

I. Introduction

1. Le mandat de Berlin a donné un cadre aux travaux de l'AGBM en vue de conduire à une nouvelle étape pour progresser vers l'objectif ultime de la Convention-cadre des Nations Unies sur les changements climatiques.

2. Pour cela, le mandat de Berlin estime nécessaire que :

- les pays développés Parties et/ou les autres Parties visées à l'annexe 1 "*élaborent des politiques et des mesures et fixent des objectifs quantifiés de limitation et de réduction selon des échéances précises - 2005, 2010, 2020 par exemple - pour leurs émissions anthropiques par leurs sources et l'absorption par leurs puits des gaz à effet de serre non réglementés par le protocole de Montréal, en tenant compte des différences de ces Parties quant à leur point de départ ...*"; et "*que soit examinée la manière dont les Parties visées à l'annexe 1 coordonnent les unes avec les autres ... les instruments économiques et administratifs appropriés ...*";
- les Parties non visées à l'annexe 1 "*réaffirment les engagements déjà énoncés à l'article 4.1. et continuent à progresser dans l'exécution de ces engagements afin d'arriver à un développement durable*".

3. Le mandat de Berlin précise que, au début des travaux de l'AGBM, "*on procédera à une analyse et à une évaluation pour définir les politiques et les mesures que les Parties visées à l'annexe I pourraient prendre pour contribuer à limiter et réduire les émissions par les sources et protéger et renforcer les puits et réservoirs de gaz à effet de serre*".

II. Analyse et évaluation des politiques et des mesures.

4. Afin de contribuer à l'analyse et à l'évaluation des politiques et des mesures, la France souhaite, en premier lieu, rappeler les éléments principaux de la politique énergétique qu'elle a menée depuis le premier choc pétrolier. Cette politique lui a en effet permis de réduire très sensiblement ses émissions de CO₂ et donc sa contribution à l'effet de serre dès avant 1990¹. Ces résultats ont pu être obtenus grâce à la mise en place combinée d'une politique rigoureuse de maîtrise de

¹ L'ampleur de cette politique a permis à la France, entre 1980 et 1990, de réduire ses émissions de CO₂ par habitant plus qu'aucun autre Etat membre de l'Union européenne (-26 % contre une moyenne communautaire de -19,3 %) ; au sein de l'OCDE, seule la Suède (aujourd'hui membre de l'Union européenne) a connu une réduction plus forte de ce ratio.

l'énergie et d'un vaste programme électronucléaire. Le développement du parc nucléaire a permis de diviser par dix le contenu en CO₂ d'un kWh.

Parmi les politiques et mesures de maîtrise de l'énergie adoptées, on peut citer à titre d'exemple :

- la définition de réglementations strictes visant à favoriser les économies d'énergie. La réglementation thermique de l'habitat constitue à cet égard un exemple significatif ;
- l'utilisation de la fiscalité. Le niveau élevé des taxes sur les carburants, supérieur à celui pratiqué par la plupart des pays développés, a fortement contribué par le passé à limiter les émissions de gaz carbonique. Par ailleurs, de nombreuses incitations fiscales visant à améliorer l'efficacité énergétique ont été mises en place dès 1974, notamment dans l'industrie et l'habitat ;
- un important programme d'économies d'énergie et d'efficacité énergétique. La France dispose depuis 1974, pour mettre en oeuvre ces actions, d'une Agence pour les économies d'énergie qui a agi sur la demande finale et auprès des industriels, constituant au fil des ans un pôle de compétence et d'expertise.

Ces politiques et mesures de maîtrise de l'énergie font actuellement l'objet d'une évaluation en profondeur au niveau national.

5. Conformément à l'alinéa 4.2.a), la France a adopté des politiques et des mesures afin de limiter encore ses émissions nettes de gaz à effet de serre. Elle souhaite également attirer l'attention des Parties sur les enseignements qu'elle a tirés de l'élaboration de sa communication nationale :

- afin d'introduire une cohérence indispensable dans les mesures à prendre dans les divers secteurs de l'activité économique et à propos des divers gaz à effet de serre, la France s'est efforcée d'examiner, au niveau national, toutes les actions dont le coût est inférieur ou égal à un niveau de référence exprimé en écus par tonne de carbone équivalent dont l'émission peut être évitée (ou qui a été retiré de l'atmosphère).
- cet examen a conduit à retenir aussi des mesures qui auront pour effet de modifier les tendances à long terme des émissions anthropiques nettes de gaz à effet de serre, même si celles-ci n'avaient qu'un impact assez faible à l'horizon 2000. Tel est le cas en particulier des mesures visant à renforcer la réglementation thermique des bâtiments ou à favoriser le stockage de carbone dans la forêt et le bois d'oeuvre.
- l'expérience du marché intérieur de l'Union européenne montre que nombre de mesures ne peuvent être mise en oeuvre de manière efficace que si elles sont coordonnées dans un espace suffisamment large. Ainsi, les initiatives qui relèvent aujourd'hui du niveau communautaire sont particulièrement importantes et efficaces dans de nombreux domaines tels que les transports, la fiscalité sur les carburants, diverses réglementations (notamment en matière d'environnement) et la politique agricole commune.
- compte-tenu des politiques et mesures retenues et de celles qui devront être prises au niveau de l'Union européenne, les prévisions d'émissions permettent d'estimer que la France devrait ramener ses émissions agrégées nettes de gaz à effet de serre (CO₂, CH₄, N₂O) en 2000 à leur niveau de 1990. Il convient cependant de souligner qu'il existe une marge d'incertitude importante sur les prévisions d'émissions de CO₂ à l'horizon 2000, de l'ordre de plus ou moins 7%. *Indépendante du programme adopté*, cette incertitude est liée, entre autres, aux aléas concernant la croissance économique, le prix du pétrole, le taux de disponibilité du nucléaire et le climat. Concernant les autres gaz à effet de serre (CH₄, N₂O), les incertitudes sur les inventaires rendent encore plus imprécises les prévisions d'émissions.

III. Autres réflexions tirées de l'expérience acquise dans l'exécution des engagements actuels et de divers travaux d'analyse disponibles (notamment les éléments produits au cours du processus d'élaboration du second rapport d'évaluation du GIEC)

6. La forme actuelle des engagements pris par les Parties visées à l'annexe 1, qui se fonde sur un objectif de limitation contraignant des émissions de gaz à effet de serre, fixé a priori, sans examen préalable de ce que chaque Partie pouvait raisonnablement espérer accomplir, et ne tenant pas compte des "circonstances nationales" (notamment les points de départ différents des Parties) conduit à des résultats en demi-teinte (cf. les premiers examens des communications nationales réalisés par le Secrétariat de la Convention, ou la déclaration des Etats Unis d'Amérique à la première session de l'AGBM) ; or il s'agissait d'une première étape a priori "facile" à franchir,

Son principal avantage est la simplicité de sa formulation ; en revanche, elle ne respecte pas certains critères dont de nombreuses analyses soulignent l'importance:

- *critère d'efficacité* : rechercher la minimisation du coût global de la stratégie de prévention de l'effet de serre mise en oeuvre ;
- *critère d'équité* : conduire à une répartition acceptable de l'effort entre Parties concernées ;
- *critère de compatibilité avec les règles du commerce international* : ne pas conduire à des distorsions de concurrence entre entreprises des différentes Parties, notamment sur les marchés internationaux.

7. Par ailleurs, il convient de reconnaître que les connaissances scientifiques actuelles ne permettent pas d'élaborer de manière objective des scénarios d'émissions que les pays pourraient s'engager à respecter (l'accent est actuellement mis sur un indicateur plus fruste qui est le niveau cumulé des émissions des gaz à effet de serre sur les cent prochaines années, sur lequel les Experts ne sont d'ailleurs pas en mesure de se prononcer de manière précise) ; dans ce contexte, les grandes tendances d'évolution des émissions sont réellement importantes (il s'agit d'obtenir une inflexion progressive des trajectoires d'émission de gaz à effet de serre des différents pays, d'où l'importance plus grande à accorder à l'évolution des "dérivées" qu'aux "points d'arrivée" dans un futur proche²).

IV. Propositions de la France pour le Protocole ou l'autre instrument légal auquel devraient aboutir les travaux de l'AGBM

IV.1. Renforcement des engagements des Parties visées à l'annexe 1.

8. Le coût des mesures nouvelles qui sont susceptibles d'être mises en oeuvre par les Parties visées à l'annexe 1 après l'an 2000, est très différent d'un pays à l'autre, compte tenu, notamment, de l'intensité des efforts déjà accomplis et des résultats obtenus en matière de politique énergétique. La France estime que ces différences entre les Parties visées à l'annexe 1 quant à leur point de départ devront être pleinement prises en compte dans la détermination de nouveaux engagements, conformément à ce qui est indiqué dans le Mandat de Berlin.

² Il convient de souligner que le "retour d'ici la fin de la décennie des émissions de gaz à effet de serre à leur niveau de 1990", qui est au coeur des engagements présents, ne garantit pas que les Parties progressent véritablement vers l'objectif ultime de la Convention; cet engagement peut en effet être tenu à l'aide de mesures n'ayant qu'un effet transitoire et ne modifiant en rien les déterminants des évolutions à long terme des émissions.

9. Par ailleurs, à la lumière des éléments d'analyse présentés plus haut, la France considère que le futur protocole devrait comporter des engagements des Parties visées à l'annexe 1 sur un ensemble de politiques et mesures qu'elles décideront de mettre en oeuvre. L'élaboration d'objectifs quantifiés à diverses échéances est utile pour dimensionner les politiques et mesures. Toutefois les incertitudes qui existent sur les prévisions d'émissions rendront probablement très difficile, voire impossible, tout engagement précis sur les niveaux d'émissions à moyen ou à long terme.

10. Dans sa déclaration faite au nom de l'Union Européenne lors de COP1, la France avait donné une liste indicative de politiques et de mesures visant à limiter les émissions nettes de gaz à effet de serre. La négociation menée dans le cadre de l'AGBM devrait s'intéresser en priorité aux politiques et mesures qui demandent à être coordonnées au niveau international pour des motifs de compétitivité ou pour accroître leur efficacité, et dont la mise en oeuvre permettrait de progresser de manière significative en direction de l'objectif ultime de la Convention. La France estime prioritaire dans ce cadre :

- le recours à des instruments économiques, y compris la fiscalité pesant sur les produits émettant du CO₂ et la suppression des subventions directes ou indirectes qui encouragent la consommation d'énergie fossile
- la mise en place de dispositifs visant à améliorer l'efficacité énergétique de certains produits dont les marchés sont ouverts à la concurrence internationale (véhicules, équipement de combustion, appareils domestiques, etc.). Ces mesures permettraient aux Pouvoirs Publics d'accroître l'efficacité des instruments fiscaux dans des secteurs dont les marchés sont soumis à diverses imperfections (manque d'information, contrainte sur les capacités de financement, ...)³.

Par ailleurs, il conviendra de prendre en compte le secteur non énergétique, et de considérer des mesures concernant les autres gaz à effet de serre (émissions de CH₄ du secteur agricole et des décharges, émissions de N₂O du secteur agricole et du secteur industriel, émissions de HFC, ...).

11. La France a toujours considéré que la façon à la fois la plus efficace et également la plus équitable de répartir l'effort de réduction des émissions de CO₂ entre les nations développées est de faire réaliser dans tous ces pays toutes les réductions d'émission dont le coût est inférieur à un niveau de référence commun. La façon la plus simple, la plus lisible pour tous ces acteurs et la moins onéreuse, en terme de coûts de gestion administratifs, de parvenir à ce résultat consiste à instaurer, au sein des fiscalités existantes de tous ces pays, une taxation progressivement croissante sur le CO₂ à des taux coordonnés dans ces divers pays. Cette approche est aussi celle qui permet, au sein de chaque pays, de minimiser le coût de la réduction des émissions de CO₂. Une telle approche fiscale est à instaurer dans un espace suffisamment large pour tenir compte du cadre concurrentiel des activités auxquelles elle s'applique.

Parallèlement, il faut souligner l'importance que l'on doit attacher à faire disparaître dans tous les pays les subventions qui encouragent la consommation d'énergie fossile; ces subventions peuvent notamment prendre la forme de prix intérieurs pour les combustibles ou carburants, inférieurs aux cours mondiaux, elles peuvent consister à vendre l'électricité en dessous de son prix de revient ou à subventionner certaines activités grosses consommatrices d'énergie fossile, par exemple dans le

³ On peut faire remarquer que si les prix de l'énergie fossile incluent une composante relative à l'internalisation des effets négatifs d'effet de serre, il est de l'intérêt d'un pays (au titre de l'efficacité au sens strict, hors préoccupations d'effet de serre) de mettre en oeuvre de telles mesures "d'accompagnement" et de veiller à leur succès

secteur des transports en n'imputant pas aux usagers de la route l'ensemble des coûts (infrastructure, congestion, insécurité ...) qu'ils occasionnent.

Ces positions sont conformes aux enseignements des travaux des experts du Groupe 3 du GIEC qui, dans le chapitre consacré à l'évaluation des politiques et mesures pour combattre le changement climatique, soulignent l'intérêt qu'il y aurait à éliminer, en priorité, toutes les distorsions économiques conduisant à encourager les émissions de gaz à effet de serre ainsi que le rôle fondamental que devraient jouer les instruments économiques dans la stratégie mondiale de prévention du changement climatique⁴.

12. Les modalités retenues pour organiser l'effort planétaire doivent être définies avec le souci de préserver une concurrence loyale entre les entreprises dans le cadre du commerce international. Il serait opportun que des dispositions semblables à celles de l'article 4 du protocole de Montréal sur les C.F.C soient prises afin d'éviter que les pays non Parties ne tirent un profit injustifié, dans le commerce international, du fait qu'ils ne participeraient pas à l'effort collectif de protection de l'atmosphère. Les délocalisations, qui pourraient résulter de telles pratiques, seraient en effet à la fois inéquitables et inefficaces, sinon même nuisibles, au plan de la prévention du changement de climat.

13. En ce qui concerne les politiques et les mesures qui ne demandent pas à être coordonnées au niveau international pour des motifs de compétitivité, la France considère que le protocole devrait en fournir une liste indicative ainsi que des recommandations quant aux critères permettant de déterminer l'ampleur des mesures sélectionnées. Parmi ces critères, la France réaffirme le rôle important qu'elle voudrait voir jouer aux aspects économiques (notamment par rapport aux considérations purement politiques) : on pourrait ainsi fixer un niveau de référence maximal commun pour le coût, à la tonne de gaz à effet de serre évitée exprimée en carbone équivalent, de ces mesures ; les communications nationales, en détaillant les raisons pour lesquelles certaines des politiques et des mesures n'ont pas été retenues et en fournissant une évaluation aussi transparente que possible du coût de celles qui l'ont été, permettraient de juger de l'efficacité ainsi que de l'équité dans la répartition de l'effort entrepris par les Parties visées à l'annexe 1.

IV. 2. Progrès dans l'exécution des engagements des Parties non visées à l'annexe 1.

14. Le mandat de Berlin réaffirme clairement que les pays développés Parties doivent être à l'avant garde de la lutte contre les changements climatiques; parallèlement, il reconnaît la nécessité pour les Parties non visées à l'annexe 1 de continuer à progresser dans l'exécution de leurs engagements présents, c'est à dire, en particulier, de mettre en oeuvre également des mesures de prévention de l'effet de serre.

La France considère que la participation, le plus vite possible, du plus grand nombre de pays à l'effort planétaire de prévention de l'effet de serre est souhaitable à plusieurs titres:

- le coût global de la prévention sera d'autant plus faible que la base d'intervention sera large et qu'il n'y aura que peu de restrictions quant aux actions pouvant être entreprises;

⁴ Les instruments économiques considérés par les experts du GIEC comprennent les instruments fiscaux (système harmonisé de taxes) et les permis (ou quotas) négociables, qui supposent des engagements contraignants portant sur des niveaux d'émissions. Outre les arguments développés plus hauts, l'absence de garantie quant à un fonctionnement satisfaisant d'un marché de permis négociable dans la pratique renforce également la conviction de la France qu'il est préférable de privilégier les instruments fiscaux à ce stade.

- l'efficacité des actions de réduction des émissions de gaz à effet de serre entreprises par les pays développés risque d'être considérablement réduite si elles induisent des augmentations d'émissions dans des pays se tenant à l'écart de l'effort de prévention, que ce soit par délocalisation d'activités productives ou comme conséquence d'une baisse du prix mondial de l'énergie fossile;
- la plupart des analyses prospectives montrent que l'objectif ultime de la Convention ne pourra être atteint en l'absence d'inflexion du rythme d'augmentation des émissions de gaz à effet de serre des pays en développement⁵. Dans les pays en phase d'industrialisation, compte tenu des inerties voire irréversibilités qu'imposent certains sentiers technologiques (notamment dans le secteur énergétique ou dans le secteur des transports), il est certainement plus efficace de considérer dès à présent des trajectoires de développement économes en carbone fossile.

15. La manière dont les Parties non visées à l'annexe 1 peuvent progresser dans l'exécution de leurs engagements doit faire l'objet d'une analyse sérieuse qui devrait être effectuée parallèlement à l'analyse concernant la contribution des Parties visées à l'annexe 1 ; des propositions concrètes émanant de ces Parties, directement concernés, seraient un apport essentiel dans le processus.

La France, pour sa part, souhaite livrer les propositions suivantes à la considération des participants au processus initié par le mandat de Berlin. Afin de progresser dans la mise en oeuvre de leurs engagements, les Parties non visées à l'annexe 1 pourraient :

- développer, le plus vite possible, en tirant le meilleur parti du concours du FEM, des "études pays" pour définir ce que pourrait être une stratégie nationale efficace de prévention de l'effet de serre;
- mettre progressivement en place, celles parmi les politiques et mesures identifiées, qui sont également favorables au développement économique de ces pays.
- participer à d'éventuelles actions coordonnées initiées par les pays de l'annexe 1, selon des modalités à préciser au cas par cas, afin d'éviter que les entreprises localisées dans les pays non visés à l'annexe 1 n'en tirent un profit injustifié dans le commerce international.

16. Conformément à l'article 4.7 de la convention, la France reconnaît que les Parties non visées à l'annexe 1 progresseront d'autant plus dans l'exécution de leurs engagements que les Parties visées à l'annexe 1 s'acquitteront de manière efficace de leurs engagements en ce qui concerne les ressources financières et le transfert de technologie. Cet engagement d'assistance doit pouvoir s'effectuer soit par la voie multilatérale (contribution au mécanisme financier) soit par la voie bilatérale (on peut citer l'initiative française ayant conduit à la création du Fonds français pour l'environnement mondial).

La France estime que, s'agissant de la contribution des pays développés à la prévention, dans les pays en développement, d'une pollution globale, la clé de répartition de l'effort des pays développés devrait évoluer à l'avenir de façon à tenir compte simultanément du PIB et du niveau d'atteinte à l'environnement global (notamment le niveau des émissions de CO₂) des pays donateurs.

⁵Les projections d'émissions de CO₂ de l'AIE pour la période 1990-2010 tablent sur une augmentation de 1,2 à 2,5 milliards de tonnes de CO₂ dans les pays de l'OCDE et de 6 à 7 milliards de tonnes dans les pays en développement. A l'horizon 2010, les émissions de CO₂ des pays en développement pourraient être supérieures à celles de l'OCDE.

PAPER NO. 3: FRANCE (ON BEHALF OF THE EUROPEAN COMMUNITY)

(The English version of this submission is contained
in document AGBM/FCCC/1995/Misc.1)

Déclaration no. 1

**PREMIERE CONFERENCE DES PARTIES
A LA CONVENTION-CADRE SUR LES CHANGEMENTS CLIMATIQUES**

**Déclaration de la France
au nom de l'Union européenne**

**Point: Adéquation des engagements contenus à l'article 4
paragraphe 2 (a) et (b)**

Berlin, le 28 mars 1995

1. L'Union européenne remercie le Secrétariat Intérimaire pour son document FCCC/CP/1995/Misc.1 qui fait une synthèse des positions des différents pays sur la question de l'adéquation des engagements contenus à l'article 4 paragraphe 2 (a) et (b). Elle souhaite toutefois attirer son attention sur le fait que la position de l'Union européenne au CIN 11 doit être reprise dans ce document et qu'elle avait indiqué son souhait que sa déclaration faite à la fin de la 11ème session soit incluse dans le compte-rendu du CIN 11 et non pas dans le document FCCC/CP/1995/Misc.1.

Sur le thème de l'adéquation, la position de l'Union européenne définie au niveau ministériel le 9 mars 1995 est la suivante:

2. L'Union européenne confirme les conclusions qu'elle a adoptées les 15 et 16 décembre 1994 et présentées lors du 11ème CIN. Elle rappelle qu'à son avis les engagements des Parties figurant à l'Annexe I, qui visent à ramener les émissions de gaz à effet de serre à leur niveau de 1990 d'ici à l'an 2000, sont insuffisants pour atteindre l'objectif ultime énoncé à l'article 2 de la convention. Elle considère par conséquent que les points a) et b) de l'article 4 paragraphe 2 de la convention sont inadéquats.
3. L'Union européenne réaffirme sa détermination de respecter ses engagements actuels et de prendre toute mesure supplémentaire qui serait nécessaire pour atteindre ce but et elle invite instamment toutes les autres parties visées à l'annexe I à faire de même.

L'Union européenne, confirmant ses conclusions du 29 octobre 1990 concernant, entre autres, la stabilisation d'ici à l'an 2000 des émissions de CO₂ dans l'ensemble de la Communauté à leur niveau de 1990, demande aux autres parties visées à l'annexe I de s'engager également à stabiliser, individuellement ou conjointement, d'ici à l'an 2000 leurs émissions de CO₂ au niveau de 1990, c'est-à-dire au moins à ne pas dépasser ce niveau après

4. Le CIN 11 a reconnu que les engagements prévus aux points a) et b) de l'article 4 paragraphe 2 ne sont qu'une première étape en direction de l'objectif ultime de la convention et qu'ils doivent être réexaminés lors de la première conférence des parties. L'Union européenne souligne à ce propos que la deuxième étape commence dès l'an 2000, puisque les engagements actuels sont muets pour la période au-delà de cette date.

5. L'Union européenne constate qu'en ce qui concerne les engagements pour la période après l'an 2000, compte tenu des délais probables de ratification, un protocole relatif à des politiques et à des mesures ainsi qu'à des objectifs et à des calendriers destinés à limiter et à réduire les émissions de gaz à effet de serre devrait avoir été adopté en 1997 pour pouvoir entrer en vigueur avant l'an 2000. Pour pouvoir être adopté en 1997, un tel protocole devrait être élaboré dans le cadre d'un processus de négociation susceptible de durer jusqu'à deux ans.

6. L'Union européenne réaffirme donc que la première conférence des parties devra au moins définir le mandat de négociation d'un protocole, en précisant un délai pour sa conclusion. L'Union européenne a déjà commencé à examiner les mesures qui pourraient contribuer à limiter et à réduire les émissions de gaz à effet de serre pour la période après l'an 2000.

7. L'Union européenne estime souhaitable, à la lumière des discussions menées au sein du CIN 11, que le mandat à définir par la première conférence des parties contienne en particulier les éléments-clés ci-après.
 - a) Mise en place d'une deuxième étape en vue de la réalisation de l'objectif ultime de la convention.

- b) Création, sous l'égide de la conférence des parties, d'un groupe ad hoc spécial, qui sera chargé d'élaborer un protocole auquel puissent adhérer autant de parties que possible, en se fondant sur les principes de l'article 3 de la Convention-cadre sur les changements climatiques et sur les conclusions de l'IPCC, y compris son deuxième rapport d'évaluation. La proposition de protocole présentée par l'AOSIS et les suggestions de la délégation allemande feront également partie des négociations.
 - c) Rapport du groupe ad hoc à la deuxième conférence des parties sur l'état des négociations relatives au protocole ; conclusion des négociations six mois avant la troisième conférence des parties afin de permettre l'adoption de ce protocole lors de cette conférence.
 - d) Inclusion dans le programme de travail du groupe ad hoc, en coopération avec les autres organes subsidiaires, d'une analyse ou d'une évaluation visant à définir les possibilités ainsi que les politiques et mesures qui permettraient de limiter et de réduire les émissions de gaz à effet de serre.
8. L'Union européenne a préparé un certain nombre d'éléments-clés dont nous pensons qu'ils pourraient constituer la base d'un mandat pour la négociation d'un protocole. Ces éléments-clés sont joints à la présente déclaration, qui est disponible dans la salle de réunion.

Eléments-clés à examiner en vue de leur inclusion dans le protocole

- i) caractère global du protocole, qui couvrira tous les gaz à effet de serre, leurs sources et puits et tous les secteurs concernés ;
- ii) responsabilités communes mais différenciées des parties en fonction de leurs capacités et possibilités respectives :
 - responsabilité première des parties visées à l'annexe I qui prendront, individuellement ou conjointement, des engagements spécifiques renforçant et élargissant les engagements pris au titre de l'article 4 paragraphe 2 points a) et b) de la convention ;
 - participation à terme des parties non visées à l'annexe I conformément à l'article 4 paragraphe 2 points f) et g) ; mise en place d'un cadre aboutissant à l'élaboration de formules durables de développement économique qui garantissent une croissance économique soutenue tout en limitant l'augmentation des émissions de gaz à effet de serre;
- iii) approche combinée incluant à la fois des politiques et des mesures ainsi que des objectifs et des échéances, telles que 2005 et 2010, compte tenu des différences quant au point de départ et à l'approche, à la structure économique et à la base de ressources, comme indiqué à l'article 4 paragraphe 2 point a) ;
- iv) politiques et mesures coordonnées concernant le CO₂ et d'autres gaz à effet de serre, en particulier dans les domaines où une coordination au niveau international est requise pour des motifs de compétitivité, la priorité étant accordée aux mesures suivantes :
 - mesures liées à la compétitivité,
 - mesures concernant les secteurs industriels à vocation mondiale,
 - mesures dans des secteurs où les décisions prises peuvent avoir des effets négatifs à long terme sur les changements climatiques,
 - mesures relatives aux produits commercialisables,

en particulier lorsque ces mesures visent :

- * des émissions ou puits, potentiels ou existants, mondialement importants de gaz à effet de serre,
- * des avantages potentiels importants lors du traitement d'autres problèmes,
- * des mesures supplémentaires potentielles destinées à améliorer le rendement énergétique,

étant entendu qu'il sera tenu compte entre autres, d'une manière appropriée, de la liste indicative des politiques et mesures possibles figurant à l'annexe des présentes conclusions ;

- v) examen régulier des engagements relatifs à la limitation et à la réduction des émissions de gaz à effet de serre ;
- vi) dispositions visant à coordonner et à échanger l'expérience en matière de politiques et de mesures nationales dans des domaines d'intérêt, notamment ceux identifiés dans les rapports d'examen et de synthèse comme contribuant de manière significative aux émissions de gaz à effet de serre ;
- vii) dispositions relatives à l'accès du public aux informations sur la consommation d'énergie et sur les politiques nationales, aux instituts régionaux chargés de la promotion d'une utilisation rationnelle de l'énergie et à l'étiquetage en matière d'énergie.

Liste indicative des politiques et mesures possibles

Mesures relatives à l'utilisation de l'énergie et au CO₂

- recours à des instruments économiques, y compris des mesures fiscales telles que la taxation énergie/CO₂, et suppression des facteurs allant à l'encontre d'une utilisation efficace de l'énergie ;
- émissions de CO₂ provenant des grandes installations de combustion ;
- consommation énergétique des appareils ménagers ;
- isolation thermique des bâtiments ;
- émissions de CO₂ provenant des secteurs industriels grands consommateurs d'énergie ;
- émissions de CO₂ et d'autres gaz à effet de serre provenant des véhicules et, plus généralement, du secteur des transports terrestres ;
- émissions de CO₂ et d'autres gaz à effet de serre provenant du secteur des transports internationaux et, plus particulièrement, des avions et des bateaux ;
- promotion de l'utilisation de sources d'énergie nouvelles et renouvelables ;
- stockage du carbone dans les forêts.

Mesures relatives au CH₄

- limitation des émissions de CH₄ provenant de l'extraction et du transport du charbon et du gaz ;
- limitation des émissions de CH₄ provenant de l'élimination des déchets.

Mesures relatives au N₂O

- émissions de N₂O provenant de certains procédés industriels (acide adipique, acide nitrique, ...) ;
- émissions de N₂O liées à l'utilisation d'engrais.

Mesures relatives aux HFC et aux PFC

- limitation des émissions de HFC et de PFC grâce à une optimisation de leur utilisation dans toutes les activités, entre autres dans les systèmes de réfrigération et de conditionnement d'air.
-

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**Ad Hoc Group on the Berlin Mandate
First Session**

STATEMENT

by

**Cornelia Quennet-Thielen
German Delegation**

Geneva, 21 - 25 August 1995

22 August 1995

Check against delivery

Mr Chairman,

I.

First of all, please allow me to pass on the best wishes of the German Environment Minister Dr Angela Merkel for the successful work of this newly set-up ad hoc group of the Conference of the Parties and for cooperation based on good faith between all the delegations from governments, international organisations and institutions as well as the non-governmental organisations. Minister Merkel is well aware of the responsibility assumed by Germany in hosting the First Conference of the Parties in Berlin and of the responsibility she herself bears as President of the Conference. She will continue unstintingly in her efforts to ensure that this negotiating process leads to an ambitious protocol or other legal instrument on the further limitation and reduction of greenhouse gas emissions that the Contracting Parties will negotiate and adopt at the Third Conference of the Parties in 1997.

II.

Mr. Chairman, the German delegation is very happy to see you in the chair again. We have profited from your leadership qualities in the past and we are sure we will need them in the two years of negotiations ahead of us. The German delegation is looking forward to good and successful cooperation with you and your future bureau. We are also pleased to see in this ad hoc group so many familiar faces. The experience, esteem and trust that we have developed with and for each other will be essential in our future work. At the same time, I am sure that all our new colleagues will quickly become members of the international "climate family" and their fresh ideas and new concepts will ensure that the process stays innovative and creative.

III.

Germany fully supports the statement of the European Union as presented earlier by the Spanish delegation. Let me just stress some points:

At the First Conference of the Parties in Berlin the Contracting Parties to the Framework Convention on Climate Change set up this subsidiary body and gave it a commission that is highly demanding from the point of view of substance and time, namely the Berlin Mandate. We all know how difficult the negotiations for this Mandate

were. They were successful only because the necessary willingness for agreement on a balanced compromise was present on all sides. That is precisely the reason why we feel it is essential that we start the work in this group with the clear and unambiguous understanding: the Berlin Mandate with all its elements is the basis and commitment of our joint work. We must conduct our negotiations in the next two years according to the wording and in the spirit of this Mandate.

IV.

At this 1st meeting we are concerned with creating the organisational and structural conditions for targeted and success-oriented work. We thank the secretariat for document no 1 which contains useful proposals, ideas and questions which we will return to individually in the course of this meeting. First of all let me develop a few basic considerations:

1. The climate protocol or other legal instrument should further implement and develop the Framework Convention on Climate Change, particularly by means of strengthening commitments for the Annex I Parties above and beyond Article 4, paragraph 2 (a) and (b) of the Convention as well as continue to advance the implementation of the existing commitments of all Contracting Parties from Article 4, paragraph 1. The drawing up of such a new instrument should keep us focused on the short and long term perspectives: in the short term we have to determine the next step towards the limitation and reduction of greenhouse gas emissions for the period after 2000. In the long term we should create a suitable mechanism for many further steps towards continuous implementation and further development of the Framework Convention on Climate Change with the aim of achieving the ambitious ultimate objective of Article 2 of the Convention. The work programme of the AGBM must take appropriate account of both of these aspects.
2. Our work programme must implement the elements of the Berlin Mandate. Our top priority is the strengthening of the commitments of the Annex I Parties by means of the combined setting of policies and measures as well as quantified limitation and reduction objectives within specified time-frames such as 2005, 2010 and 2020. Federal Chancellor Kohl stated this quite categorically in Berlin: In view of the high energy consumption and considerable emission of climate-damaging greenhouse gases in the industrialised nations, it is these countries which are called upon to take the first step. We must meet our special responsibility for protecting the global climate.

3. Policies and Measures:

Together with our partners in the European Union we have always been committed to agreeing on coordinated policies and measures - that is to say policies and measures to be taken by all Annex I Parties. We feel that a purely optional menu would not justify the tremendous effort associated with the identification and negotiation of policies and measures for a legal instrument. The considerable time involved also requires that we start with a limited number of particularly promising priority areas. We feel that these are areas in which measures would only be taken, can only realistically be expected or only promise success if they are implemented jointly on an international level. A few examples of this are the taxing of aircraft fuel, efficiency standards and labelling for products such as cars as well as economic instruments.

Under no circumstances does this mean that the Contracting Parties should be discouraged from implementing the entire spectrum of possible measures in their national programmes. It will be much rather the case that, above and beyond measures, which are coordinated at an international level, many other policies and measures will be indispensable in order to achieve ambitious quantified limitation and reduction objectives within the meaning of Article 2 of the Convention. However, we feel it is wise here to give countries the flexibility to choose the most suitable and effective measures in accordance with their specific national situation. The common strategy of the European Union is a good example of this two-track procedure.

4. Quantified limitation and reduction objectives

- According to the Berlin Mandate, objectives of this nature must be agreed as a second element alongside these policies and measures. Establishing desirable medium- and long-term objectives in emission reductions sets a clear framework for the development and implementation of national and regional programmes on precautionary action for climate protection and allow policy makers and other actors to optimize the range of available measures.
- The national target of the German government is well-known. Federal Chancellor Kohl reaffirmed this in Berlin when he said that Germany remains committed to reducing the 1990 level of its CO₂ emissions by 25% by the year 2005. Moreover, as early as its first National Communications under the Framework Convention on Climate Change

of September 1994, the Federal Government made it clear that it is aiming to reduce all climate-related emissions (including the gases not covered by the Framework Convention on Climate Change but controlled by the Montreal Protocol) - converted into CO₂ equivalents - by a factor of 50% by the year 2005 - in comparison to 1987. In comparison to the base year of 1990 this corresponds to a target reduction of some 40%.

The Federal Government is currently further developing its national reduction targets for the period beyond 2005. In view of our ambitious national targets, it is natural that the German concepts for quantified limitation and reduction objectives for the Annex I Parties in a protocol or other legal instrument will also be quite ambitious.

When setting our work programme with regard to quantified limitation and reduction objectives we must take many questions into account. Let me just mention a few:

- * How do we implement the comprehensive approach of the Framework Convention on Climate Change? An overall objective for greenhouse gases not controlled by the Montreal Protocol or by setting objectives for each individual gas? The German delegation's preference for quantified objectives to be set for individual gases is well known. Obviously this is not possible for all gases at the same time. However, for a number of gases the existing data should be sufficient for objectives to be set by the time of the Third Conference of the Parties. In addition to CO₂, these could initially be CH₄, N₂O, PFCs and HFCs.

We feel that even an overall objective will only be able to relate to a specifically defined list of gases owing to the varying degrees of scientific knowledge and data availability with regard to the different greenhouse gases.

- * How can quantified limitation and reduction objectives for Annex I Parties take appropriate account of the different national conditions and starting points?

5. Analysis and assessment:

The Berlin Mandate states that the process will include in its early stages an analysis and assessment to identify possible policies and measures for Annex I Parties, to identify environmental and economic impacts and the results that could be achieved with regard to time horizons such as 2005, 2010 and 2020. There is not very much time until the Third Conference of the Parties in 1997. We therefore do not think it is acceptable to limit ourselves initially to analysis and assessment. Furthermore, the Berlin Mandate states clearly that this analysis and assessment is not a phase preceding the negotiations. Germany is absolutely convinced that it is high time to start negotiations on concrete policies and measures as well as quantified limitation and reduction objectives for the Annex I Parties. In 1997 we must take decisions on an ambitious policy to protect the climate system beyond the year 2000.

In this connection we have recourse to a plethora of existing scientific, technical, social and economic information on the analysis and assessment: many national and international institutions and organisations have conducted outstanding work in this field. IPCC, UNEP, the International Standards Organisation (ISO), OECD, IEA and the United Nations Economic Commission for Europe (ECE) are just a few international examples. In Germany over eight years the Study Commission on Preventive Measures to Protect the Earth's Atmosphere of the German parliament in particular has contributed comprehensive analyses and assessments that are applicable far beyond the national area. This also applies to the IKARUS system (instruments for climate gas reduction strategies) developed within the context of our national programme, which can be used for detailed estimates of the effects of various policies, measures and techniques on greenhouse gas emissions.

Above and beyond this we should draw on the information and work in the whole machinery of the Convention. We have a comprehensive process of reporting and of reviewing reports. Both subsidiary bodies, SBSTA and SBI, will have numerous tasks in their work programme which are of great value to the negotiations in the AGBM. The intergovernmental technical advisory panels on methodologies and technologies currently under discussion can also contribute to the work of the AGBM. We must make best use of them and avoid duplicating our work.

We support the proposal that the Secretariat be commissioned to prepare an annotated compilation of the available information of this nature in due time before the next meeting of the AGBM in October (as with INC Document A/AC 237/83 on the adequacy of commitments). We request all Parties involved - the national delegations, the relevant international organisations and institutions as well as the non-governmental organisations - to identify suitable material, to make it available and to continue and strengthen their current work on these matters.

We should also consider asking SBSTA and SBI relevant questions e.g. concerning further analysis and assessment as well as relevant conclusions from Annex I communications already available and reviewed.

At the same time we should all see it as our priority to intensify our national analyses and assessments already associated with the development of the national programmes under the Convention and to incorporate policies and measures as well as limitation and reduction objectives for the stated time frames after the year 2000. We need to do that homework urgently to be well prepared.

If all these options are used, analysis and assessment can go hand in hand with negotiations without any problems whatsoever in the early stages of our work and be completed rather expeditiously.

Mr Chairman,

These were the first considerations of Germany with regard to the implementation of the Berlin Mandate in this new working group.

We might well come back to individual questions, as raised in the Secretariat's document or brought forward by other delegations in the course of our meeting.

Ständige Vertretung Deutschlands

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**Ad Hoc Group on the Berlin Mandate
First Session**

STATEMENT No 2

by

**Cornelia Quennet-Thielen
German Delegation**

Geneva, 21 - 25 August 1995

23 August 1995

Mr. Chairman,

I did not intend to take the floor on this item as I already explained our considerations on inputs into future work in my statement yesterday. However, having listened carefully to our Chinese colleague this morning, I recognized that there still remain considerable doubts or misunderstandings about the German position regarding a very crucial issue. Therefore I would like to ask your indulgence, Mr. Chairman, for taking the floor and clarifying this issue.

In our statement yesterday I expressed the firm position of my country strictly to respect the Berlin Mandate and its different elements and appealed to others to do the same. We have decided in Berlin upon a clear task for the Ad Hoc Group: to strengthen the commitments in Art. 4.2 a) and b) of Annex I Parties by elaborating policies and measures as well as quantified limitation and reduction objectives for these Annex I Parties without introducing any new commitments for Non Annex I Parties, while reaffirming existing commitments in Art. 4.1 and continuing to advance the implementation of these commitments. That for us is the basis and commitment for our future work.

Already in Berlin we have fully subscribed to this balanced compromise and my colleagues have repeatedly expressed this in the negotiating group under Ambassador Kjellen's chairmanship. But obviously not all doubts could be removed. So let me clarify again:

The German element paper submitted in September last year is outdated insofar as it was addressing possible commitments to be undertaken by a certain category of developing countries. I fully understand the confusion that prevails, as the elements paper is still referred to by many delegations. We understand this reference being directed to a different part of that paper, namely its section II which lists a comprehensive basket of policies and measures for Annex I Parties. These policies and measures mentioned in section II are still seen by many delegations, as well as by ourselves as a useful input for negotiating the new commitments of Annex I Parties. I hope that this clarification and explicit dissociation is now fully understood by all our friends and colleagues, especially in the developing world. May I express my thanks through you, Mr. Chairman, to my Chinese colleague for the affirmation he already gave me bilaterally that he is now fully aware of our position and that his concerns are removed.

PAPER NO. 5: ICELAND



Ministry for the Environment

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4.9.1995

Letter from the Secretary General, Ministry for the Environment of Iceland, to the secretariat of the UNFCCC

Ref.: Contribution of views by Parties on the implementation of the Berliner Mandate - request from the Bureau of the COP.

The Government of Iceland has considered the request made by the Bureau of the first Convention of the Parties (COP1) for the Framework Convention on Climate Change (FCCC) concerning views on the implementation of the Berliner Mandate.

The Icelandic Government acknowledges that the commitments by Annex I parties to reduce greenhouse gases to their 1990 level by the year 2000 are not sufficient for achieving the objectives expressed in Article 2 of the Convention. A successful implementation of the Berliner Mandate is therefore of great importance and Iceland will actively participate in the negotiation process, with the aim of reaching an agreement within the time-frame laid down in the decision taken at COP1.

The negotiation process should be organised in a flexible manner in order to ensure that it is possible to take into consideration the development of the coming year's international discussion about Climate Change. The conclusions of the first meeting of the Ac-hoc Group on the Berliner Mandate appears to yield such flexibility.

Iceland would like to underline the importance of thorough analysis and assessment of the alternative actions that the Parties might want to discuss during the negotiations, including proposals presented at COP1 in Berlin. An emphasis on analysis and assessment is imperative in order to establish a credible process and it is clearly in line with the Berliner Mandate. In particular, an effort should be made to identify the policies and measures which are most effective when implemented collectively. However, due to the time constraint, one should draw on existing work and avoid unnecessary detailed analysis. It is clear that many national and international institutions and organisations have conducted outstanding work in

this field, which should be used for this purpose. Further, analysis and assessment should not be completely separated from the negotiations but must be viewed as an integral part of the negotiations, especially after the results of the Intergovernmental Panel on Climate Change (IPCC) second assessment report have been made available. Iceland, in accordance with the conclusions of the first meeting of the Ad-hoc Group on the Berliner Mandate (AGBM-1), will be presenting a list of issues that it finds necessary to clarify through analysis and assessment.

In view of the difficulties the Parties had in reaching an agreement on the FCCC and the many delicate compromises that had to be made in the process, it is Iceland's opinion that the current negotiation process should be aimed at establishing a protocol to the existing Convention.

It is clear that the negotiations will at some stage focus on a number of questions related to quantified limitations of greenhouse gases. One of the main issues in this context is whether limitations should be based on quantified objectives for individual gases or an overall objective for greenhouse gases. We would like to make it clear that Iceland has a preference for an overall objective for greenhouse gases, including CO₂, CH₄, N₂O and CF₄. We find that an overall objective is more in line with the aim of the FCCC than quantified objectives for individual gases. This approach, however, implies that more work has to be done with the aim of improving the scientific basis for aggregating the data for the different greenhouse gases.

Finally, with reference to article 4.2 (a) in the FCCC, we would like to express our concerns about the need to take into consideration special national conditions and different starting points. Iceland relies almost solely on renewable energy sources for stationary energy production. The possibilities for utilising renewable energy sources for this purpose have almost been fully exploited, and were so long before year 1990. However, due to the geographical size of the country as well as the relative importance of fishing sector, emissions from transportation and fishing operations are relatively high per capita. Here, the possibilities for quantitative reduction are limited by the present technology. These particular conditions are among the issues Iceland would like to address during the negotiations.

JAPAN'S VIEW
THE IMPLEMENTATION OF THE BERLIN MANDATE

1. The Government of Japan is willing to make every effort to successfully conclude the Berlin Mandate, and to adopt, at the COP3, a protocol or another legal instrument. The Government of Japan has already started exploring possible elements to be included in such instruments and will provide the next session of the AGBM (October 1995) with the explored elements, in addition to the preliminary comments below.

2. Preliminary comments

International negotiation on legal instruments should be undertaken in a constructive manner, attaching great importance to the following points:

(1)(a) To reflect appropriately the principles stipulated by Article 3 of FCCC, and

(b) "Taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective," as is provided for in Article 4.2(a) of FCCC.

(2) "Not introduce any new commitments for non-Annex I Parties," as stipulated in the Berlin Mandate 2(b).

(3) Such *modus operandi* that AG/BM and COP elaborate the existing commitments in Article 4.1 of FCCC and that, within the framework of Article 4.1, measures are taken by each party, which contribute to achievement of the ultimate objective of FCCC.

(4) The pursuit of a common understanding among all Parties, including non-Annex I Parties, regarding legal instruments should be developed on the basis of (a) a common, proper evaluation of past efforts and achievements of Annex I Parties, (b) on-going efforts by these countries to implement their commitments within the Convention, and (c) Annex

I Parties' exposition of their will to take the lead in making further efforts.

(5) Internationally comparative analysis of the state and effectiveness of policies and measures concerning each of the sectors such as industrial, residential and commercial, transport etc., taken by individual Annex I Parties, should be conducted at the subsidiary bodies, based upon national communication from each party, in-depth review, OECD/IEA joint project etc. Quantified limitation and reduction objective needs to be set based upon this analysis as well as the study by IPCC obtained through the subsidiary bodies, which provides the GHG emissions scientifically necessary to arrest the global warming.

(6) Further consideration and elaboration is required for Activities Implementation Jointly (AIJ) and for technology innovation, dissemination, and transfer, including how these should be referred to within the legal instruments.

3. With a view to facilitating international agreement on legal instruments, it is also important for each party to take a domestic action such as the formulation of appropriate administrative systems and the elaboration of policies and measures to arrest global warming.

In this regard, the Government of Japan is endeavoring to strengthen its policies and measures, as mentioned in the Annex attached.

4. Following the conclusions at SBSTA 1, Japan's comments on (a) report framework of Activities Implementation Jointly and (b) national communications of non-Annex I parties, will be provided by November 15.

ANNEX

Currently, Climate Change is one of the most important issues to the Government of Japan in developing national policy.

1. In October 1990 the Government of Japan established an Action Program To Arrest Global Warming by a decision of the Council of Ministers for Global Environment Conservation.

The targets of the Action Program are as follows:

(1) The emissions of CO₂ should be stabilized on a per capita basis in the year 2000 and beyond at about the same level as in 1990, by steadily implementing a wide range of measures under this Action Program, as they become feasible, through the utmost efforts by both the government and private sectors.

(2) Efforts should also be made, along with the measures above, to stabilize the total amount of CO₂ emission in the year 2000 and beyond at about the same level as in 1990, through progress in the development of innovative technologies, etc., including those related to solar, hydrogen and other new energies as well as fixation of CO₂ at the pace and in the scale greater than currently predicted.

2. Japan has been promoting various measures, and strengthening policies including those which materialized according to the Action Program to Arrest Global Warming.

The following are recent development of the policies and measures on Climate Change issue in Japan.

(1) The Basic Environment Plan was decided by the Cabinet of the Government of Japan based on the Basic Environment Law in December 1994. The plan articulates policy direction on the Climate Change issue:

Ultimate objective is the same with that of the United Nations Framework Convention on Climate Change, i.e. "stabilization of greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system."

In the medium term, Japan will make further efforts to promote various measures in cooperation with other countries as well as to the formulation of the new international framework to arrest global warming.

For the time being, we will aim at attaining the goal of Action Program.

We will continue to promote various measures in the Program.

monitoring the status of implementation and fully taking into account new scientific knowledge.

(2) Formulation of the Action Plan For Greening Government Operation. The Action Plan for Greening Government Operation was decided by the Cabinet in June 1995.

In the Plan it is decided that the Government should play a leading role in environment-friendly actions in the State and to limit CO2 emission from administrative works, to promote using recycled paper, and to introduce energy efficient equipment and low-pollution-emission vehicles etc.

(3) Major measures newly introduced in 1994-1995.

- Inclusion of some equipments such as computer etc. into specified equipment controlled under the Law Concerning Rational Use of Energy.
- Inclusion of electric power generation burning refuse-derived fuel as an object for issuing local bonds by local public authorities.
- Subsidies for installation of solar energy systems in private houses.
- Enactment of the Law for the Promotion of Sorted Collection and Valorization of Packaging Waste.

3. In addition to above mentioned measures, in order to contribute to the international discussion, particular, that of AG/BM, the Government of Japan has started examining countermeasures to arrest global warming beyond 2000, by investigating possible countermeasures which will be taken by itself.

4. With regard to Japan's assistance to developing countries in this area, developing the measures of these countries to arrest global warming by holding the Asian-Pacific Seminars on Climate Change in order to disseminate the guideline of the inventory of greenhouse gas emissions and absorption (Up to now, four seminars were organized, in which 25 countries participated.), and also holding International conference on Climate Change in Asian-Pacific region concern sealevel rising from global warming.

Japan also has been assisting developing countries to create individual national strategies for counteracting global warming. Research to develop the strategy has been completed in two countries and is underway in two countries.

PAPER NO. 7: NETHERLANDS

STATEMENT OF THE NETHERLANDS ON AGENDA ITEM 3 (D) "INPUTS TO SUBSEQUENT SESSIONS OF THE AGBM"

In addition to the statement made by Spain on behalf of the European Union and the EU paper on this subject that was circulated - that we of course fully support - I would like to make a few comments on the issue of inputs to the negotiating process, highlighting some elements of the table of inputs as proposed by the EU. As most of these inputs will be the result of analytical or assessment activities I will touch upon the organisation of the analysis and assessment as well.

Focus

Inputs into the AGBM process should be focused on the key issues to be dealt with. And those key issues are clearly spelled out in the Berlin Mandate, namely:

- elaboration of policies and measures for Annex-1 Parties,
- setting of quantified limitation and reduction objectives within specified time-frames for Annex-1 parties,
- continued advancement of the implementation of existing commitments of art. 4.1.

If we want to make the best use of our limited resources and available time, the information to be collected as the basis for the negotiations should be focused on the main questions regarding those three key items. Questions on how to identify policies and measures to be dealt with in the protocol and how to set objectives and time frames. Analysis and assessment should not deal with the question whether objectives and time frames are necessary and/or effective. The Berlin Mandate has already answered that question clearly.

Consideration of the third element of the Berlin Mandate, namely the advancement of the implementation of the existing general commitments, would benefit greatly from inputs that focus on the diffusion and application of technology. In setting their development priorities, the technology choices made by countries have a major impact on the future emissions of greenhouse gases.

Inputs to be provided by SBSTA and SBI

Using the work of SBSTA and SBI to provide inputs into AGBM is receiving broad support. I would particularly like to highlight the importance of also using the intergovernmental technical panels that SBSTA is going to set up. These panels, if set up carefully, would enable us to generate sector specific information regarding policies and measures in those sectors where the priority of coordinated or harmonised action in the context of a protocol should lie.

In our opinion those priority sectors would be:

- internationally traded products such as automobiles and appliances
- internationally oriented energy intensive industrial processes such as steel, aluminum and chemicals manufacturing
- HFC and PFC use (see also our proposals for guidelines on fluorocarbons in FCCC/CP/1995/Misc.1 @ 45)
- airline and marine shipping industries

If the AGBM needs that kind of sector specific information - and I am convinced it will if it wants to address the issue of coordinated policies and measures adequately - then SBSTA should take the AGBM requirements into account. In other words, the work of the panels should be narrowly focused on those sectors that AGBM identifies as priority areas and they should bring together the real experts in those sectors. AGBM will have to ask SBSTA to act accordingly.

We can fully support the remarks made by the representative of Brazil on the contribution IPCC could make via SBSTA to the work of AGBM based on requests from Convention bodies to the IPCC. Also the suggestion on requesting a methodology to determine contribution of countries to the problem of climate change is a very interesting one.

With respect to the US suggestion, to set up a special panel on inputs regarding the global emission trends, I would like to point to the decision 6 of CoP-1 that clearly specifies that as a task for SBSTA.

Inputs based on available information

A lot of relevant information on possible policies and measures for Annex-1 countries and their technical and economic aspects is available from analyses that were already done or are currently in progress outside of the Convention machinery. The ongoing OECD/IEA Common Actions study is particularly relevant, because it provides a useful classification of policies and measures in 3 categories:

1. policies and measures that are decided at the national level,
2. policies and measures that will benefit from a certain coordination between (groups of) countries,
3. policies and measures that will only be undertaken if agreed internationally.

As a protocol will have to focus predominantly on categories 2 and 3 it does not make sense to provide the AGBM with a lot of information on policies and measures that are primarily decided at the national level apart from the information available from the review of the national communications, especially potentially replicable measures. The AGBM should focus on provisions, to be included in the protocol, to enable the exchange of experience with national policies and measures between Parties.

Priority issues to be dealt with in our opinion are the use of economic instruments as well as the issues mentioned above in connection with the technical panels.

Inputs based on additional work to be performed

Some additional analytical work will have to be undertaken to supplement the input from SBSTA/SBI and the input based on available information. In the EU paper there is a separate section devoted to this. For instance, to allow AGBM to deal with the formulation of objectives and time frames an assessment of possible alternatives for objectives and the consequences for achieving the ultimate objective of the Convention will be required. The use of collective targets, such as for the group of Annex-1 countries, should in our opinion be a prominent feature of such an assessment, because it would allow a least cost strategy to be followed, that could drastically reduce the costs for all Parties involved. That is, if the accompanying issue of a fair distribution of the costs can be resolved (also to be addressed in the analysis). Collective objectives could take the form of:

- a % reduction per year (say 1-2% per year after 2000),
- a % reduction by a certain year,
- a cap of global emissions through Annex-1 action or - something different.

Other approaches to be looked at could include:

- the idea of emission budgets for a certain period of time as opposed to an annual emission milestone or
- a combination of a collective absolute target with individual reductions applying to an emissions trend rather than a base year.

Also the use of objectives such as energy efficiency improvement objectives or objectives regarding the % renewable energy should be investigated as a supplement to the use of objectives regarding emission levels.

On the policies and measures side it is likely that some additional work will be necessary on the potential in terms of emission reduction, because available studies are somewhat limited in this respect.

For the synthesis of policies and measures and the accompanying objectives and time frames we would like to emphasize the need to perform analyses using so called integrated assessment models. There is a family of those comprehensive models available now (see also the IPCC Working Group III report) that have the potential to support the negotiations via comparisons of various different combinations of policies and objectives. Aspects like costs, effectiveness in controlling greenhouse gas concentrations and effectiveness in mitigating adverse impacts of climate change can be evaluated through such exercises.

The AGBM would have to ensure that an appropriate organisational framework for these additional analytical and assessment activities is found. Given the full agenda of SBSTA it is unlikely that it will be able to deliver such information in time. A specific arrangement in the context of the AGBM would therefore be required. The Secretariat could make a compilation of ideas submitted by Parties on such an arrangement for the second AGBM meeting.

PAPER NO. 8: NORWAY

SUBMISSION BY THE GOVERNMENT OF NORWAY ON THE IMPLEMENTATION OF THE BERLIN MANDATE, INCLUDING THE NORWEGIAN VIEW ON ISSUES THAT WOULD BENEFIT FROM ANALYSIS AND ASSESSMENT

With reference to the Berlin Mandate, section III, paragraph 4, The Government of Norway is of the opinion that a thorough analysis and assessment phase is clearly needed. In this respect, we would like to focus on particularly two important aspects that would benefit from further analysis and assessment: (i) The need for equitable and appropriate contributions by each of the Parties and (ii) The need for cost-effective, coordinated economic instruments. In addition we address the need for more information regarding voluntary agreements.

(i) The need for equitable and appropriate contributions by each of the Parties

Norway has earlier referred to the need for an "equitable burdensharing" in developing further the commitments under the Convention. Similarly, other delegations have addressed the need for "a fair distribution of the costs for all Parties involved" in order to establish a level playing field. This point of departure, moreover, represents an important part of the foundation on which the main objectives of the AGBM process is based. According to paragraph 2 (a) of the Berlin Mandate, the process shall take into account "the differences in starting points and approaches, economic structures and resource base,, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort...."

Henceforth, a paramount challenge ahead of us will be to operationalize this clause of the Berlin Mandate.

The Government of Norway has advocated a common emission target for a group of Parties, such as the OECD, which is to be achieved through "equitable and appropriate contributions by each of these Parties". In practical terms this would mean that the emission targets for each of the Parties would be differentiated on the basis of their "differences in starting points and approaches, economic structures and resource bases".

An analogy to such an approach is found in the Sulphur Protocol adopted in 1994 under the UNECE Convention on Long Range Transboundary Air Pollution, where the commitments for the respective Parties are differentiated on the basis of, i.a., the natural environment's critical loads. With respect to climate change, where the effects of emissions largely are unrelated to where they occur, the idea of a fair distribution of costs suggests that the "critical economic loads" would be an appropriate point of departure. In other words, commitments under a Protocol or other legal instrument should be differentiated among the Parties in emission terms. In terms of total economic loads, however, there should be no differentiation among the Parties which are part of the common emission target.

Thus, an important task of the analysis and assessment phase will be to elaborate further the concept of *equitable and appropriate contributions* (or *fair distribution of costs* or *burdensharing* or whatever label one chooses to address this pivotal issue).

In our opinion, it would in this respect be useful to draw on the competence of the OECD. OECD should be requested by the AGBM to extend its work in this field (GREEN- model work, Common Action project) and initiate a project particularly related to the costs of action in different countries.

Norway would certainly like to contribute to the further process on this issue. We are on a national level preparing some projects with the aim to identify potential challenges related to the idea of "burdensharing"/"a fair distribution of the costs," and suggestions as to how these challenges could be met. Two pre-studies have been carried out by two Norwegian institutions, ECON Energy and CICERO (Center for International Climate and Environmental Research). (Report no. 305/95 "Burden sharing in climate policy: Survey of abatement cost studies" and Working Paper 1995:2 "Aspects of burden-sharing of common action to mitigate climate change"). A third pre-study, "The political feasibility of introducing the concept of "critical economic loads" in burden sharing discussions between OECD countries," carried out by The Fridtjof Nansen Institute, Norway, will soon be finalized.

We are enclosing the outline of a more extensive project on "Exploring distribution of commitments- a follow-up to the Berlin mandate" being prepared by CICERO. We will do our best to ensure that relevant working papers as well as the main report will be finalized in due time to be a useful input in the AGBM- process.

(ii) The need for cost-effective, coordinated economic instruments

The Berlin Mandate specifically asks that consideration be given to the possibilities for coordinating policy instruments (section II, paragraph 2d). In the Norwegian view, the need for cost-effective measures is the main reason why coordinated economic instruments as well as the concept activities implemented jointly (AIJ) will be of importance in a new agreement. In this respect, we would like to refer to the work being carried out for Annex I countries by the Joint OECD/IEA project on national communications relating to Policies and measures for "common action." The AGBM should carefully go through the outline of this work in parallel with considering the need for additional projects in this field, carried out in cooperation with the OECD or other institutions.

Norway introduced a specific CO₂ tax in 1991. Certain changes in rates and bases have been made since the introduction, due partly to environmental concerns, but mainly due to the competitiveness of Norwegian industry. In this respect, the development of Norwegian CO₂ taxes may illustrate the problem of a small open economy trying to be in the fore-front in applying economic instruments for environmental protection. If other countries do not follow suit in imposing CO₂ taxes, it would obviously affect the cost competitiveness of the country imposing

them unilaterally. If that results in polluting activities moving to other countries, so called carbon leakage, global emissions would not be reduced. Thus, the phasing in of taxes determined to reduce emissions of greenhouse gases in small open economies like Norway's, must in the long term be coordinated with what other countries do.

For further information, we are enclosing an updated paper on the Norwegian experience with carbon taxes (from Ministry of Environment) and a preliminary summary of a study of the effect of the CO₂ tax on Norwegian emissions of CO₂ 1987-1993 (Report 95/14 by Statistics Norway 1995).

Focusing particularly on the energy market, Norway would like to stress that more than 90% of the world energy consumption is provided by fossil fuels. Whereas oil is the most important of these, coal supplies about 30% of the total consumption and the world's consumption of coal is increasing. Natural gas supplies some 20% of the total. The dominant position of fossil fuels will continue into the next century.

The use of fossil fuels creates different environmental problems, both locally and globally. Both the level of energy consumption and the composition are affected by government policy. Energy taxes and administrative regulations play a decisive role in the energy markets. The background to energy policies and measures varies, as does the reasoning behind them. Security of supplies and environmental concerns are often listed as major considerations.

OECD studies show that a restructuring of existing energy taxes and subsidies would be cost efficient within climate change policy and result in reduced emissions. The studies carried out by the OECD also show that a replacement of the current biased taxation of energy with real green taxes which better reflect environmental costs, will change the existing energy-mix to one that is environmentally sounder, and will lead to higher consumption of oil at the expense of coal. Elimination of energy subsidies would also lead to a better mix, in addition to a cleaner environment.

The above mentioned considerations should be analysed in the further work of the AGBM. The application of national policies, including energy taxation, and their environmental effects as they relate to CO₂ and other greenhouse gas emissions would form an important basis for the elaborations to be carried out as part of the negotiation process.

(iii) The use of voluntary agreements

Taxation is a suitable means of limiting CO₂ emissions, both because there are many sources of emissions and because it is easy to define a tax base, since there is a clear relationship between emissions and the use of fossil fuels. In the Norwegian view, taxation is the instrument that should be used as a general rule to limit CO₂ emissions, both on administrative grounds and because it is most cost-effective. In the case of limiting emissions of other greenhouse gases, such as CH₄, N₂O, CF₄, C₂F₆ and SF₆, it is less clear which measures are most effective. The measures to

be implemented to limit emissions of these gases must therefore be carefully evaluated in each case.

The use of voluntary agreements and other measures than CO₂ taxes may also be useful instruments for achieving emission reductions for greenhouse gases.

Norway sees a need for further analyses and assessments related to voluntary agreements. Knowing that other countries have quite long experience with voluntary agreements, it would in this respect be useful if these countries could provide the AGBM with information regarding such agreements.

Attached:

- Outline of project on "Exploring distribution of commitments- a follow-up to the Berlin mandate," by CICERO, Oslo, Norway
- Paper on the Norwegian experience with carbon taxes (Ministry of Environment)
- Preliminary summary of a study of the effect of the CO₂ tax on Norwegian emissions of CO₂ 1987-1993 (Report 95/14 by Statistics Norway 1995)

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14 September 1995

OUTLINE OF

EXPLORING DISTRIBUTION OF COMMITMENTS - A FOLLOW-UP TO THE BERLIN MANDATE

PROJECT BEING PREPARED FOR THE NORWEGIAN MINISTRY OF FINANCE AND
MINISTRY OF ENVIRONMENT

THE AIM OF THE PROJECT

The distribution of commitments between participating countries will be a vital feature of any future protocol (or other legal instruments) to the Climate Convention, implying legally binding commitments for industrialized countries to reduce their net emissions of greenhouse gases. The project will study necessary prerequisites for such an agreement to be established, with the aim to identify potential problems and obstacles related to the distribution of commitments and costs between participating countries, and suggestions as to how these potential problems could be solved. A better understanding of these issues might contribute to the negotiation process on the Berlin mandate. Thus some of the inherent questions and problems of such negotiations should be handled and solved.

PROJECT FRAMEWORK

The project will be an analysis of prerequisites for establishing future protocols to the Climate Convention implying legally binding commitments for participating countries. The following five prerequisites are considered important:

1. Participation: number and type of countries (e.g. all OECD countries, or OECD countries and East European countries).
2. Global target: size of emissions reduction and total cost.
3. "Fairness" of cost distribution within the group of participating countries.
(Depends *inter alia* on preferences for various ethical systems, choice of coordinated policy option and implementation, willingness to pay for emissions reduction in various countries (which, *inter alia*, depends on expected climate change consequences for each country), and the level of development, e.g. measured as GDP per capita (less important within a group of similar countries.))

4. The level of cost-effectiveness, which is an important determinant for the total cost. (Depends *inter alia* on coordinated policy option choice and implementation.)

5. The level of uncertainty with respect to total cost, cost share, and future national climate change consequences. (Countries will be less willing to participate if they e.g. anticipate a relatively large probability of substantially higher costs to meet the future target.)

Our main hypothesis is that countries must find these five prerequisites satisfied to accept climate policy commitments implying considerable cost for participating countries. Consequently the key issue is to analyze how these prerequisites can be satisfied for the necessary number of countries, in particular within OECD.

THE PROJECT

The level of coordination between Annex I or Annex II Parties within the context of new commitments can vary from a common emissions target met through national commitments and national policy measures chosen by each country, to a more cost-effective agreement on a uniform carbon tax across the participating Parties. The former type of agreement is a more likely outcome of the negotiations on the Berlin mandate than the latter alternative.

The burden-sharing implications of the distribution of commitments and costs between participating countries can be analyzed in a static or dynamic setting. In a static setting the cost can be defined as the difference between the equilibrium GDP before and after the implementation of the climate policy. In a dynamic setting an option is to analyze the transition costs of the national economy from a situation before introduction of the coordinated climate policy to the new equilibrium situation after implementation of the climate policy.

The negotiation process on the distribution of commitments can be analyzed employing dynamic game theory with respect to global target, institutional arrangements, climate policy measures, and participation. The cost is commonly expressed in terms of loss of gross domestic product in each participating country, but other welfare measures and effects should be considered (e.g. change in national wealth or change in environmental indicators). Some examples involving OECD countries will be analyzed.

Considering other greenhouse gases than carbon dioxide raises the question of implications of employing Global Warming Potentials or more sophisticated model-based methods for comparing different long-lived and well-mixed greenhouse gases with respect to the radiative forcing of climate. Furthermore, the implications of introducing gases where the climate effect depends on the geographical location of the emissions, should be considered.

Time schedule

Project start	1 August 1995
Draft final report	1 April 1996
Final report	1 June 1996

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CARBON TAXES; NORWEGIAN EXPERIENCES

(Ministry of Environment, 1995)

On January 1, 1991, a specific CO₂-tax was introduced in Norway. The rates are high compared to similar taxes that are introduced or proposed by other countries and the EU; up to equivalents of 55 dollars pr ton of CO₂. Certain changes in rates and bases have been made since the introduction, due partly to environmental concerns but mainly due to the competitiveness of Norwegian industry. Roughly 60 per cent of Norwegian CO₂ emissions face CO₂ taxes while around 40 per cent is exempted at this stage

From 1989 to 1992, precipitation levels were high and there were large supplies of cheap hydropower. This, combined with lower economic activity and the introduction of CO₂-taxes, kept CO₂-emissions below the 1989 level. In 1993, emissions reached about the same level as in 1989, and in 1994 they increased further.

The development of Norwegian CO₂ taxes may illustrate the problem of a small open economy trying to be in the fore-front in applying economic instruments for environmental protection. A unilaterally introduced tax for a global purpose is under political pressure as long as other countries do not follow suit.

Status of the CO₂-tax

CO₂ taxes were introduced in Norway in 1991, and they are high compared to those in other countries. Such taxes of different scope and magnitude have to date only been introduced in Denmark, Finland, Holland and Sweden. Other countries have "green taxes" with different names.

Developments in Norway are shown in Table 1.

Table 1. Developments in the levels of Norwegian CO₂ taxes

	1991	1992	1993	1994	1995
Gasoline	0.60 NOK/litre	0.80 NOK/litre		0.82 NOK/litre	0.83 NOK/litre
Autodiesel etc.	0.30 NOK/litre		0.40 NOK/litre	0.41 NOK/litre*	0.415 NOK/litre
Gas in the North Sea	0.60 NOK/Sm ³	0.80 NOK/Sm ³		0.82 NOK/Sm ³	0.83 NOK/Sm ³
Oil in the North Sea	0.60 NOK/litre	0.80 NOK/litre		0.82 NOK/litre	0.83 NOK/litre
Mineral Oil	0.30 NOK/litre	0.30 NOK/litre	0.40 NOK/litre	0.41 NOK/litre	0.415 NOK/litre
Coal		0.30 NOK/kg	0.40 NOK/kg	0.41 NOK/kg	0.415 NOK/kg

* Caused by change in taxation system for autodiesel vehicles.

Source: Norwegian Ministry of Finance

As one can see, there has been little change since 1992. The main reason may be, aside from economic conditions in Norway, developments- or lack of developments - in other countries. Thus, in reality there is a limit to how much a small, open economy can be in front of others.

Mainly for reasons of competitiveness (and leakage effects), the criteria of harmonization across economic sectors has not been fully implemented. Roughly 60 per cent of Norwegian CO₂ emissions face CO₂ taxes while around 40 per cent is exempted at this stage. There are conflicts of interest between reducing CO₂ emissions at least cost and international cost competitiveness of industrial firms and sectors in Norway. Thus, international coordination of the implementation of CO₂ taxes is needed.

Effects on emissions and energy efficiency

Norway's CO₂-emissions increased steadily from 1960 to 1980. Throughout the 1980s, CO₂-emissions were relatively stable, despite a steep increase in petroleum production and thus in the consumption of natural gas for energy purposes by this sector. This is primarily because the rise in emissions from the continental shelf has been offset by a drop in the consumption of fuel oils. From 1989 to 1992, precipitation levels were high and there were large supplies of cheap hydropower. This, combined with lower economic activity and the introduction of CO₂-taxes, kept CO₂-emissions below the 1989 level. In 1993, emissions reached about the same level as in 1989, and in 1994 they increased further, mainly as a result of higher consumption of fuel oils, particularly by the the wood-processing industry.

In the long run the tax, or expectations of a tax, is expected to work through a change towards a more CO₂-effective capital stock. This will take time, depending on the level of investment in new installations and the speed of the retrofitting process. The offshore petroleum sector may serve as an example. CO₂-emissions from the petroleum sector increased by only 2.5% from 1990 to 1993, whereas petroleum production increased by 24% during the same period. The tax is expected to have contributed to making production more energy efficient and has encouraged development of projects and solutions aiming at reducing CO₂ emissions. Most of the emission reductions that have been developed and implemented by the petroleum industry the last couple of years were initiated before the introduction of the CO₂ tax and thus took place independent of the implementation of the tax. It could nevertheless be argued that a CO₂ tax the last few years has been part of the overall decision-making process, and might as such have contributed to an earlier implementation of some of the measures. Measures that were not necessarily economically favourable prior to the introduction of the tax have in some cases proved to be so after the tax became effective.

Carbon taxes in a small, open economy

Norway and some other countries have introduced a CO₂-tax. In the absence of more widely introduced CO₂-taxes, exemptions have been granted for part of the industry, and different tax rates are applied for various reasons. To analyse the industry's competitive situation in different countries it is necessary to compare all taxes, subsidies, regulations and other factors. Weak competitiveness for the industry can have other explanations than different energy or CO₂-taxes. So far there seems to be limited negative effects on Norwegian industry, with no dramatic changes in the competitive position, given the careful design of the tax.

The development of Norwegian CO₂-taxes may illustrate the problem of a small open economy trying to be in the fore-front in applying economic instruments in environmental policies. The design of the instrument both for practical reasons and concerns about competitiveness deviates from a first best tax covering all emissions with the same rate. Unilateral action is facing opposition as long as other countries do not follow suit, and it can be questioned whether it is, over a longer period of time, rational policy for a small country to be out of line with the majority of others in choosing measures to combat a global environmental problem.

Finally, instruments like the Norwegian CO₂-tax should not be given a final judgement after this short time period. The effects both on the environment and on the structure of the economy will develop over a much longer period of time.

Norwegian emissions of CO₂ 1987 - 1993

A study of the effect of the CO₂-tax

Reports 95/14 - Statistics Norway 1995

Bodil Larsen and Runa Nesbakken

10. Summary and Conclusion (preliminary version)

A CO₂-tax (carbon tax) was introduced in Norway in 1991. The tax was imposed in addition to the existing tax on mineral oil (the basic tax). The study attempts to establish whether changes in the CO₂-tax and the basic tax have had any effect on emissions of CO₂ during the period 1987-93. It is not enough just to compare changes in the tax with changes in emissions over time, because the emissions are also affected by a number of other factors. About 60 per cent of the CO₂-emissions are subject to tax. Thus, for the remaining 40 per cent, the CO₂-tax is not the explanation of any reductions in emissions. The total CO₂-emissions decreased from 35.6 million tonnes in 1990 to 33.9 million tonnes in 1991. The emissions increased to 37.2 million tonnes in 1994, simultaneously with a reduction in the taxes.

Stationary sources (heating) account for about 40 per cent of the emissions. The analysis of emissions from stationary sources in the production sectors covers about 40 per cent of these emissions. The results show that the CO₂-tax helped to reduce CO₂-emissions by up to 10-20 per cent per year in certain sectors, while the reductions have not been as great in other sectors. According to the calculations, emissions from stationary sources in the production sectors analysed were reduced by between 75 and 157 thousand tonnes per year during the period from 1987 to 1993, because of the CO₂-tax. The emissions, as part of the stationary emissions studied, were reduced by between 1.5 per cent and 5.9 per cent per year.

The CO₂-tax led to relatively small reductions in the stationary use of energy in households (energy use connected with the dwelling). The effect of the CO₂-tax was greatest in 1991 and 1992, with a reduction of about 3 per cent in the consumption of oil and kerosene.

Emissions of CO₂ from mobile sources account for about 40 per cent of the total CO₂-emissions, and the production sectors and households are responsible for respectively 70 and 30 per cent of these emissions. In the analysis of CO₂-emissions from the use of transport in the production sectors, the change in CO₂-emissions relative to the gross product (CO₂-intensity) was decomposed in order to obtain a picture of the cause of the change. The three components considered were changes in the structure of business and industry (sector structure), changes in energy use relative to gross product (energy intensity) and changes in the composition of the consumption of different transport oils. The CO₂-intensity decreased by 3 per cent per year from 1988 to 1992. The main reason was changes in the sector structure. The CO₂-tax may have influenced the sector structure and therefore the CO₂-intensity, but the degree to which this occurred is uncertain.

According to the calculations, emissions of CO₂ from mobile sources in households were reduced by 2 to 3 per cent per year as a result of the CO₂-tax. This corresponds to an annual reduction of between 94 and 119 thousand tonnes of CO₂.

Process emissions (from industrial processes) account for about 20 per cent of the total emissions of CO₂. Sources of energy used in industrial processes have been exempted from both the CO₂-tax and the basic tax. The changes in CO₂-emissions and the CO₂-intensity from 1988 to 1993 were small.

Emissions of CO₂ from the petroleum sector (consisting of stationary emissions, mobile emissions and process emissions) accounted for more than 20 per cent of the total emissions of CO₂ in 1993. The CO₂-intensity decreased by more than 15 per cent from 1990 to 1992, but increased by 3 per cent from 1992 to 1993. According to ECON (1994) (ECON stands for Centre for Economic Analyses) the emissions relative to the production in this sector were reduced by about 1.5 per cent as a result of measures introduced because of the CO₂-tax.

The CO₂-intensity for transport in the production sectors was reduced as a consequence of changes in the energy intensity, the composition of the transport oils and, in particular, the sector structure. The analysis is based on a period of only 4 years, and the results would have been more robust if the period of analysis had been longer. The analysis of the mobile sources of emissions has uncovered a need to collect better physical data. The data base is not good enough because the methods of calculation have been changed, and do not provide comparable series of figures over time. The chosen sector grouping was too aggregated to enable the changes in CO₂-intensity to be decomposed satisfactorily. If the sectors are not sufficiently homogenous, changes in structure within an aggregated sector can give results that are interpreted to be changes in the energy intensity. However, even if the sector grouping had been good enough to identify what were changes in structure and what were changes of another kind, it would still have been difficult to state how large a share of the change in the different components could be attributed to the CO₂-tax.

Sea transport and air transport are to a large degree exempted from CO₂-tax. Nevertheless, the reduction in CO₂-emissions is larger for these particular forms of transport than for other forms. The fishing fleet made a large contribution to the total reduction in CO₂-intensity in transport from 1988 to 1992, in spite of the fact that oil for coastal fishing is exempted from the CO₂-tax. The changes in emissions took place independent of the tax, and were a result of a strong growth in the aquaculture industry along with a decrease in traditional fishing.

Changes in the sector structure, energy intensity and composition of the energy sources are all important factors affecting changes in the emissions of CO₂. A CO₂-tax influences profitability in different industries in different ways, depending on to what degree the industries are dependent on oil and are energy-efficient. Thus the tax can cause changes in the sector structure. The CO₂-tax could also serve to speed up advances in technology, leading to an improvement in energy-efficiency. Furthermore, a CO₂-tax raises the price of oil relative to other sources of energy, so that households and industrial enterprises both substitute oil with other energy sources, if possible. Thus, changes in the sector structure, energy intensity and composition of energy sources can be a result of the CO₂-tax, but may also be due to a number of other factors such as trade conditions, the replacement of out-dated and energy-

intensive production equipment, prices, general technological advances, regulations, possibilities of switching between different energy sources, etc.

Figure 27 shows the changes in CO₂-emissions with and without taxes (CO₂-tax and basic tax) for parts of the economy. The figure includes emissions from stationary sources in households, from stationary sources in large parts of manufacturing industry and from private and public provision of services, and from mobile sources in households (use of passenger cars). The most important sources of emissions not included are process emissions, emissions from the petroleum sector and emissions from other sources than those from the households.

Figure 27. Changes in total CO₂-emissions* and changes in CO₂-emission as a result of the CO₂-tax and the basic tax. 1987 - 93. Million tonnes



* Mobile emissions from the production sectors, process emissions and about half of the stationary emissions in the production sectors (e.g. the petroleum sector) are not included.

As part of total Norwegian CO₂-emissions, the CO₂-emissions analysed fell gradually from 31 per cent in 1987 to 21 per cent in 1993 (partly due to increased emissions from the petroleum sector). Since only about 60 per cent of the CO₂-emissions were subject to CO₂-tax in the period from 1991 to 1993, the emissions studied accounted for between 41 per cent and 35 per cent of total emissions subject to CO₂-tax at this time. The petroleum sector accounted for about half of the emissions subject to CO₂-tax which are not included in figure 27.

One conclusion based on the results in this report is that the CO₂-tax has probably had some effect on emissions of CO₂ from mobile sources in households and from stationary sources. The total effect of the CO₂-tax on the emissions studied varies between three and four per cent in the period from 1991 to 1993. In comparison, the price of fuel oil and gasoline increased by

11-17 per cent and by 9-11 per cent respectively, due to CO₂-taxes¹. Therefore, the study indicates that the CO₂-taxes have influenced the CO₂-emissions analysed. The effect on emissions from other mobile sources (manufacturing and service industries) are more uncertain, partly because the database is not good enough, and partly because variables other than CO₂-taxes may effect sector structure and energy intensity.

¹ Any possible effect of the CO₂ tax on the crude oil price is ignored, which seems reasonable when analysing a national CO₂ tax.

**PAPER NO. 9: POLAND AND THE
RUSSIAN FEDERATION**

Letter from the Heads of the Delegations of Poland and the Russian Federation to the first sessions of the UNFCCC subsidiary bodies to the Chairman of the Ad hoc Group on the Berlin Mandate

Geneva
August 31, 1995

In accordance with the Decision 1/CP.1 of the COP-1 the negotiating process on the Berlin Mandate has been started. In particular, this decision recommends in paras 1(a) and 1(b) a way of implementation of this process taking into account the provisions of the Convention related to the principle of common, but differentiated responsibilities of the Parties.

It seems advisable in the practical work on a protocol to define some specific criteria. One such criterion, the level of GHG emissions per capita, in particular, is mentioned in para 1(d) of the Decision 1/CP.1. Some other criteria, such as GDP per capita or similar, have been proposed by delegations of Poland and Russia for consideration during the AGBM-1.

In accordance with the decision of AGBM - 1 (Doc. FCCC/AGBM/1995/L.1/Add.1, p.1 h(i)) the delegations of Poland and the Russian Federation are submitting the relevant proposals offering possible approaches aimed at implementation of the principle of common, but differentiated responsibilities (attached), which we propose to consider during forthcoming AGBM - 2. In addition, Poland and the Russian Federation offer the following measures, which might, in our opinion, facilitate the implementation of the Berlin Mandate.

- On the basis of the decision 6/CP.1, Annex I, Section A, para 5(c) the SBSTA should present the information and to provide the recommendations on any methodological and technical issues, necessary to develop protocols to the Convention, thus enabling the Parties to consider at the second session of the SBSTA the substance of proposed criteria;

- Further, these criteria could be considered at the third AGBM session, and relevant documents be proposed for consideration and possible adoption at the COP-2.

Suggestions on use of the principle of common but differentiated responsibilities

1. One of the key principles on which responsibilities under the FCCC are based is the principle of common but differentiated responsibilities of the Parties to the Convention. The Article 3.1 states that "the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capacities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof".

However, text of the Convention does not contain a definition of the principle of common but differentiated responsibilities, in particular in its relation to determining specific commitments of the Parties in future protocols or other legal instruments.

2. Provisions of the Convention which to some extent reflect the differentiated approach to the capacities of the countries can be outlined as follows. Articles 4.1 and 4.2 generally describe division of commitments between developed and developing countries. Articles 4.3, 4.4 and 4.5 further specify some commitments of developed countries related to new and additional resources, transfer of technology, etc. Article 4.6 contains the provision taking into account special situation in the countries with economies in transition. Articles 4.7 to 4.9 touch upon specificities of the developing countries. Article 4.10 relates to countries whose economies are highly dependent on production of fossil fuels.

3. Considerations mentioned above as well as today's world realities require their adequate reflection in the Berlin Mandate process. In this connection, it is proposed to give a definition for the principle of common but differentiated responsibilities, and to adopt certain criteria for its practical implementation. The criteria should reflect social, economic and some climatic parameters relevant in the context of sustainable development.

The Convention itself contains indications that even among Annex I Parties there are countries with different economic potentials; thus potential of countries with economies in transition is presently lower in comparison to the countries of the European Union. Among developing countries there is a group of least developed countries (Article 4.9). These differences are reflected in the classification adopted by the World Bank and UNDP.

We can be more specific after analyzing a number of criteria, which should be developed for application of the principle of common but differentiated responsibilities. Among these criteria one could mention:

- GDP per capita;
- amount of anthropogenic emissions, first of all of carbon dioxide and methane, per capita and per a unit of territory;
- amount of sinks and net emissions per capita and per a unit of territory;
- levels of production and consumption of energy per capita.

4. To take into account the cumulative effect of these criteria for the purpose of determining differentiated commitments of individual countries it is proposed to evaluate specific indicators according to each criterion by summing up their reverse values.

These or similar calculations would allow the Annex I countries to determine their individual and more flexible levels of commitments under the Convention. In such a way it would be possible to implement more efficiently the principle of common but differentiated responsibilities during the Berlin Mandate process aimed at defining commitments for the period beyond the year 2000.

5. The principle of common but differentiated responsibilities in the context of the Convention is proposed to be formulated as follows:

The common responsibility of the Parties to the Convention means common actions aimed at protection of the climate system to attain the ultimate goal of the Convention. The differentiated responsibility means individual responsibilities of the Parties to the Convention related to their commitments determined taking into account their economic capabilities and stipulated in a protocol or another legal instrument.

In our opinion, this approach, which adequately reflects the present world situation, could be used as a basis for setting quantified limitation and reduction objectives with specified time-frames.

PAPER NO. 10: SWITZERLAND

ANALYSIS AND ASSESSMENT

Switzerland welcomes the opportunity to comment on the process of *Analysis and Assessment*, in particular as concerns its nature, content, organisation, and timing.

Nature of the AA process: The Berlin Mandate clearly states that the process "*will include in its early stages an analysis and assessment*". It is therefore crucial that the *analysis and assessment* be conducted in parallel, not prior, to the negotiation itself.

Content of the AA process: Among policies and measures, the AGBM should focus primarily on actions that require international agreement or that would be beneficial if taken collectively. Therefore, the *analysis and assessment* process should inform the negotiation on those actions, as well as on the coordination of relevant economic and administrative instruments such as:

1. energy efficiency standards and labelling
2. fuel consumption standards for motor vehicles
3. carbon and/or energy taxes and transport-related taxes, including on aviation fuels.

Organisation of work: Most of the background work is being, or has already been, carried out within different organisations or international bodies, such as for example the IPCC, UNEP, the OECD, and the IEA. The SBSTA has a mandate to summarise the results of the work of the IPCC and to compile scientific, technical and socio-economic information. The AGBM could request that the SBSTA, in compiling this information, sort it by categories according to an indicative list of priorities. On the basis of this compilation, the different options should be prepared within sector-specific expert panels for consideration by the AGBM. The technical advisory panels to be established by the SBSTA would be ideally suited to perform this task.

Timing and priorities: We propose that this body drafts a request for the SBSTA to start work on the compilation of information without delay. In addition, an indicative list of priorities should be established on the basis of the outcome of this week's discussions. In October, the AGBM should provide guidance to the SBSTA as to which panels it wants to set up, as well as on their mandate and timeframe for output. The first results from the panels should be reported for consideration by the AGBM at its March 1996 session.

In Switzerland's view, the list of priorities should include the following:

1. coordinated energy efficiency standards for appliances, products and motor vehicles
2. coordinated economic instruments and incentive taxes in the energy and transportation sectors, including aviation
3. renewable energies
4. the regulation of PFCs and HFCs.

**PAPER NO. 11: TRINIDAD AND TOBAGO (ON BEHALF OF THE
ALLIANCE OF SMALL ISLAND STATES (AOSIS))**

*Introduction to the
Draft Protocol to the United Nations Framework Convention
on Climate Change
submitted by Trinidad and Tobago on behalf of the
Alliance of Small Island States (AOSIS)*

BACKGROUND:

The text of a Draft Protocol to the United Nations Framework Convention on Climate Change on Greenhouse Gas Emissions Reduction (Draft Protocol), was submitted by the government of Trinidad and Tobago on behalf of the Alliance of Small Island States (AOSIS) on 20 September 1994, six months prior to the first Conference of the Parties (COP1), and in accordance with Article 17 of the Convention.

During COP1 in Berlin, the Draft Protocol played a central role in the negotiation of the Parties' decision on the adequacy of the commitments in Article 4.2(a) and (b) of the Convention, and in the drafting of the Berlin Mandate which establishes a process aimed at strengthening those commitments. At COP1, more than 70 Parties and signatories to the Convention associated themselves with a proposal calling for the post-Berlin process to "be based on the proposal for a protocol by the Alliance of Small Island States." The Berlin Mandate, adopted by consensus at the close of the COP1, provides that the "protocol proposal of the Alliance of Small Island States (AOSIS), which contains specific reduction targets and was formally submitted in accordance with Article 17 of the Convention, along with other proposals and pertinent documents, should be included for consideration in the process."

The following comments are based on the intervention of Ambassador Annette des Iles, Permanent Representative of Trinidad and Tobago to the United Nations, speaking on behalf of AOSIS at the 11th session of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, and have been updated to emphasise their consistency with the provisions of the Berlin Mandate.

GENERAL OBSERVATIONS:

The primary aim of the Draft Protocol is to build on the 1992 United Nations Framework Convention on Climate Change (Convention) by strengthening the specific commitments of developed country Parties to reduce their emissions of carbon dioxide (CO₂); by requiring developed country Parties to adopt specific targets and timetables for the control of emissions of

other greenhouse gases; and by providing a mechanism for the coordination of specific measures designed to reduce greenhouse gas emissions.

The Draft Protocol does not impose any obligations on developing country Parties additional to those already contained in the Convention. It is designed to encourage developing country participation in the progressive development of climate change policy through the Draft Protocol's mechanism for coordination of measures, and by focusing on the need for accelerated transfers of relevant technologies to developing countries.

The Draft Protocol is intended to complement and not supplant the Convention. Much of its text is drawn from the Convention's consensus language or from the text of other widely accepted international agreements, or intergovernmental declarations. Parties to the Protocol would hope to rely upon the procedures, mechanisms, and institutional arrangements already established under the Convention. The Convention anticipates this relationship by authorizing its Conference of Parties to keep under review any related legal instrument it may adopt.

This approach is entirely consistent with the provisions of the Berlin Mandate, which aims to adopt a protocol or another legal instrument setting quantified limitation and reduction for Annex I Parties' anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, without introducing any new commitments for Parties not included in Annex I.

SPECIFIC PROVISIONS:

PREAMBLE

The Draft Protocol's Preamble restates a number of elements contained in the Convention, including its Objective, and clearly emphasises that the burden of achieving this Objective rests with the developed states, that have undertaken in Article 3 of the Convention to take the lead in combating climate change.

Preambular Paragraph 4 highlights the intended focus of this Protocol by recognising the "need for developed country parties to adopt specific targets and time frames for reducing emissions of greenhouse gases to achieve the Objective of the Convention."

The final paragraph of the Preamble acknowledges the need for a long term perspective and a regime that is responsive to changing circumstances in accordance with the principle of common but differentiated responsibility.

These same principles are reflected in the preambular and operative text of the Berlin Mandate.

ARTICLE 1: DEFINITIONS

Article 1 clarifies that certain terms used in the Protocol are intended to have the same meaning as when used in the Convention, or as when used in the Convention, or as explicitly defined in Article 1 of the Convention.

Article 1(1), (7) and (8) differentiate between "Parties" to the Protocol and "Parties to the Convention". This distinction anticipates that, while all Parties to the Protocol must first be Parties to the Convention, not all the Parties to the Convention will necessarily become Parties to the Protocol. This may result in Parties to the Protocol having a different legal relationship to each other than they will have with Parties to the Convention, that have chosen not to become Parties to the Protocol.

ARTICLES 2-3: COMMITMENTS

BASIC COMMITMENT (Article 2)

This basic commitment applies to all Parties to the Protocol and restates, word for word, the core of the general commitment contained in the Convention's Article 4(1)(b), which requires, among other things, all Parties to the Convention to implement programmes containing measures to mitigate climate change. Article 2 of the Protocol, therefore, is not intended to create any additional commitments for any category of Party. It is included to signal the close relationship of the Protocol to the Convention and the far more specific focus of the Protocol on developed country greenhouse gas emissions.

The inclusion of this paragraph is consistent with the Berlin Mandate's aim of reaffirming existing commitments in article 4.1 and continuing to advance the implementation of these commitments in order to achieve sustainable development, taking into account the Convention's provisions on financial resources and technology transfer.

TARGETS FOR GREENHOUSE GAS REDUCTIONS (Article 3)

This specific commitment, which is the heart of the Protocol, requires developed country Parties to the Protocol that are included in Annex I of the Convention to reduce their emissions of CO₂ by at least 20% of 1990 levels by 2005, and to establish timetables for controlling emissions of other greenhouse gases.

The CO₂ target and timetable that would be established by the Protocol is often referred to loosely as the "Toronto Target" after the influential recommendations of the World Conference on the Changing Atmosphere held in Toronto, June 1988. The Toronto Statement declared that stabilising atmospheric concentrations of CO₂ is an imperative goal and estimated that this would require reductions of more than 50% from 1988 emission levels. The Toronto Statement recommended a 20% reduction from 1988 levels by 2005 as an "initial global goal".

In the lead up to the negotiations of the Convention a number of intergovernmental conferences supported the Toronto Target, including the Nordwijk Declaration on Atmospheric Pollution and Climate Change of 1989 and the Ministerial Declaration on Sustainable Development in the ECE, Bergen, Norway 1990. During this period, a number of developed countries made unilateral statements, or adopted domestic policies that reflected targets and timetables similar to or more ambitious than the Toronto Target.

Most recently, within the European Union, the European Parliament and the European Council have endorsed the development of specific greenhouse gas reduction targets. In September 1994, a European Parliament resolution called upon the EU and Member States to support the Toronto Target. In December 1994, the European Council had asked the Commission to present proposals for progressive reductions for CO₂ and other greenhouse gases for target years 2005 and 2010. Furthermore, the United Kingdom has proposed a target to reduce a basket of greenhouse gases by 5-10% by 2010.

Rather than adopting the "comprehensive" or "basket of gases" approach to emissions limitation, where all sources of greenhouse gases and sinks are considered collectively, the Draft Protocol proposes to deal with each greenhouse gas separately. Because of the scientific and political uncertainty currently surrounding appropriate targets for other greenhouse gases, Article 3(1)(b) does not introduce immediate emissions reductions targets, but requires that Annex I Parties, at the first Meeting of the Parties to the Protocol, adopt specific targets and timetables to limit or reduce other greenhouse gases.

The list of gases provided in Article 3(1)(b) is not intended to exclude or prioritise any particular greenhouse gases, except to exclude those controlled by the Montreal Protocol.

The Draft Protocol's approach to addressing all greenhouse gases, in a comprehensive but discrete fashion is consistent with the language in the Berlin Mandate, which calls for "coverage of all greenhouse gases, their emissions by sources and removals by sinks and all relevant sectors."

REVIEW AND REVISION OF TARGETS (Article 3(2))

Article 3(2) authorizes the Meeting of the Parties (as established by Article 8) to "review and revise" both the CO₂ targets and timetables, established in Article 3(1)(a), and the controls for other greenhouse gases that are to be adopted under Article 3(1)(b). This empowers the Meeting of the Parties to analyze the adequacy of the existing measures and to adopt further emissions reductions if required by science and agreed to by the parties.

Any revision of the Protocol's commitments is to be done "in accordance with the precautionary principle and the best available scientific information and assessment of climate change". This is intended to ensure that while the future development of the Protocol should be science driven, the lack of full scientific certainty should not be used as a reason for postponing measures designed to prevent climate change. The precautionary principle has become a standard feature of recent

environmental treaties and declarations, including the Convention itself, and notably in the Ozone and Acid Rain regimes.

ACCESSION OF NON-ANNEX I PARTIES TO THE SPECIFIC COMMITMENTS (Article 3(3))

As mentioned above, the commitments in Article 3 are binding only on the developed country Parties that are listed in Annex I of the Convention, and do not apply to developing states. However, in the same manner as Article 4(2)(g) of the Convention allows developing states or other non-Annex I countries to consent to be bound by the commitments that apply only to Annex I Parties, so Article 3(3) of the Protocol creates the identical mechanism in relation to the specific obligations in Articles 3, 4 and 5 of the Protocol. Such a provision has already proved its usefulness under the Convention, as the government of Monaco has used it to accept the commitments of Annex I countries. The governments of Slovakia and the Czech Republic have recently announced that they intend to make similar commitments. Developing and other non-Annex I Parties to the Protocol could only be bound by these commitments if they voluntarily chose to be bound.

The Berlin Mandate, similarly calls upon Parties to "take into account any result from the review referred to in Article 4.2(f), if available, and any notification referred to in Article 4.2(g)."

ARTICLE 4: COORDINATION MECHANISM

The Protocol's Coordination Mechanism is intended to create a subsidiary body that will provide advice to the Meeting of the Parties and offer a forum for the negotiation of specific economic, administrative and other instruments that may assist Parties in meeting the Protocol's Objective.

Parties, policy analysts and climate activists have long recognised that regulation of the economically integral activities that emit greenhouse gases will require a coordinated approach. Indeed, Article 4(2)(e)(i) of the Convention, requires that Annex I Parties "coordinate as appropriate with other such parties, relevant economic and administrative instruments developed to achieve the objective of the Convention."

Because the measures undertaken by Annex I Parties to the Protocol, especially those that may have an impact on trade, will affect the interests of developing countries, the Coordination Mechanism is open to the participation of all Parties. It is expected that the Mechanism's activities will be closely coordinated with the work of the Convention's COP under Article 7(2)(c) of the Convention and the Convention's Subsidiary Bodies on Scientific and Technical Advice and on Implementation.

The Berlin Mandate calls for a process that considers "as provided in Article 4.2(e), the coordination among Annex I Parties, as appropriate, of relevant economic and administrative instruments" and provides for "the exchange of experience on national activities in areas of

interest.”

ARTICLE 5: REPORTING REQUIREMENTS

The Annex I Parties to the Protocol are required to submit a detailed description of the policies, programmes and measures taken to implement their commitments under Articles 2-4, and provide an estimate of the resulting effects on emissions and removals by their sources and sinks.

Although this language is virtually identical to that contained in Articles 4 and 12 of the Convention, the reporting under the Protocol will have to reflect the strengthened emissions reductions commitments it requires. The more concrete nature of the obligations under the Protocol will require more detailed and precise reports from the Annex I Parties.

Part of this detail is a new reporting requirement introduced by Article 5(2) which requires that Annex I Parties provide a cost/benefit analysis of the measures that they have undertaken. This is intended to assist the Parties in assessing the economic burdens and benefits realised by Parties as they implement the Protocol.

The Protocol imposes no additional reporting requirements upon developing country Parties.

ARTICLE 6: INSTITUTIONAL ARRANGEMENTS

Article 6 reflects the desire to ensure that the Protocol makes use of the institutions established under the Convention without unfairly imposing costs on those countries that may be Parties to the Convention, but that are not Parties to the Protocol.

ARTICLE 7: TRANSFER OF TECHNOLOGY

Article 7 enhances the technology transfer provisions of the Convention by requiring that the “best available technologies ... are expeditiously transferred to developing countries” under “fair and most favourable conditions”. This language is borrowed from the Montreal Protocol on Substances That Deplete the Ozone Layer, is significantly stronger than the technology transfer provisions in Article 4(1)(c) and (g), and Article 4(5) of the Convention. It is intended to provide an incentive for developing countries to participate in reaching the Objective shared by the Convention and the Protocol and to ensure that advanced technologies “forced” by Annex I Parties’ strengthened commitments will be transferred expeditiously to the South.

This article would, again, be consistent with the Berlin Mandate’s aim of continuing to advance the implementation of developing country Parties’ commitments.

ARTICLE 8: THE MEETING OF THE PARTIES

The Protocol establishes a Meeting of the Parties with powers to review the implementation of

the Protocol, adopt new targets and timetables, and assess the effectiveness of the steps taken by developed countries.

A long list of specific functions and powers are specified in Article 8(1), including the catch-all which entitles it to "exercise such other functions as are required for the implementation of this Protocol". The majority of these provisions are identical to powers attributed to the Conference of the Parties for the implementation of the Convention by Article 7(2) of the Convention.

Article 8(2)-(4) of the Protocol, which contains the rules governing the holding of sessions of the Meeting of Parties, and attendance, are the same as the provisions in Article 7(4)-(6) of the Convention, which govern sessions of the Conference of the Parties.

Article 8(1)(d)-(e) provides that the Meeting of the Parties will receive, review and ensure the publication of the reports submitted by Annex I Parties on their implementation of greenhouse gas control measures, and to regularly assess the overall aggregated effect of the steps taken by Annex I parties.

Essentially these provisions give to the Meeting of the Parties the function in relation to the Protocol, that the Convention, in Article 10, entrusted to the Subsidiary Body For Implementation.

The publication of national reports and the international assessment helps to promote transparency and facilitates public analysis by the media and NGOs of how effectively industrialized countries are fulfilling their commitments under the Protocol.

FINAL CLAUSES

DISPUTE SETTLEMENT

Article 9 states that any disputes are to be settled in accordance with the terms of the Convention. It leaves open the possibility that the Parties to the Protocol may decide, in cooperation with the Parties to the Convention, to make use of whatever Multilateral consultative Process may be established under Article 13 of the Convention.

AMENDMENTS

Article 10 establishes the same procedure for the proposal, adoption and entry into force of amendments to the Protocol as apply in relation to amendments to the Convention. However one notable difference is that the Convention provides for adoption of amendments by a $\frac{3}{4}$ majority when consensus cannot be reached, whereas the Protocol specifies a smaller majority at only $\frac{2}{3}$.

OTHERS

The provisions dealing with annexes, right to vote, the depositary, signature, ratification, entry into force, reservations, withdrawals and authentic texts are the same as in the Convention.

PAPER NO. 12: UNITED STATES OF AMERICA



United States Department of State

*Bureau of Oceans and International
Environmental and Scientific Affairs*

Washington, D.C. 20520

September 7, 1995

Letter from the Director, Office of Global Change, Bureau of Oceans and International Environmental and Scientific Affairs, United States Department of State, to the Executive Secretary of the UNFCCC

This is in response to your communication of June 23, 1995, to permanent missions in Geneva advising Parties of the September 8 deadline for the submission of views by Parties to help advance work on the implementation of the Berlin Mandate (FCCC/CP/1995/7/Add.1, decision 1/CP.1). We understand that such views will be compiled and made available in an addendum to the secretariat's note of August 17, 1995 (FCCC/AGBM/1995/Misc.1).

We request that the opening statement by the U.S. delegation at the first session of the AGBM (copy enclosed), together with the U.S. Non-Paper on the Berlin Mandate Process (copy also enclosed), which was distributed with the U.S. opening statement, be included in the compilation of views by Parties. We further request that the statement by the U.S. delegation during the afternoon session of the AGBM on August 23 (copy enclosed), together with the partial list of sources that might be tapped to provide useful inputs to the analysis and assessment process, which we distributed in Geneva with our August 23 statement, also be included in the compilation of views by Parties.

As noted in the U.S. Non-Paper, we believe that the analysis/assessment should consider, inter alia, for Annex I and Non-Annex I Parties, as appropriate, trends in historic emissions indicators (e.g., vehicle miles travelled, energy intensity, population) and national/global emission forecasts.

The U.S. delegation noted in its August 23 statement:

"In order to analyze and assess next steps for Annex I Parties, it is necessary to consider how their actions may affect the global environmental problem that we face. To do so, we must look at emission trends and

at the efforts that all Parties are making to deal with emissions of greenhouse gases. Only in this way can we understand how next steps by Annex I Parties will affect the global environmental problem that we face.

"In addition, it is likely that the actions taken by Annex I Parties will affect Non-Annex I countries, as has been noted by delegations from several developing Parties. For this reason as well, we cannot analyze and assess policies and measures to be taken by Annex I Parties in isolation.

"We are also aware that Non-Annex I Parties have expressed repeatedly their keen interest in matters related to technology development and diffusion. In analyzing possible policies and measures for Annex I Parties, it will be important to consider the potential for new technologies and for improved diffusion of these and existing technologies to achieve the environmental benefits that we seek. We believe -- and hope -- that all Parties will be very interested in such aspects of the analysis and assessment that our group will undertake."

The U.S. Non-Paper on the Berlin Mandate Process urged that the October AGBM meeting begin considering global emissions trends (perhaps convening a panel of experts). Unfortunately, our proposal to convene a panel of experts on this issue at the October AGBM meeting did not find its way into the conclusions of the meeting. Nevertheless, we remain convinced and believe it vital that the October AGBM meeting begin consideration of this issue.

To that end, we also request that the additional enclosed materials, which are submitted as some examples illustrating the kinds of materials that we believe should be considered with respect to global emissions trends, be included in the compilation of views submitted by Parties, together with a copy of this letter which describes our submissions. These materials include:

- A brief statement on trends in historic emissions indicators
- Two pages taken from a document entitled "Energy Use and Carbon Emissions: Some International Comparisons, March 1994" published by the U.S. Energy Information Administration (Volume DOE/EPA-0579); one page deals with "Energy and Carbon Emissions in a World Context" and makes a number of important observations, although these observations are based on a definition of "developing countries" that differs from the approach

taken in the FCCC; the other page deals with "G-7 Sectoral Analysis"

- Several tables that may be relevant to a discussion of historic emissions trends
- Several pages drawn from World Energy Outlook, 1995 Edition of the International Energy Agency that refer to historical trends, the outlook for energy-related CO2 emissions and regional variation in transport fuel consumption
- An illustrative list of reference materials on historic emissions trends and indicators

We recognize that the full publications from which these materials are drawn do not lend themselves to inclusion in a miscellaneous document. Nevertheless, we assume that the secretariat and other Parties have access to such publications and that we will begin considering global emissions trends at the October AGBM session, under an appropriate agenda item, drawing upon these and other relevant materials. With sufficient notice to facilitate shipment, we would be pleased to furnish copies of U.S. Government publications, if necessary or desirable.

We have assembled the materials enclosed in this letter quickly in order to meet the September 8 deadline. There may, in addition, be other materials that we will wish to submit to the secretariat and draw to the attention of our colleagues prior to or during the October AGBM meeting.

We appreciate the secretariat's efforts to compile the views of Parties and circulate them prior to the October AGBM meeting. We believe that this effort should help further our efforts at that session.

Enclosures:
As stated.

Opening Statement by the
United States of America
Ad Hoc Working Group/Berlin Mandate (AG/BM)
August 22, 1995

Thank you, Mr. Chairman.

The American poet/philosopher Walt Whitman once wrote "....that the more difficult passage is often the shorter one. It is sometimes the pathway which bristles with thorns, brambles and thickets."

Mr. Chairman, in Berlin, the international community chose to undertake a shorter passage toward achieving our goal of taking appropriate action for the period beyond the year 2000. This is a period which we believe bristles with "thorns, brambles and thickets" and a period which, while navigable, therefore requires us to chart our course very carefully.

Pursuant to Berlin, we are striving to develop a proposal which will enable us to take appropriate action for the period beyond 2000, including strengthening the commitments of Annex I Parties in Article 4.2(a) and (b) and reaffirming and continuing to advance the implementation of commitments in Article 4.1 in order to achieve sustainable development.

In order to make progress in our future work, it is imperative that we take stock of the past. Only a few decades ago, global climate change was an obscure concern relegated to footnotes in even more obscure scientific journals. Today it is a matter of major international discussions and a priority in domestic policy debates. I think it is safe to say that the Convention itself has been an historic achievement and remarkable success.

Nevertheless, it is clear that the Convention has not produced the progress in limiting emissions that we had hoped. The national communications of Annex I Parties clearly demonstrate that they have adopted and continue to adopt national policies and corresponding measures to mitigate and adapt to climate change. They are thus meeting their commitments under the Convention, but reaching the Convention's aim remains elusive.

The United States has developed one of the most comprehensive action plans, and we are achieving better than anticipated success from some of our voluntary programs. Still, we are not on course to meet our national commitment announced by President Clinton in April 1993. A full review of our plan should be ready this fall, but preliminary analysis shows that current trends have us on a path that will not return U.S. greenhouse gas emissions to their 1990 levels by the year 2000.

This gap results partly from dramatic economic expansion in the U.S. economy over the past two years -- a welcome event -- and from low oil prices over the same period. But however welcome, these developments also have consequences for U.S. greenhouse gas emissions.

This gap also results in part from our unique system of government. While the Administration has proposed an aggressive program to reduce U.S. emissions and save money for the American economy, the legislative branch controls appropriations. To date, Congress has not provided the funds needed fully to implement the measures contained in our national action plan, and Congressional funding decisions yet to be taken could well result in a significant shortfall.

We are working and will continue to work to meet our national commitment. At the same time, uncertainties surrounding economic growth, fuel prices, and other factors continue to bedevil our ability to achieve a particular emissions objective within a particular timeframe.

And the United States is not alone in experiencing such difficulties. Other Annex I countries are also having significant problems in reaching the goals they have set for themselves. And it is our observation that non-Annex I nations are not making as much progress as we all might like to formulate and implement measures to mitigate climate change.

These hard truths are emerging even though the preponderance of scientific evidence continues to come in that our initial precaution in reducing greenhouse gas emissions was prudent indeed. New evidence continues to mount that global climate change remains a serious challenge to the international community and must be addressed with urgency and priority.

I point this out because it is my government's view that, as we organize ourselves for the next steps, we must individually and collectively reassess the approaches we have been taking to determine whether or not they are the most efficient and reliable means of ensuring real emissions reductions. No doubt this is a difficult question, but it is a legitimate and serious one.

Are we on the right track? Are the current aims working? How might they be improved? What changes might be needed to ensure that we make real progress toward reducing emissions of greenhouse gases? If we are serious about this problem, we cannot duck these serious issues. We must think anew and act prudently to ensure that the promise of the Berlin Mandate is fulfilled.

We need to consider very carefully the factors that inhibit reaching the "aim" referenced in Article 4.2(a), and consider as well whether such factors may likewise inhibit reaching another such objective in a different timeframe. We may conclude that an altogether different approach is needed, one that will provide the needed stimulus for action without condemning us, like Sisyphus, never to reach our goal.

We believe that a period of analysis and assessment provides needed time for questions to be asked and answered and for governments to exchange ideas and approaches with respect to the main elements of a protocol or other legal instrument. In the end, we may conclude that an approach similar to the one we have already taken under the terms of the Convention is the correct path to follow. Alternatively, we may conclude that attempting to set a new, specific goal for each country to aim for is counter-productive at the present time, based on our apparent inability now -- or by 1997 -- to reach the goals which we previously set for ourselves.

Fortunately, much work for this analysis and assessment has already been done and needs only to be brought forward. Nevertheless, it is desirable to proceed in an orderly manner, emphasizing analysis and assessment as the precursor to informed and effective negotiation of a new legal instrument.

We have a more formal draft proposal on the timeline and framework for our work, but permit me for a moment to summarize some of the principle features of the analysis/assessment as we envision it unfolding:

We believe that the analysis/assessment should consider the effectiveness of current approaches and suggest ways in which future approaches can be made more credible and effective. This effort should also identify the activities undertaken by all parties in fulfillment of their obligations to advance the implementation of commitments under Article 4.1.

Among the items which might be analyzed or assessed for Annex I Parties (and for non-Annex I Parties, as appropriate) are emissions trends and the experience of parties to date in controlling them. These might include such items as trends in historic emissions indicators, as well as national and global emission forecasts, and in-depth reviews of national communications.

Among the approaches which might be analyzed are those which have been currently proposed, including the AOSIS proposal of 20 percent CO2 reduction by 2005, as well as other possible approaches, including successful experiences with policies and measures in areas such as transport, energy, industrial, residential/commercial, agriculture/forestry, and with non-CO2 gases to cite a few examples.

We should also examine the impact of various market mechanisms, including fiscal instruments and activities implemented jointly, including emissions trading. Among the technological opportunities which might be explored are the increased use of renewables, improved energy efficiency, the more efficient and safer means of conventional energy sources now in use, and methane recovery to name a few.

Finally, we may also want to look at the impact of climate change and mitigation actions, taking into account both the subsidiary body consideration of the IPCC's forthcoming Second Assessment Report and other national and international assessments, including those contained in the U.S. and other national and international country studies programs (which, in the U.S. case, are currently underway in 55 countries).

In sum, we believe that the analysis/assessment should develop output to address all aspects of the fulfillment of the Berlin Mandate. It should include an examination of the economic and environmental consequences of actions and inaction, both global and national, on both Annex I and non-Annex I Parties and include issues related to the timing of such actions. In addition, it should consider the consequences of actions on greenhouse gas emissions, the potential of shifts of industries to non-participating countries, and the effects on both employment and the investment cycle, as well as the implications for trade.

Mr. Chairman, I believe that we are all in agreement that the ultimate objective of the convention is to stabilize atmospheric concentrations of greenhouse gases at a level that would prevent dangerous anthropogenic interference with the climate system. However, given the political realities which confront us, it is clear that the next step alone is unlikely to yield that result. Thus, the analysis and assessment should assist the parties to address a fundamental issue: What is the best we can do through the Berlin Mandate toward achieving our ultimate objective?

An analysis of the impacts of near-term versus longer-term actions (e.g., in five or ten-year increments) could help to resolve this issue. It is our view that the approach contemplated by the United States would obviate the need to

establish formal sub-groups under the AG/BM and side-step the inevitable difficulties involved in such an effort, including such thorny issues as (a) under what basis would subgroups be formed? (b) how would their work be coordinated? (c) who would chair them? (d) would they have their own bureaus? and (e) what basis would be used to select them? Instead, under our proposed approach, all Parties would be able to engage fully in the process, and early analysis and assessment would better inform all negotiators.

In addition, our suggested approach takes into account the work that will be performed by SBSTA and SBI (e.g., on the review of national communications of Annex I Parties and in reviewing the results of the Second Assessment Report of the Intergovernmental Panel on Climate Change). It seeks to avoid duplication with the work to be performed by those subsidiary bodies and to build upon it.

To do so, however, it may be necessary for subsequent meetings of the SBSTA and the SBI to precede meetings of the AG/BM -- for example, in March 1996 -- so that the AG/BM may benefit from earlier discussions in the SBSTA and SBI.

Certain of the many technical questions raised in our approach might be addressed in a series of expert meetings or technical workshops coordinated by the convention secretariat. The results of such meetings or workshops could in turn be fed into the AG/BM discussions. We would encourage further discussion of this possibility during this meeting.

Mr. Chairman, I wish to reiterate both the interest and the intention of the United States to move forward in this process. We urge all nations to join us in thinking creatively and acting aggressively to confront this major challenge in a manner that is fair and certain. This Convention has been a success; if we think and work together anew, we believe that we can make it more so.

Thank you, Mr. Chairman.

SEEGC 8207

BERLIN MANDATE PROCESS: U.S. NON-PAPER

To help speed the work of the Ad Hoc Group on the Berlin Mandate (AG/BM) established by the Conference of the Parties to the U.N. Framework Convention on Climate Change, the United States has developed some preliminary views on a process that will lead to a protocol or other legal instrument pursuant to the "Berlin Mandate."

If the time frame established by the Berlin Mandate for development and adoption of a protocol or other legal instrument is to be achieved, organizational work must be well-conceived so the process is maximally efficient. The way forward is not obvious and many questions need to be addressed. There have been suggestions that negotiations begin early in the process, and yet it is not clear that governments will so soon be able to develop comprehensive positions or table texts. We also note that the Berlin Mandate itself calls for the inclusion of analysis and assessment in its early stages.

We are disappointed with our progress to date in reducing emissions and with the progress of others. We need to determine what measures have worked, which ones have not, and to chart a new course which will lead us to an effective and credible treatment of the problem which we are all confronting in developing new aims. For this reason, we believe a period of analysis and assessment will provide needed time for questions to be asked and answered and for governments to exchange ideas and approaches with respect to the main elements of a protocol or other legal instrument less formally, with more give and take than is sometimes possible once formal negotiations have begun. In the U.S. view, it will be critical to establish a credible process that builds trust and confidence among all parties and provides for the fullest consideration of optimal approaches.

Fortunately, much work has already been done and needs only to be brought forward. However, some issues remain unexplained, and it is desirable to proceed in an orderly manner, emphasizing analysis and assessment at the outset before moving to a more formal negotiating phase. Obviously, however, the analysis and assessment itself forms part of a negotiating process. We anticipate that discussions will take place throughout the process on the features of a protocol or other legal instrument; initially these discussions would be less formal than they would become by October 1996. This would facilitate early consideration of various proposals from an analytic standpoint.

In considering an approach to the analysis or assessment, it is important also to consider how the more formal negotiations would proceed, taking into account the number of meetings available to the parties and the issues to be addressed. The attached outline provides:

- (1) some background on the process;
- (2) an initial list of issues and approaches that should be addressed by the analysis and assessment in order to ensure informed decisions; and
- (3) a discussion of the specific steps involved in completing the process.

In the U.S. view, the process for formal negotiations would likely proceed much as did the negotiations that led to adoption of the convention itself. The steps envisioned for the formal negotiations thus follow the pattern already established among the parties. Again, however, just as "negotiations" will begin even at the August meeting, the "analysis and assessment" may not end categorically in July 1996. Instead, we envision that the more formal effort at analysis and assessment will conclude in July 1996 and that the more formal negotiating process would begin thereafter.

Analytically, the analysis and assessment should assist the parties in addressing a fundamental issue: as the ultimate objective of the Convention is to stabilize atmospheric concentrations of greenhouse gases at a level that would prevent dangerous anthropogenic interference with the climate system -- recognizing that the next step alone is unlikely to yield that result -- how can we best determine how much can be accomplished by the new protocol/other legal instrument? While solutions to this are complex, some analysis on the impacts of near-term versus longer-term actions (e.g., in five or ten-year increments) may help to resolve some of the issues.

The approach contemplated in the attached outline would obviate the need to establish formal subgroups under the AG/BM and side-step the inevitable difficulties involved in such an effort (e.g., on what basis would subgroups be formed, how would their work be coordinated, who would chair them, would they have their own bureaus and what basis would be used to select them, etc.?) Instead, under this approach, all Parties would be able to engage fully in the process, and early analysis and assessment would better inform all negotiators.

In addition, the approach contemplated in the attached outline takes into account the work that will be performed by SBSTA and SBI (e.g., on the review of national communications of Annex I Parties and in reviewing the results of the Second Assessment Report of the Intergovernmental Panel on Climate Change). It seeks to avoid duplication with the work to be performed by those subsidiary bodies and to build upon it. To do so, however, it may be necessary for subsequent meetings of the SUBSTA and SUBIM to precede meetings of the AG/BM -- for example, in March 1996 -- so that the AG/BM may benefit from earlier discussions in the SBSTA and SBI.

Certain of the technical questions raised in the outline might be addressed in a series of expert meetings or technical workshops coordinated by the Convention secretariat. The results of such meetings or workshops could in turn be fed into the AG/BM discussions. We would encourage further discussion of this possibility during the August meeting.

PROPOSED STEPS IN THE BERLIN MANDATE PROCESS

Background

- The Berlin Mandate provides that the process it initiates will include in its early stages an analysis and assessment to identify possible policies and measures for Annex I Parties which could contribute to limiting and reducing emissions by sources and protecting and enhancing sinks and reservoirs of greenhouse gases.
- The Berlin Mandate also provides that the AOSIS protocol proposal along with other proposals and pertinent documents should be included for consideration in the process, and calls for strengthening the commitments in Article 4.2(a) and (b), as well as reaffirming and continuing to advance the implementation of commitments in Article 4.1.
- The AG/BM's second meeting is now scheduled to take place in Geneva for one week beginning October 30, 1995. Thereafter, three one-week meetings of the AG/BM are now contemplated in 1996: March, July, and October, and presumably, there will be three meetings also in 1997 in approximately the same timeframes as in 1996.
- Much work on the analysis/assessment has already been done and simply needs to be brought forward.
- The following sketches an approach to the analysis and assessment and the overall process that will lead to the completion of the work as early as possible in 1997, with a view to adopting the results at the third session of the Conference of the Parties.

ANALYSIS/ASSESSMENT

- The analysis/assessment should consider the effectiveness of current approaches and suggest ways in which future approaches can be made more credible and effective in terms of achieving emissions limitations. This effort should also identify the activities undertaken by all parties in fulfillment of their obligations to advance the implementation of commitments under Article 4.1.
- The analysis/assessment should consider for Annex I and Non-Annex I Parties, as appropriate:
 - 1) Emissions trends and experience of parties to date in controlling them, including:
 - trends in historic emissions indicators (e.g., vehicle miles travelled, energy intensity, population)

- national and global emission forecasts
 - in-depth reviews of national communications
 - information from all countries, including Non-Annex I countries, concerning their activities/measures to implement commitments under Article 4.1)
- 2) Currently suggested approaches, including:
- AOSIS proposal (20 percent CO² reduction by 2005)
 - EU agreement (maintenance of 1990 greenhouse gas levels indefinitely after 2000)
 - UK call (5-10 percent greenhouse gas reduction by 2010)
 - other (including analysis of various dates through 2020)
- 3) Other possible approaches, including successful experiences with policies and measures (and technology development/diffusion potential) in areas such as:
- transport
 - energy
 - industrial
 - residential/commercial
 - agriculture/forestry
 - non-CO² gases
- 4) Market mechanisms such as:
- fiscal instruments
 - activities implemented jointly/joint implementation
 - emissions trading
- 5) Technological opportunities including:
- improved energy efficiency
 - switching to lower emitting fossil fuels and new fuel sources/increased use of more efficient and safer conventional energy conversion technologies (e.g., clean-coal technologies and nuclear power)

- increased use of renewables
 - methane recovery
 - alternative chemicals
 - automotive/rail/air technologies
- 6) Impacts of climate change and mitigation actions
- linkage with subsidiary body consideration of IPCC Second Assessment Report
 - other national and international assessments (e.g., U.S. Country Studies Program)

The analysis/assessment should develop output to inform all aspects of the fulfillment of the Berlin Mandate, and should include if possible:

- GDP/welfare consequences (global and national, including for Annex I and Non-Annex I Parties)
- consequences of actions on greenhouse gas emissions
- shifts (e.g. of industries) between countries
- effects on employment
- effects on investment cycle
- trade implications

STEPS IN THE PROCESS

If the target date for conclusion of the initial analysis/assessment effort is mid-1996, the AG/BM could undertake the following tasks at each of its meetings:

August 1995

- Meet for first time
- Deal with organizational issues (e.g., Bureau)
- Consider and adopt workplan, including provisional dates for future meetings and provisional agenda for each meeting

October 1995

- Identify specific analytical outputs that should be sought with respect to currently suggested approaches (both those now "on the table", i.e., AOSIS protocol, EU "stabilization", UK 2010 proposal, and possible new submissions)
- Decide what analyses should be performed (including for the advancement of the implementation of Article 4.1 commitments, and for discussions of policies and measures in various sectors in March 1996), and within what time period
- Begin considering global emissions trends (perhaps convening a panel of experts)
- Begin considering experiences with market mechanisms such as fiscal instruments and activities implemented jointly

March 1996

- Begin considering experience of parties in controlling emissions trends (based on SBSTA/SBI meetings on results of in-depth reviews of national communications)
- Address sectoral approaches, including half-day discussions of policies and measures (e.g., for transport, energy, commerce/industry, agriculture/forestry, non-CO² gases), consider ways to include approaches relevant to advancing the implementation of Article 4.1 commitments
- Consider technological opportunities

July 1996

- Review results of analysis/assessment efforts with respect to currently suggested approaches
- Review results of SBSTA and SBI consideration of IPCC Second Assessment Report
- Consider advantages and disadvantages of all approaches and opportunities to combine or reconcile them
- Consider advantages and disadvantages of technology options

Thereafter, and with a view to completing its work as early as possible in 1997 and adopting the results at the third session of the Conference of the Parties, the following steps are likely to be involved:

- Begin considering elements of a protocol/other legal instrument, based on textual proposals submitted by the Parties and circulated by the secretariat prior to the meeting and based on results of analysis/assessment, including recommendations on means to continue to advance the implementation of Article 4.1 commitments
- Continue considering elements of a protocol/other legal instrument, based on a draft single negotiating text prepared by the Secretariat and circulated prior to the meeting
- Adopt a revised (bracketed) single negotiating text
- Remove all but the most contentious brackets from the revised single negotiating text
- Resolve remaining brackets and adopt the final text

SEEGC 8142

Statement by the United States of America
Afternoon Session
23 August 1995

Thank You, Mr. Chairman

The United States delegation is fully aware of the Berlin Mandate and each of its provisions. We are not, in this first meeting of the AG/BM, negotiating this mandate, but are discussing an approach to the analysis and assessment activities called for in the mandate.

In order to analyze and assess next steps for Annex I Parties, it is necessary to consider how their actions may affect the global environmental problem that we face. To do so, we must look at emission trends and at the efforts that all Parties are making to deal with emissions of greenhouse gases. Only in this way can we understand how next steps by Annex I Parties will affect the global environmental problem that we face.

In addition, it is likely that the actions taken by Annex I Parties will affect Non-Annex I countries, as has been noted by delegations from several developing Parties. For this reason as well, we cannot analyze and assess policies and measures to be taken by Annex I Parties in isolation.

We are also aware that Non-Annex I Parties have expressed repeatedly their keen interest in matters related to technology development and diffusion. In analyzing possible policies and measures for Annex I Parties, it will be important to consider the potential for new technologies and for improved diffusion of these and existing technologies to achieve the environmental benefits that we seek. We believe -- and hope -- that all Parties will be very interested in such aspects of the analysis and assessment that our group will undertake.

Finally, we are aware that many Non-Annex I Parties are taking actions that are proving highly successful in limiting emissions and sequestering carbon. We think that these "success stories" will be of great interest to Annex I Parties in analyzing and assessing potential policies and measures, and that we should seek to bring forward this information in the course of our analysis and assessment.

We know that First National Communications from Non-Annex I Parties will not generally be available until 1997. At the same time, much information is available, or will soon be available, from cooperative country study efforts that have

been taken by Non-Annex I Parties assisted by others. If we are seeking to analyze and assess, we should not ignore potentially valuable experience and information coming from sources other than the Annex I Parties.

In closing on this point, I would note that we have not proposed to change the terms of the Berlin Mandate -- we are not, at this stage, negotiating. We are seeking to analyze and assess in order to inform the negotiations and the negotiators, and build the confidence we will need to move forward.

Turning to the subject of how we might obtain useful inputs to our analysis and assessment process from sources other than the Parties -- all the Parties -- the United States has prepared a partial list of some sources that might be requested to provide information of the assessment topics that we included in the non-paper that our delegation distributed yesterday afternoon. I will provide the Secretariat Coordinator a copy of these lists and I will also endeavor to make copies available to the delegations and observers by tomorrow.

Mr. Chairman, thank you for this opportunity to provide some clarification on how all of the Parties need to engage in the analysis and assessment activities if we are to be successful in our actions on next steps and the chance to amplify on some potentially useful sources for assistance in our group's analysis and assessment activities.

THE UNITED STATES PROPOSAL FOR A PARTIAL LIST OF ORGANIZATIONS TO
CONTRIBUTE TO THE ANALYSIS AND ASSESSMENT ACTIVITIES OF AG/BM

In order to carry out the elements of the analysis and assessment described in the U. S. Non-paper on the Berlin Mandate Process, there is a need to identify organizations that might be called upon to provide input and make contributions to the conduct of elements of the analysis and assessment activities. Included in the contributors would be the Parties to the Convention as well as the many nongovernmental industrial, conservation, environmental, and labor organizations and their members, both national and international. In addition to the Parties and these groups, the United States delegation wishes to provide a partial list of other organizations that could provide input and contribute to the analytical process of the AG/BM.

1. Historic trends to understand emissions growth and its relation to economic growth, energy use, population and demographics, technological change, etc.:

INPUT: OECD/IEA/ECMT
 IMF/World Bank Statistics
 Food and Agriculture Organization (FAO)
 The United Nations General Assembly and its
 organizations
 UNEP/GRID
 Regional Development Banks
 Country Studies and FCCC National Communications
 U. S. Energy Information Agency (EIA)
 U. S. Department of Energy (DOE) National
 Laboratories
 U. S. Departments of Commerce and Labor
 Statistical Bureaus
 U. S. Environmental Protection Agency

2. Assumptions and projections of future demographics, economic growth, energy use, land uses, and greenhouse gas emissions, including for the years 2005, 2010, and 2020 (this subject is actually included under the first item of the U. S. paper):

INPUT: International Institute for Applied Systems
 Analysis (IIASA)
 IEA/OECD
 IMF/World Bank
 Regional Development Banks
 Nongovernmental academic and consulting groups
 including:

 Stanford Energy Modeling Forum (EMF)
 Massachusetts Institute of Technology
 Oxford Consulting Group
 East-West Center (Pacific Energy Outlook)

3. Approaches in economic sectors:

INPUT: ISO - International Standards Organization
International Tropical Timber Organization (ITTO)
International Labor Organization (ILO)
UNIDO
CGIAR
World Bank
Regional Development Banks
FAO
IEA/OECD
UNEP/Industries Group
Voluntary Program results (for example, the U. S.
Electric Utility/ U. S. DOE Climate Challenge)
U. S. DOE National Laboratories
Technical Advisory Panels established under the
SBSTA

4. Broad market mechanisms, such as fiscal policies and emissions trading (including banking):

INPUT: IPCC/WGIII
UNCTAD
IEA/OECD
U. S. DOE Laboratories
Nongovernmental academic and consulting groups
including:

Data Resources Inc. (DRI)
Energy Modeling Forum
Resources for the Future (RFF)
Harvard Climate Project

5. Technological options for all greenhouse gas categories, source categories, and emissions categories:

INPUT: U. S. EPA methane studies
International Atomic Energy Agency (IAEA)
U. S. Committee on Renewable Energy, Commerce and
Trade (CORECT)
Nuclear Energy Agency (NEA)
IEA/OECD
UNIDO
U. S. DOE Clean Coal Program
U. S. DOE National Laboratories
IPCC/WGII (and former WGIII)

6. Environmental and socioeconomic impacts of climate change and mitigation actions, including effects on GDP, employment, trade and resource shifts (analysis of AOSIS, UK, German and other proposals under discussion by the AG/BM):

INPUT: U. S. EPA
U. S. DOE National Laboratories
OECD Green Model
IPCC/WGIII
IPCC Second Assessment
Nongovernmental academic and consulting groups
including:

Stanford Energy Modeling Forum
Yale University
MARKAL MACRO
Oxford Consulting
Jorgensen and Associates
Brookings Institute
University of Maryland Climate Change Program

7. Adaptation measures:

INPUT: WHO
UNEP
Global Biodiversity assessment
IPCC/WGII
Country Studies
FAO
Nongovernmental academic and consulting groups
including:

University of Maryland Climate Change Program
International Council of Scientific Unions
(ICSU)
National Academies of Science and Engineering
Carnegie Mellon University
Massachusetts Institute of Technology

Trends in Historic Emissions Indicators

The United States believes that effective action to control greenhouse gas emissions must consider greenhouse gas emissions trends and current circumstances and the underlying factors and indicators which influence them. Since the relative importance of various sources and underlying circumstances differs among countries, appropriate policy responses may also differ among countries. Consideration of these differences should therefore be an important element of analysis and assessment under the Berlin Mandate.

This submission contains some key points regarding historic emissions trends and indicators. We have also provided some references and sources for additional information.

- The 1992 Supplement to the IPCC Scientific Assessment highlights the relative importance of the various greenhouse gases and sources globally. While the developed countries and economies in transition account for the majority of energy-related CO₂ emissions, developing countries account for the majority of land-use related CO₂ emissions and a large proportion of other greenhouse gas emissions.
- The fact that the relative importance of the different greenhouse gas sources differs by region has important implications. Programs focused on energy-related CO₂ are not likely to reduce emissions of land-use related CO₂ or anthropogenic methane. Policies to mitigate greenhouse gas emissions must consider all sources and types of greenhouse gases.
- Energy-related CO₂ remains the single most important anthropogenic component of radiative forcing. The developed countries account for the bulk of energy-related CO₂ emissions over the past 60 years, although their proportion of global emissions over the past two decades has declined. Trends in economic growth and energy consumption further suggest that the biggest growth in future emissions levels will occur in developing countries.
- Countries differ markedly in terms of their energy and carbon intensity per unit of economic output. Even among OECD countries with comparable levels of economic development, there are significant differences in patterns of energy consumption and related carbon emissions. This demonstrates that factors other than aggregate economic activity and population growth are important components of energy-related carbon emissions.

- Various indicators illustrate and help describe the differences among countries in emissions trends. These include, inter alia, energy consumption per unit GDP (energy intensity), carbon emissions per unit GDP (carbon intensity), and energy consumption and carbon emissions per capita. Other factors which may differ significantly among countries are sectoral structure and activity, energy efficiency, fuel mix and fuel prices. Additionally, circumstances such as the existing policy and regulatory environment and the age and type of existing infrastructure and capital stock may also influence emissions.
- Assessment of the similarities and differences among countries of key emissions factors can provide insight into opportunities for emission reduction through technological improvement and sectoral approaches. Different circumstances among countries can also lead to substantial differences in the cost of reducing emissions.

Energy and Carbon Emissions in a World Context

The purpose of this section is to place the developing countries (defined throughout the report to include the current and former centrally-planned economies) and developed countries (members of the OECD) in a global perspective with regards to such indicators as: economic output; energy consumption; and energy-related carbon emissions.

Key findings of this section include:

- ✓ Since 1970, world economic growth rates have exceeded increases in energy use and energy-related carbon emissions. Between 1970 and 1992, world gross domestic product increased 85 percent, while energy use and carbon emissions rose 66 percent and 51 percent, respectively.
- ✓ Growth in world carbon emissions has been less than growth in energy consumption. This has resulted partly from the increased relative importance of noncarbon-emitting energy sources, primarily nuclear power, and partly from a switch away from coal and towards natural gas in the non-OECD.
- ✓ Economic growth has been slightly faster in developing than developed countries. OECD economies grew 83 percent between 1970 and 1992, compared to 88 percent in the non-OECD.
- ✓ Since 1970, energy use trends have differed markedly for developed and developing countries. Between 1970 and 1992, OECD energy consumption grew only half as fast as GDP; in contrast, energy consumption grew faster than GDP in the developing countries.
- ✓ Since 1970, electricity use (and associated carbon emissions) worldwide have increased faster than overall energy use and GDP. This trend has been especially pronounced in the developing countries.
- ✓ The OECD consistently used less energy to produce a unit of economic output than the rest of the world. In 1991, for instance, the OECD produced a unit of output using little more than half the energy required by the non-OECD.
- ✓ Nonetheless, developed countries, with 16 percent of world population as of 1992, accounted for 52 percent of world energy consumption. The OECD countries in 1992 consumed about six times as much energy per capita as the non-OECD countries. Between 1970 and 1992, however, non-OECD countries increased their share of world energy consumption from 39 percent to 48 percent.
- ✓ The developed countries as of 1992 accounted for about 48 percent of energy-related world carbon emissions. As with energy consumption, the OECD's share of world carbon emissions declined between 1970 and 1992 (from 57 percent to 48 percent), while emissions from the developing countries grew rapidly.
- ✓ Evolution of energy use and carbon emissions patterns in the developing countries towards patterns more like the developed countries is likely to have profound implications for world energy use and carbon emissions. If developing countries had consumed fossil fuels and emitted carbon at the same per capita rates as developed countries did in 1990, for instance, world fossil fuel consumption would have tripled, while world carbon emissions would have nearly tripled from actual levels.

WORLD
CONTEXT



G-7 Sectoral Analysis

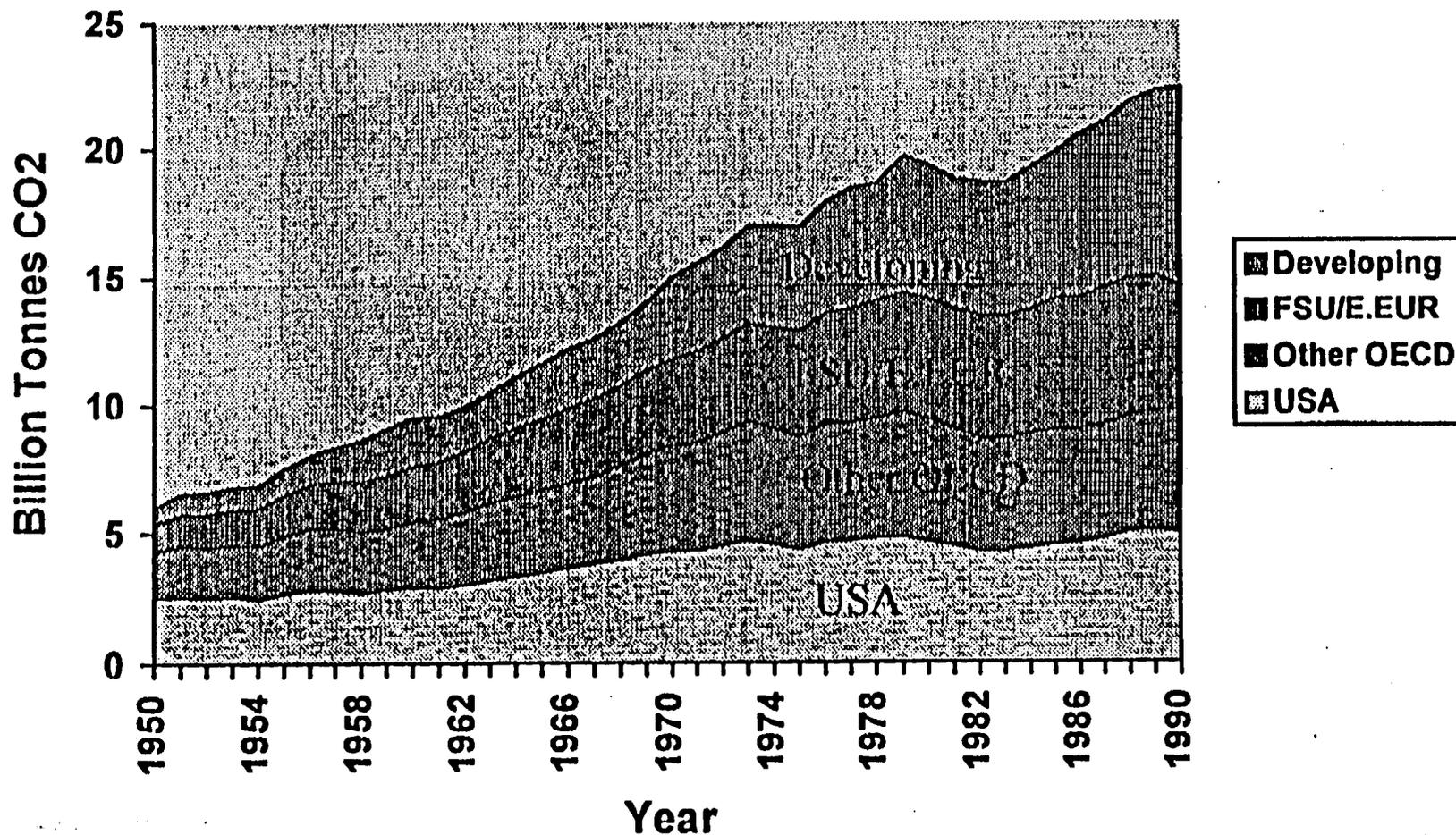
The purpose of this section is to provide information on structural differences among G-7 countries which help explain: 1) differences in energy consumption patterns within the G-7; and 2) changes in those patterns since 1970. To this end, the section will examine energy use patterns and trends in the major economic sectors (industrial, transportation, and residential/commercial, including services); as well as in electricity generation.⁶

Key findings of this section include:

- ✓ **The G-7 countries differ in their sectoral shares of national energy consumption.** The U.S. transportation sector, for instance, accounted in 1990 for 28 percent of U.S. energy consumption; in contrast, Japan's transportation sector accounted for only about 18 percent of Japan's energy use.
- ✓ **G-7 sectoral shares have changed over time.** Between 1970 and 1990, for instance, the transportation sector significantly increased its share of G-7 energy consumption, especially in Europe. During the same period, residential/commercial's share also increased throughout the G-7, particularly in Japan, while industry's share of total energy consumption declined throughout the G-7.
- ✓ **The G-7 countries differ in their energy use patterns within sectors.** In Canada and the United States, for instance, energy-intensive industries (such as paper and pulp, primary metals, and petroleum refining) in 1990 accounted for around 60 percent (or more) of total industrial energy consumption. In other G-7 countries, energy-intensive industries were relatively less important, and appear to have declined since 1970.
- ✓ **The G-7 countries differ in their lifestyles and living standards.** The average American, for instance, has a relatively larger home and more cars compared to citizens of other G-7 countries. Throughout the G-7, living standards (as measured by vehicles per person, appliance ownership, etc.) increased significantly between 1970 and the early 1990's.
- ✓ **The G-7 countries differ in their retail energy prices, primarily due to differences in their tax regimes.** Gasoline prices, for instance, ranged in 1992 from \$3.89 per gallon in Italy to \$1.13 per gallon in the United States. Average fleet efficiencies tend to be higher in those countries with higher gasoline prices.

1950-1990: Fossil Energy-Related CO2 Emissions

- 16 -



Source: ORNL (1994)

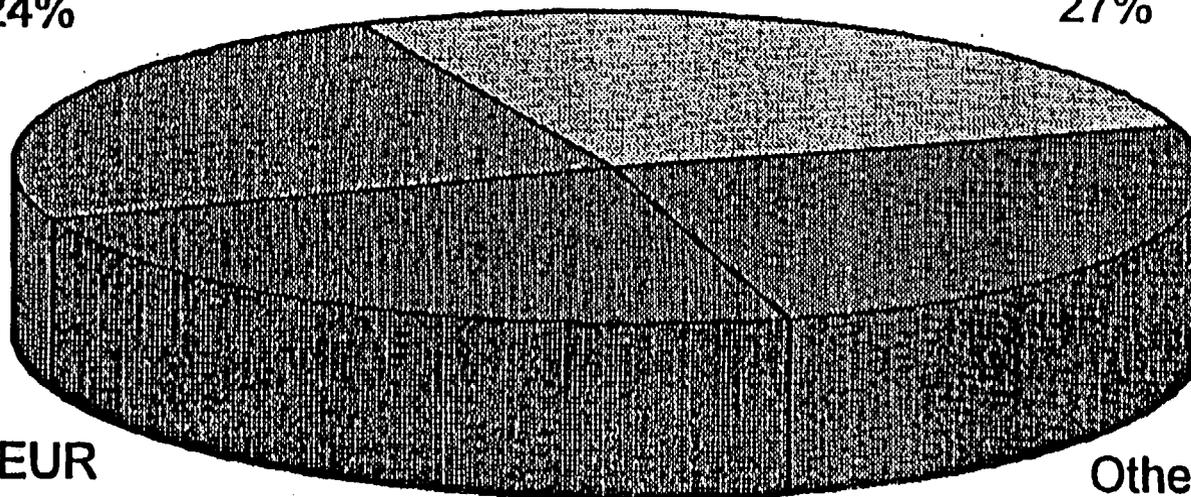


1950-1990: Cumulative CO2 Emissions Fossil Energy and Cement Production

Global Total: 159 Billion Tonnes CO2

Developing
24%

USA
27%



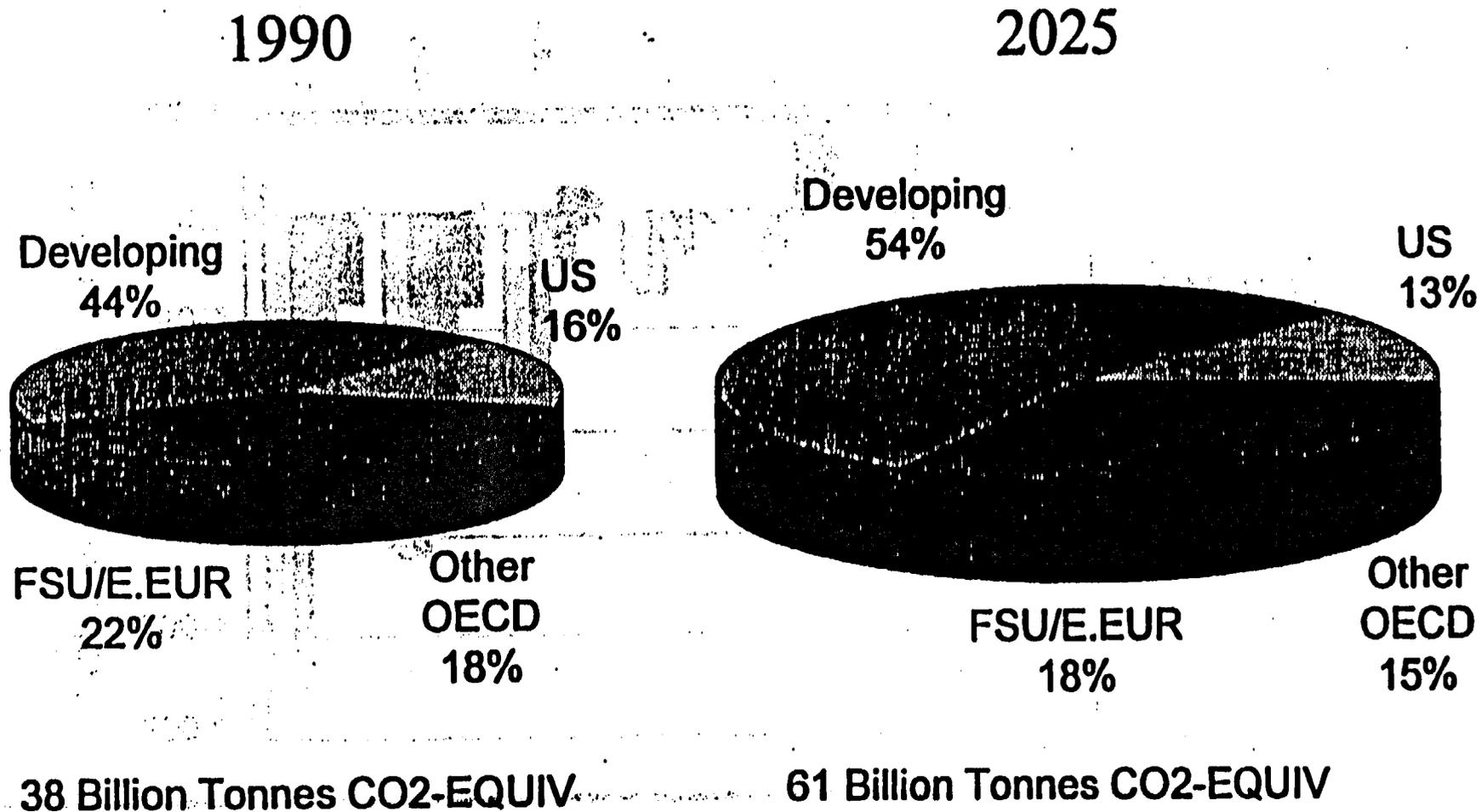
FSU/E.EUR
24%

Other OECD
25%

Source: ORNL (1994)



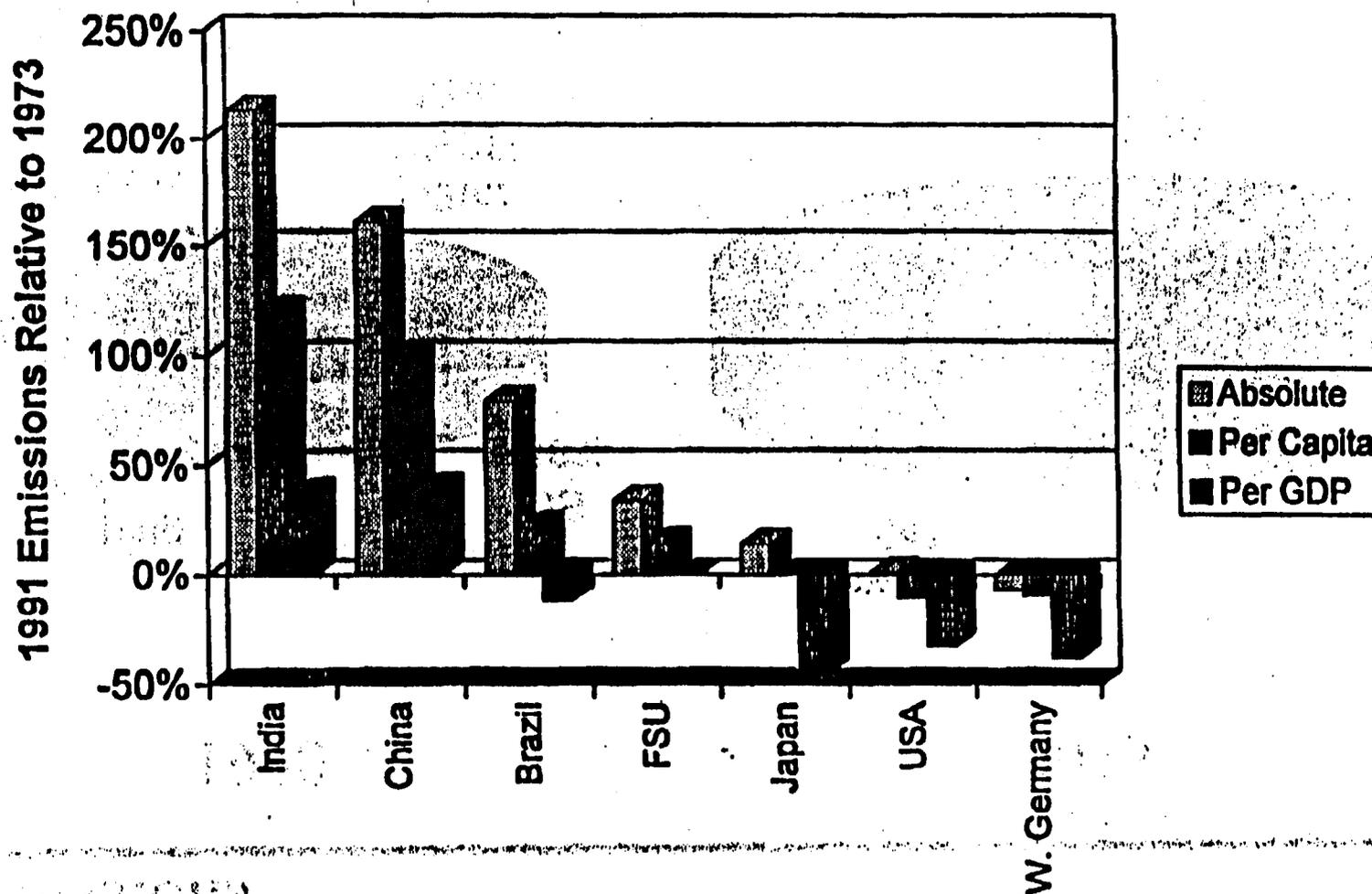
Projected Shift in Regional Allocation of Total Emissions



Source: IPCC (1992)



Percentage Change in CO2 Emissions Between 1973 and 1991

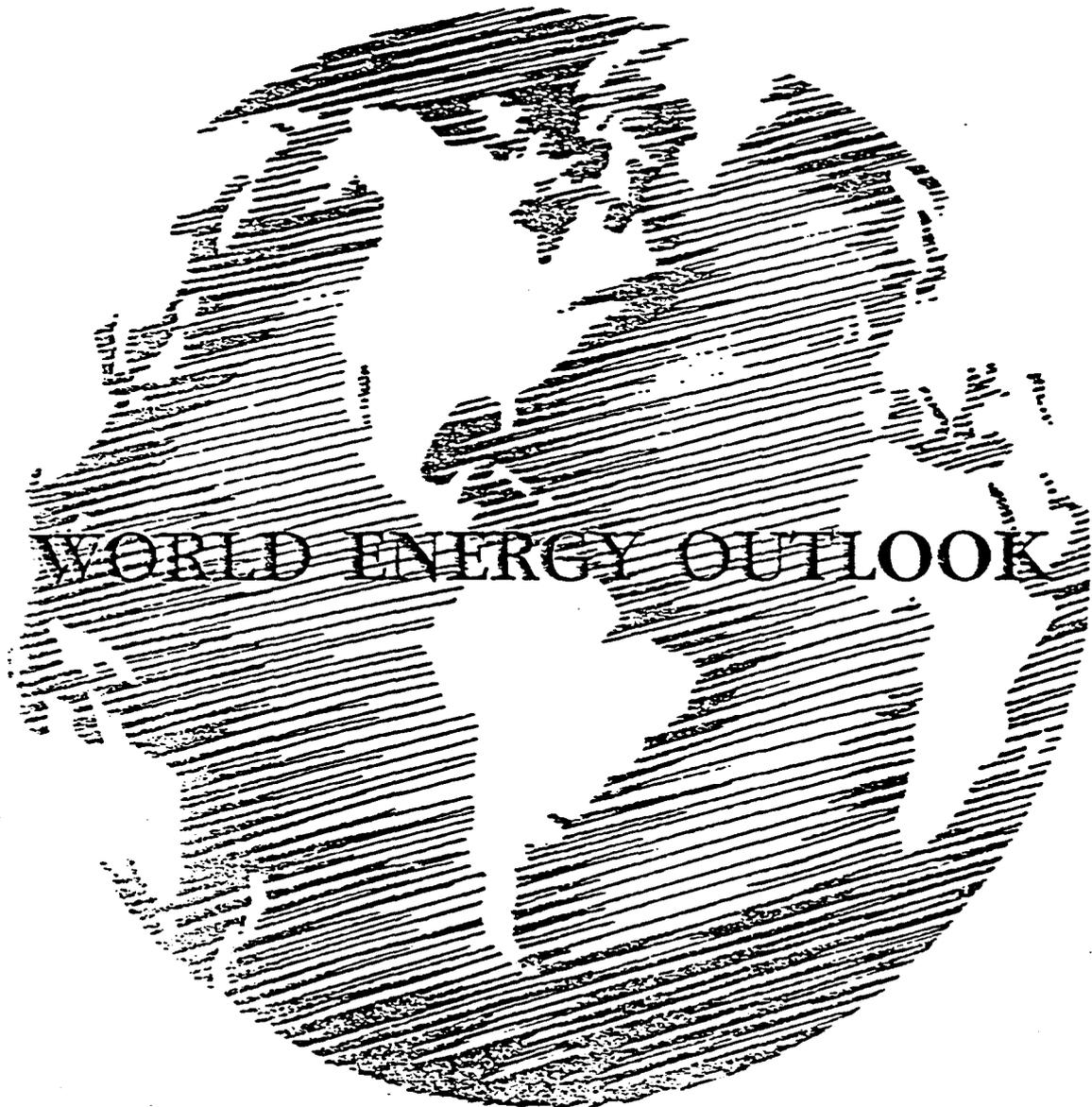


Source: LBL 1995 Analysis of Energy Data ("Other Industry" and "Petroleum Refining" are excluded)





INTERNATIONAL ENERGY AGENCY



**1995
EDITION**

1.1. Historical Trends

According to IEA data, world carbon emissions excluding FSU/CIS (where reliable data are not available for the whole period) grew by 2.1 per cent per annum from 1971 to 1992. Over the same period, energy use grew by 2.5 per cent per annum on average, implying an average annual improvement in carbon intensity per unit of energy of about 0.4 per cent.

Table 2.1: Average Annual Increase in Energy Demand and Energy-Related CO₂ Emissions (% p.a.)

	1971 to 1992		1992 to 2010			
	Energy	CO ₂	CC		IS	
	Energy	CO ₂	Energy	CO ₂	Energy	CO ₂
OECD	1.5	0.8	1.2	1.1	0.8	0.5
ROW	5.5	5.3	4.2	4.1	3.9	3.8
World (ex FSU/CIS)	2.5	2.1	2.4	2.4	2.0	2.0
FSU/CIS	1.9	0.6	0.6	0.5	-0.1	-0.3
World	2.4	1.7	2.1	2.1	1.7	1.6

The significant difference between the growth rates of CO₂ emissions and energy consumption in the OECD over the period 1971 to 1992 arose due to the substantial growth of nuclear power. The share of nuclear power in total primary energy rose from less than 1 per cent in 1971 to over 10 per cent in 1992 or, in terms of its contribution to the electricity output mix, from 2.8 per cent to 23.5 per cent. Over the outlook period, nuclear power is expected to increase by only 0.8 per cent per annum and to lose share in the primary energy fuel mix. Consequently, *ceteris paribus*, the evolution of CO₂ emissions will follow energy demand much more closely than in the past. If an alternative measure of primary energy demand were chosen, one that does not weight nuclear power so heavily,¹ primary energy consumption grew by only 2.1 per cent per annum from 1971 to 1992, much closer to growth in carbon emissions.

In the OECD, energy intensity improved by 1.3 per cent over this period implying a reduction in carbon per unit of GDP of approximately 2 per cent per annum. In ROW, over the same period, energy intensity rose by an average of 1.1 per cent per annum implying an increase in carbon

1. See Appendix 2 for a brief description of primary energy accounting and tables of primary energy compiled on such a basis.

intensity per unit GDP of about 0.9 per cent.² By 1992, OECD carbon emissions per unit GDP measured at purchasing power parities were about 5 per cent less than those of the ROW countries.

If population is taken into account, however, there is a marked difference between the two regions. The OECD emits nearly seven times as much carbon per capita as the ROW countries. This ratio is projected to fall to between four and five over the outlook period.

1.2. The Outlook for Energy-Related CO₂ Emissions

As shown in Table 2.2, global energy-related CO₂ emissions in 2010 are projected to grow by over 40 per cent over their 1990 level under the *Capacity Constraints (CC)* case and by about 30 per cent in the *Energy Savings (IS)* case. Most of the increase in emissions is expected to occur in ROW, where CO₂ emissions are projected to more than double under each case. In the OECD countries, CO₂ emissions in 2010 will exceed their 1990 level by almost 24 per cent in the CC case and by over 11 per cent in the IS case.

In both cases, growth in CO₂ emissions in the OECD is highest in the Pacific region. Japan accounts for 80 per cent of the region's primary energy demand and for three quarters of its CO₂ emissions. Developments in Japanese energy demand and changes in its fuel mix are, therefore, of greatest significance for the region's emission levels. The relatively large increase in emissions can be explained by the growing share of solid fuels in total primary energy in Japan. In fact, the increase in emissions would be even greater without the expected large increase in nuclear power. European emissions rise almost in line with total energy demand. The increase in the share of natural gas, which should reduce the growth in emissions in OECD Europe, is offset by the assumed reduction in the share of nuclear power. In North America, like Europe, increased gas penetration compensates for the falling share of nuclear power and emissions grow roughly in line with energy demand.

The highest increase in CO₂ emissions is expected to occur in ROW, where emissions will increase from 6 billion tonnes of CO₂ in 1990 to around 13 billion tonnes in 2010. By the end of the projection period, therefore, ROW countries will become slightly larger emitters of CO₂ than the OECD and will account for nearly 45 per cent of the world total. The major reason for the increase in ROW share is the much faster energy demand growth in these countries, more than three times the growth rate in the OECD.

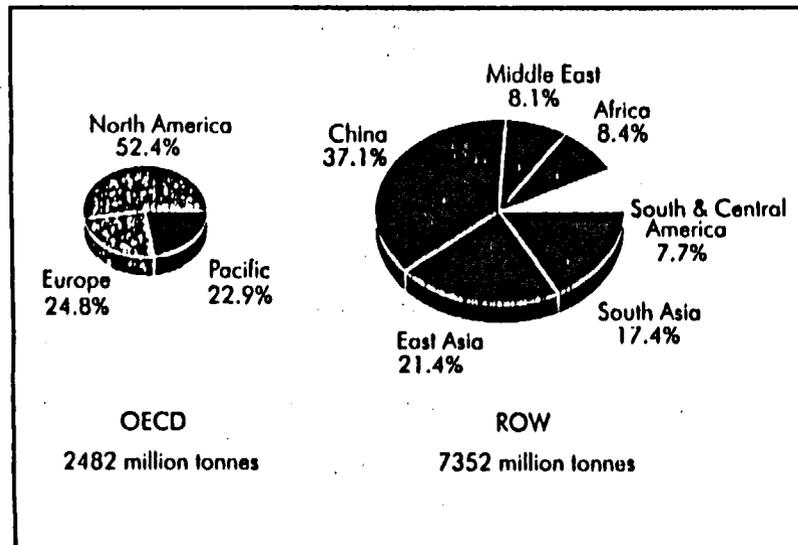
2. One factor influencing these trends is the relocation of the iron and steel industry, an issue discussed in detail in Section V of this chapter.

Table 2.2: World Carbon Dioxide Emissions
(billion tonnes of carbon dioxide)

	1990	2000		2010	
		ES	CC	ES	CC
OECD	10.4	11.1	11.6	11.6	12.9
North America	5.6	6.0	6.4	6.2	6.9
Europe	3.4	3.5	3.6	3.7	4.1
Pacific	1.4	1.6	1.6	1.7	1.9
FSU/CEE	5.2	3.3	3.5	3.8	4.4
ROW	6.0	8.8	8.9	12.8	13.4
China	2.4	3.5	3.5	5.1	5.1
East Asia	0.9	1.6	1.6	2.3	2.5
South Asia	0.7	1.1	1.1	1.8	2.0
Other	2.0	2.6	2.7	3.6	3.8
World	21.6	23.2	24.1	28.2	30.7

Rounding may cause totals to differ from the sum of individual components.

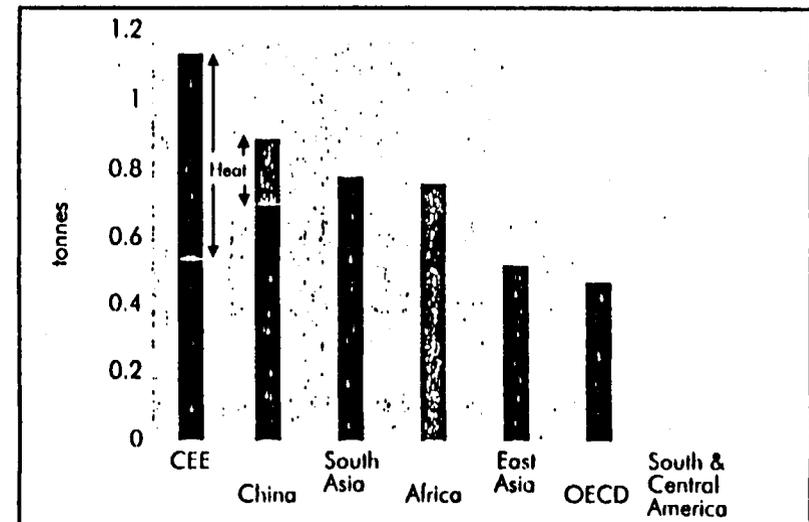
Figure 2.1: Increase in Annual CO₂ Emissions, 1990-2010
Capacity Constraints Case



It is interesting to note that, on the basis of the projections presented here, India and China alone account for a larger amount of the increase in emissions between 1990 and 2010 than do all OECD countries combined, as illustrated in Figure 2.1. Moreover, these two countries will account for over 50 per cent of ROW emissions by 2010. What makes this comparison impressive is that, in 1990, China and India accounted for less than one third of the level of total OECD emissions.

The major fuel for power generation in two of the fastest growing non-OECD countries, India and China, is coal, the most carbon intensive of the fossil fuels. In 1992, coal accounted for around 74 per cent of total electricity generation in China, while, in India, it accounted for almost 72 per cent. As illustrated in Figure 2.2, CO₂ emissions per TWh of electricity generated in China and South Asia are among the highest in the world. It is often difficult to separate inputs to heat generation from those to electricity generation. If allowance is made for heat generation on the basis of output shares, the CO₂ emissions per TWh for regions with a large amount of cogeneration, i.e., China and CEE, are much reduced.

Figure 2.2: CO₂ Emissions per TWh of Electricity Generated, 1992



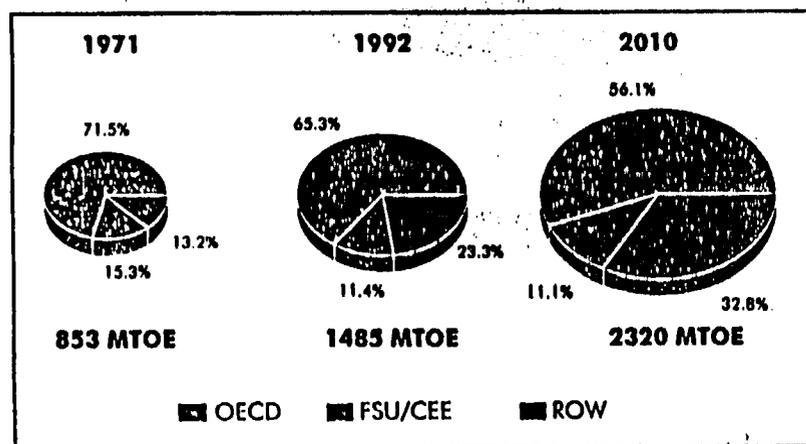
In the absence of the assumed ongoing improvements in the efficiency of power generation in the ROW countries, their combined growth in emissions would be even faster. One obvious implication is that

speed. Short trips from cold start are far more fuel intensive than trips with the engine warm. Declining average vehicle occupancy rates often lead to an increase in transport energy intensity. US data indicate a steady decline of the occupancy rate of passenger cars from 2.08 in 1966 to 1.58 in 1992.¹⁷

II.2. Regional Variation in Transport Fuel Consumption

Over the past twenty years, total world transport sector energy consumption has grown by 2.7 per cent per annum. Within the OECD, growth was the slowest in North America, reflecting its relative high degree of saturation in the transport sector.

Figure 7.4: Transport Sector Energy Consumption



Growth in ROW was more than twice the rate in the OECD. Within ROW, growth was exceptionally high in the Middle East and China. During the 1980s, total transport energy demand in South Korea grew, on average, by more than 14 per cent per annum and is now more than seven times its 1971 level. During the 1970s, growth was very high in Mexico and the Middle East and, although, growth slowed substantially during the 1980s, the composite growth rates from 1971 to 1992 were still quite high, at 5.9 and 9.6 per cent per annum respectively.

World transport energy demand is expected to grow by 2.5 per cent per annum over the outlook period. Average growth in transport sector energy demand is expected to be 1.6 per cent in the OECD, 2.4 per cent in

17. U.S. Department of Transportation (1995).

FSU/CEE, and 4.5 in the ROW, from 1992 to 2010. The highest growth is projected for South Asia, at more than 6 per cent annually, and the lowest for North America, at 1.5 per cent. As in the past, within the OECD, the highest growth rate is in the Pacific region, at 2.1 per cent. Compared with the historical trends, growth over the outlook period will be slower in all the regions, with the exception of South Asia and CEE/FSU.

Table 7.1: Transport Energy Demand Growth Rates (% p.a.)

	1971-1992		1992-2010		
	Total Transport		Gasoline	Diesel	Aviation Fuels
North America	1.6	1.5	0.9	2.3	2.6
Mexico	5.9	3.2	3.0	3.0	5.2
OECD Pacific	3.8	2.1	2.1	2.1	2.3
OECD Europe	3.0	1.7	1.1	2.1	2.9
OECD	2.2	1.6	1.1	2.2	2.7
FSU/CEE	1.2	2.4	2.7	2.6	2.3
South America	3.2	3.3	3.6	3.4	2.9
Brazil*	4.1	3.4	4.5	3.7	3.3
Africa	3.6	3.4	3.4	3.5	3.2
South Africa	1.6	3.2	3.2	3.3	2.8
Middle East	9.6	2.9	2.8	3.0	3.0
East Asia	6.5	5.7	5.7	6.1	5.9
South Asia	3.6	6.1	7.4	6.5	4.3
China	11.8	5.4	6.4	7.9	8.7
ROW	5.5	4.5	4.6	5.0	4.6
World	2.7	2.5	2.1	3.3	3.1

* Data for gasoline does not include alcohol.

Of the principal road transportation fuels, demand for diesel fuel, in all the regions except Mexico, showed the highest growth rate from 1971 to 1992. Diesel is expected to continue to be the fastest growing fuel over the outlook period, with projected growth of 2.2 per cent in the OECD (compared to 1.1 per cent for gasoline), 5.0 per cent in the ROW (4.6 per cent for gasoline) and 3.3 per cent for the world as a whole (2.1 per cent

Illustrative List of Reference Materials for
Historic Emissions Trends and Indicators

"Energy Use and Carbon Emissions: Some International Comparisons," Energy Information Administration, Office of Energy Markets and End Use, U.S. Department of Energy.

"Energy Use and Carbon Emissions: Non-OECD Countries," Energy Information Administration, Office of Energy Markets and End Use, U.S. Department of Energy.

"Trends 93: A Compendium of Data on Global Change," Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, 1994.

"International Anthropogenic Methane Emissions: Estimates for 1990," U.S. Environmental Protection Agency, Office of Policy, Planning and Evaluation, 1994.

"CO2 Emissions from Developing Countries: Better Understanding the Role of Energy in the Long Term, Volume I: Summary," J. Sathaye and A. Ketoff, Lawrence Berkeley Laboratory Applied Science Division, 1991.

"Energy Efficiency, Developing Nations and Eastern Europe: A Report to the U.S. Working Group on Global Energy Efficiency," M. Levine, et al., June 1991.

"Emissions Scenarios for the IPCC: An Update," documentation in support of Chapter A3 of "Climate Change 1992: The Supplementary Report to the IPCC Scientific Assessment," Cambridge University Press, 1992.

25 October 1995

ENGLISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Ad Hoc Group on the Berlin Mandate
Second session
Geneva, 30 October - 3 November 1995

IMPLEMENTATION OF THE BERLIN MANDATE

Comments from Parties

Note by the secretariat

Addendum

In addition to the submissions already received and contained in document FCCC/AGBM/1995/MISC.1 and Add.1, contributions have been received from Nigeria, Spain and Switzerland.

These submissions are attached, and, in accordance with the procedure for miscellaneous documents, are reproduced in the language in which they were received and without formal editing.

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PAPER NO. 1: NIGERIA

UN FRAMEWORK CONVENTION ON CLIMATE CHANGE: SUBMISSION OF THE NIGERIAN DELEGATION TO THE OCTOBER/NOVEMBER 1995 MEETINGS

1. IMPLEMENTATION OF THE BERLIN MANDATE

The basic elements of the Berlin Mandate recognises the lead role of developed countries in its implementation. But any actions taken to combat climate change should not have adverse economic effect on developing countries considering current global interdependency. It should be understood that actions to mitigate greenhouse gas emissions may also reduce economic growth in developed countries a situation that is most likely to have an adverse effect on developing economies. The implementation of the economic development of all parties.

In view of the foregoing, the process of implementation should commence with the collation and shortlisting of existing studies which are relevant to greenhouse gas emission. They should be those that investigate the emission of these gases by economic sectors, sources and sinks with respect to their environmental, economic, social and technological implication. Having identified existing work, further studies in areas deemed not to have been adequately covered could then be initiated. The combination of all findings should form the basis for determining standards for evaluating climate change in any country party and their linkage effect to other countries.

This initial first step will require the involvement of IGOs and NGOs that are involved in aspects of climatic change studies. The studies and reports to be evaluated must, among others, identify the contribution of all sectors of human activity to climate change, through the use of physical and/or simulated models to elucidate all possible climate change scenarios and possible mitigating actions to be taken. The provision of data by all country parties is therefore essential if the task must be accomplished.

But as was evident at the last meetings of AGBM, SBSTA and SBI, finance was a major constraint to the participation of developing countries. Some countries could not send a delegation. Even where one was sent, the delegation was made up of only one person who was required to participate in the AGBM, SBSTA & SBI. The meetings of SGBM, SBSTA and SBI must however attract different expertise of party representatives. A situation where the same persons participate in political, economic and technical issues will be retrogressive.

Similar problems would affect the effective contributions of NGOs, and IGOs of developing countries, Funds must therefore be made available by the more endowed countries if the process of implementation must progress. As most IGOs are established to advance the economic goals of their respective member countries, their views on issues are fundamental to the implementation of the Berlin Mandate.

AD HOC GROUP ON THE BERLIN MANDATE

FIRST SESSION

GENEVA, 21-25 AUGUST 1995

STATEMENT BY THE REPRESENTATIVE OF SPAIN

ON BEHALF OF THE EUROPEAN UNION

ON ITEM 3(C):

ANALYSIS AND ASSESSMENT

GENEVA, 22 AUGUST 1995

Thank you Mr Chairman.

It is a great honour for me, as representative of Spain, to take the floor today on behalf of the European Union. First of all, I would like to congratulate you, Mr Estrada, for your election as Chairman of this Group and to thank through you the Secretariat for the prompt organization of the first meeting of the Berlin Mandate Group.

Berlin has led to a balanced compromise on the steps to be taken in relation to the period after the year 2000. The text of the Berlin Mandate which was accepted by all participants must be the starting point of our future work. The European Union is confident that all negotiators will keep the spirit of the Berlin meeting and work cooperatively in order to make as much progress as possible at this session of the Ad hoc Group.

Our task is clear: we do have to negotiate a protocol or another legal instrument, including the strengthening of the commitments of the Parties included in Annex I to the Convention in Article 4, paragraphs 2(a) and (b), as early as possible in 1997 with a view to adopting the results at COP3.

The European Union sees the work of this Group as concentrating on three elements, as set out in paragraphs 2(a) and (b) of the Berlin Mandate. These three elements are:

- elaboration of policies and measures for Annex I parties;
- setting of quantified limitation and reduction objectives within specified time-frames for Annex I Parties;
- reaffirmation and continued advancement of the implementation of existing commitments of non-Annex I Parties

taking into account the further provisions in paragraphs 2(c) to (f) and 3 to 5 of the Mandate.

The European Union recognizes the importance of the work of this Group. The suggested programme of work offers the important elements for the process until COP2 as well as until COP3.

With reference to point 3(c) regarding Analysis and Assessment, the European Union recalls that the early stage of the process, as stated in the Berlin Mandate, will not only include an analysis and assessment but will also include negotiations in parallel. The output of the analysis and assessment has to be taken into account during the process of the negotiations; the European Union would also recall the sixth decision of COP1, on the subsidiary bodies established by the Convention, which states in its paragraph (a) that "The SBSTA will be the link between the scientific, technical and technological assessments and the information provided by competent international bodies, and the policy-oriented needs of the Conference of the Parties".

For these reasons, the European Union suggests that during the process of AGBM work, as soon as possible policies and measures, and possible impacts and results regarding to the time horizons, are identified on the basis of compilations of available material as offered by the Secretariat in the document AGBM/1 paragraph 20. For more specific information, AGBM can ask the SBSTA and any technical advisory panels to provide additional assessment and analysis, as well as SBI to provide material with respect to its review of the national communications, in order for those to be input in further process of negotiations.

With respect to the questions raised under item 18 of document AGBM/1, I have the following comments:

The analysis and assessment of policies and measures serves the purposes of delivering the appropriate information and creating a common picture of what possible policies and measures for Annex I Parties there are and what will be their possible impact. The aspects to be analyzed and assessed, therefore, should be relevant to the eventual application and implementation.

For measures, an array of aspects should be taken into account in any decision concerning application and implementation. As important aspects in this context we consider:

- environmental impacts on climate change/greenhouse gas emissions;
- other environmental impacts;
- technical/technological aspects;

- economic and market aspects;
- social and financial aspects;
- institutional and legislative aspects.

Especially in those cases where existing experience of Parties for those promising measures can add valuable information on those aspects, this could be actively sought for.

This analysis and assessment process should result in the following outputs on the basis of, inter alia, national communications and in-depth reviews:

- assessment of the objectives/results which might be achieved by policies and measures;
- identification of which policies and measures appear to be successful or have the potential to be successful;
- determination of policies and measures which might be appropriate for coordinated action.

In particular, in those areas where international coordination is called for in view of concerns such as competitiveness, priority should be given to those aspects related to policies and measures which ask for international coordination:

- measures subject to competitiveness concerns;
- measures concerning globally oriented industrial sectors;
- measures in sectors where decisions may have long-term adverse effects on climate change;
- measures relating to tradable products.

We look forward to the findings of the IPCC's Second Assessment Report to provide further advice on which to base quantified limitation and reduction objectives.

PAPER NO. 3: SPAIN (ON BEHALF OF THE EUROPEAN COMMUNITY)

AD HOC GROUP ON THE BERLIN MANDATE

FIRST SESSION

GENEVA, 21-25 AUGUST 1995

STATEMENT BY THE REPRESENTATIVE OF SPAIN

ON BEHALF OF THE EUROPEAN UNION

ON ITEM 3 (D):

REQUEST FOR INPUTS TO SUBSEQUENT SESSIONS OF THE AGBM

GENEVA, 23 AUGUST 1995

Thank you, Mr Chairman.

Spain, on behalf of the European Union, would like to contribute to item 3(d) of the agenda - Requests for inputs to subsequent sessions of the AGBM - with a response, in tabular form which is being distributed now.

This table classifies the inputs to the AGBM negotiating process according to:

- policies/measures
- objectives/time horizons
- advance of the implementation of existing commitments as established in Article 4.1

and to the bodies to consider those inputs.

The table also provides proposed deadlines for the presentation of these inputs to the AGBM sessions.

Inputs into AGBM negotiating process, bodies to consider those inputs and proposed timetables.

	Policies/ measures	Objectives/time horizons	Advance implementation existing commitments art 4.1
SBSTA	<ul style="list-style-type: none"> * Summary of recommendations on 2nd IPCC report (CP6/annexI/A.1. a) 3rd session AGBM * Assessment of effect of measures already taken (from synthesis report and in-depth reviews) (CP6/annexI/A.1. b) 5th session AGBM * Identification of innovative, efficient and state-of-the-art technologies/ know how (CP6/annexI/A.3) 3rd session AGBM * Sector specific analyses from Panels, inter alia, in areas mentioned in the EU Council conclusions as submitted to the COP-1 by the French Presidency. 3rd session AGBM 	<ul style="list-style-type: none"> * Summary of recommendations on 2nd IPCC report (CP6/annexI/A.1. a) 3rd session AGBM * Compilation/ synthesis of information on global situation from IPCC and others 3rd session AGBM 	<ul style="list-style-type: none"> * [Progress report on] available national communications (NC's) from non-Annex I Parties 5th session AGBM * Identification of innovative, efficient and state-of-the-art technologies/ know how (CP6/annexI/A.3) 5th session AGBM

SBI	<ul style="list-style-type: none"> * Assessment of in-depth review reports on NC's from Annex-1 (CP6/annexI/B.1) 5th/6th session AGBM * 2nd synthesis report on NC's from Annex-1 5th session AGBM * Assessment of overall aggregated effect of steps taken in light of Convention objective (CP6/annexI/B.2) 3rd/4th session AGBM 		<ul style="list-style-type: none"> * [Progress report on] available national communications from non-Annex-1 Parties 5th session AGBM
AGBM Existing work:	<ul style="list-style-type: none"> * Annotated compilation of existing technical and economic information: <ul style="list-style-type: none"> - OECD/IEA common actions study - IEA/ETSAP study - UNEP/Riso costing studies - European Commission policy options working paper - 1st synthesis report on NC's - other (Secr: AGBM/1 para 20) <ul style="list-style-type: none"> - Elements of the March EU Council conclusions, as submitted to the COP-1 by the French Presidency 2nd session AGBM * Compilation of MISC submissions (Secr: AGBM/1 para 20) 	<ul style="list-style-type: none"> * Annotated compilation of existing information regarding objectives/time horizons: <ul style="list-style-type: none"> - AOSIS proposal - German elements - NGO proposals - other 2nd session AGBM * Compilation of MISC submissions (Secr: AGBM/1 para 20) 	<ul style="list-style-type: none"> * Progress report on available NC's from non-Annex-1 Parties by the Secretariat 5th session AGBM

<p>AGEM Further work ^(*)</p>	<ul style="list-style-type: none"> * Additional analysis of potential policies/measures * Results of analysis using bottom-up approaches such as Integrated Assessment Models 	<ul style="list-style-type: none"> * Assessment of possible objectives/time horizons and their consequences for the path towards achieving ultimate objective (art 2) * Assessment of possible cost-effective GHG limitation and reduction strategies and cost minimization methods * Assessment of feasibility of "second order objectives" * Results of analysis using top-down models 	
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^(*) The 2nd session of the AGEM should specify the necessary work and indicate who will undertake it and set deadlines.

SETTING LIMITATION AND REDUCTION OBJECTIVES FOR THE PERIOD BEYOND 2000

The Berlin Mandate process aims, inter alia, to set quantified limitation and reduction objectives after the year 2000 for greenhouse gas emissions from Annex I Parties, *"taking into account the differences in starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort"*.

The ability to reduce carbon dioxide emissions cost-effectively differs significantly from one country to another. For a given emission reduction objective, some countries have a greater number of low cost opportunities than others. Differences in marginal abatement costs are closely linked to national circumstances such as per capita emission levels, structure and efficiency of energy production and use, and GDP-related factors.

In order to reflect these differences and secure an equitable share of the effort among Annex I countries, different emission reduction objectives should be assigned to different categories of countries. Such categories would be defined on the basis of appropriate and agreed criteria, which should be based on combined and appropriately weighted indicators such as per capita emissions, GDP, share of global emissions, carbon intensity of primary energy use, and marginal abatement costs.

To illustrate this point, we can use as an example a simple categorisation based on per capita emissions of energy-related carbon dioxide: countries would be grouped in categories based on increments of, say, 5 tonnes of CO₂ per capita. To each of these categories would be assigned different quantitative emission reduction objectives between 2000 and 2020 based on 1990 levels, starting, for the first category, with an emission cap (i.e. stabilisation at 1990 levels beyond the year 2000).

Based on the provision of article 4.2(a) of the Convention concerning the possibility for Parties to implement policies and measures jointly and to assist other Parties in contributing to the achievement of the objective of the Convention, countries in a given category or across categories could choose to form clusters, combining their emission reduction objectives and sharing the costs and benefits of achieving them. A number of theoretical studies applied to Annex I countries suggest that significant cost savings can be achieved in this way.

We propose that the AGBM request the Secretariat to prepare, for consideration at the third session of the AGBM, a document which analyses in detail the various indicators to be used for the definition of suitable and objective criteria and the different options for grouping countries in different categories, taking into account the relevant literature.

2 November 1995

ENGLISH/SPANISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Ad Hoc Group on the Berlin Mandate
Second session
Geneva, 30 October - 3 November 1995

IMPLEMENTATION OF THE BERLIN MANDATE

Comments from Parties

Note by the secretariat

Addendum

In addition to the submissions already received and contained in document FCCC/AGBM/1995/MISC.1 and Add.1 and 2, the secretariat has received additional submissions from Canada, Denmark, Iceland, the Philippines (on behalf of the Group of 77 and China) and Spain (on behalf of the European Community). The secretariat has also received the English version of the submission by France contained in document FCCC/AGBM/1995/MISC.1/Add.1 and the Spanish version of the submission by Spain (on behalf of the European Community) contained in document FCCC/AGBM/1995/MISC.1/Add.2.

These submissions are attached and, in accordance with the procedure for miscellaneous documents, are reproduced in the language(s) in which they were received and without formal editing. Any further submissions will be issued in another addendum.

FCCC/AGBM/1995/MISC.1/Add.3

GE.95-64147

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PAPER NO. 1: CANADA

Letter dated 1 November 1995 from the Chairman, Annex I
Experts Group on the UNFCCC to the Executive Secretary

On behalf of the Annex I Experts Group on the Framework Convention on Climate Change, we are pleased to submit the following document "Draft Framework for Assessment and Analysis of Common Actions". This document represents work in progress that will be subject to revision once Annex I Parties have had an opportunity to fully consider its contents. In addition, several Annex I Parties wish to consult with interested groups outside of the government for their comments.

Noting the Chair's and Secretariat's desire to move forward on these matters, this interim document is presented to provide useful input into the AGBM process at this point in time. However, Annex I Parties would like to emphasise that future inputs to the AGBM would need to go through a full review process as described in our intervention at the second session of the AGBM on 30 October.

It is our expectation that a revised version of this document will be submitted to the AGBM at its third session. We regard this framework for analysis as a living document that will continue to evolve as the work on the analysis of common actions progresses.

(signed)
Douglas Russell
Chair, Annex I Experts Group on the FCCC

Draft Framework for Assessment and Analysis of Common Actions¹

Progress Report on the Common Action Study

Annex I Expert Group on the Framework Convention on Climate Change

Interim Report to AGBM2

Overall goal

The goal of the common action study is to broadly assess the relative potential of a range of policies and measures for common action by countries² and Parties listed in Annex I to the FCCC with a view to bringing forward this analysis to the Ad Hoc Group on the Berlin Mandate.

Context

A description of sectoral emissions trends and sectoral policy trends will be given where appropriate to set the context for assessment of each measure. The revised framework below provides the full range of information desired for broad assessment of selected measures. It may not always be possible to adhere to the framework fully as at times it may be beyond the resources of the project to find all of the necessary information (for example if modelling studies are needed).

Policy objectives

A brief description of the various policy objectives to which the measure is expected to contribute will be given. Policy objectives will not necessarily be primarily or wholly climate related, and can be expressed at various levels of specificity, and may vary from country to country.³

Approach and methodology

A brief description will be given of the approach used to assess the measure, and general methods used e.g. survey of the literature, modelling, or analysis based on estimates and expert judgement. In

¹ The range of definitions for common action includes the following:

- common actions could be specific policies and measures implemented by a group of countries together under some form of agreement, to increase the effect of the measure;
- common actions could involve co-ordination of action to implement the same or similar measures together;
- common action could be an agreement to take actions in a sector towards a given aim or target; or
- common action could simply be successful policies and measures that could be replicated by other Parties.

² Where this document refers to "countries" or "governments" it is also intended to include "regional economic organisations," if appropriate.

³ For example policy objectives for the measure "voluntary agreements with electricity utilities to purchase more wind energy" could be:

- reduced CO2 emissions from energy (a general objective); or
- increased share of wind energy in electricity supply (a more specific objective); and
- greater diversity in electricity supply (a non-climate objective).

addition, methods used for specific aspects of the analysis such as the costs and effects of the measure will be described in those sections of the report, as indicated below.

Full Description of Measure

Each measure will be described as specifically and concretely as possible. This description will include information about any "package" the measure is part of - that is other measures that are associated with the measure being studied. The more carefully specified the measure, the more useful the analysis of its costs, effect, and other key criteria will be. The description will include the following information, where relevant, including a range of implementation options (e.g. how it is implemented, when it is implemented):

- A. level/rates at which it is applied;
- B. products/activity the measure applies to;
- C. extent and type of commonality;
- D. whether it is mandatory/voluntary;
- E. monitoring and enforcement details;
- F. other measures that are necessary or desirable for the success of the action;
- G. options for how any revenue is used;
- H. any incentives for compliance.

Rationale for common action

A brief description of ways the measure could be implemented will be given, including variations on the extent and type of commonality, to provide insights on the relative advantages and disadvantages of common action. Examples will be given of how the measure might be implemented at various: broad scale level, by all Annex I Parties, by a sub-set of countries; or as a national measure. The extent and type of commonality addressed will depend on what levels are feasible for the measure.

Analysis on how the measure performs at different levels of is important, but may be conceptual rather than quantitative if information is not readily available. The ideas about how the measure might be implemented and how effective it could be, with respect to the extent and type of commonality, are more useful than trying to provide uncertain numbers. Some possible advantages/disadvantages from common action are:

- A. changes in relative competitive advantage of an industry or the economy;
- B. increase/reduction in trade distortions, reduction in free-riding;
- C. greater collective effect if co-ordinated;
- D. measure may not be undertaken otherwise;
- E. reduce "leakage" of emissions (e.g. from industries moving off-shore);
- F. lower cost;
- G. lower barriers;
- H. increased political feasibility.

Possible participants and vehicles for action

Options for possible participants will be suggested for the measure, including consideration of the extent and type of commonality as described in the previous section. In many cases, measures will be implemented by governments; in other cases through private sector participants. Measures could also involve private sector participation or public/private partnerships.

Options for vehicles for action will be given considering variations on the extent and type of commonality. In some cases governments might achieve a policy objective directly through the instruments available to government. Even if industry or local government are to be the main implementers of the measure, governments may still need to harness their input through negotiating voluntary agreements, providing information on the benefits of the action, or passing a law requiring action. In these cases, the vehicle for their action needs to be clearly specified (e.g. business consultative mechanism, business partnerships through industry associations, twin city agreements by municipal governments). In some cases, the measure could be carried out by either government or non government participants or both, with each scenario involving different vehicles for action. Vehicles could be existing and/or new institutions that could be used to implement the measure. Examples of vehicles are:

- A. International organisations eg IEA implementing agreements on energy efficiency partnerships;
- B. Co-ordinating body eg International Organisation of Standardisation (ISO 14000 project);
- C. Legal framework eg European Union directives,
- D. International treaties eg Energy Charter;
- E. Voluntary business partnerships;
- F. Industry associations eg IATA.
- G. National government or inter-governmental agreements

Greenhouse gas emissions reduction potential⁴

The following information will be provided (including variations on the extent and type of commonality for each measure to be studied):

- A. assumptions about the emissions path if the measure were not implemented);
- B. the key assumptions underlying the estimates;
- C. the level of confidence associated with the estimates (in the analyst's opinion, or from a sensitivity analysis);
- D. the information that is needed for the estimates and whether it is available or not;
- E. the type of analysis or modelling that is relevant to assessing the effects of the measure.

Preliminary estimates of the effects of the measure on emissions will be made. Where information is available, the incremental emissions reduction potential of the measure will be presented as estimates of individual greenhouse gases in tons of CO₂ equivalent per year for the years 2000, 2005, 2010, and 2020. If possible, the full technical potential of the measure will also be given and

⁴ Other environmental benefits are covered under "other policy goals."

indirect effects of the measure on the greenhouse gas emissions, such as flow on effects to other sectors, or possible effects in countries not participating in the common action, will be discussed. Where relevant, specific examples of these indirect effects will be given.

Costs and macro-economic effects⁵

The following information will be provided (including variations on the extent and type of commonality for each measure studied):

- A. the key assumptions the cost estimates are based on;
- B. the level of confidence associated with the cost estimates (in the analyst's opinion, or from a sensitivity analysis);
- C. the information that is needed for the cost estimates and whether it is available or not;
- D. information on the variation of costs from country to country and factors influencing these differences;
- E. the type of analysis or modelling that is relevant to assessing the costs of the measure.

Preliminary assessments of the cost (e.g. high/medium/low) will be given. Where information is available, the incremental cost of the measure will be estimated in US dollars per ton CO₂ equivalent. The type of costs included in the analysis will be specified: cost to governments of implementing and enforcing the measure; cost to industry; cost to the general public; macro-economic effects (including effects on employment and trade, GDP, and investment). In some cases there may be economic benefits associated with the measure, which will be noted.

Political feasibility

The study will discuss political and institutional issues associated with the measure, such as whether the measure is likely to be politically sensitive (to governments, other participants, interest groups). Where relevant, the analysis will identify the political feasibility of measures (including variations on the extent and type of commonality), in different national and regional contexts, and comment on the relative merits of the measure for the groups most affected by it (governments, industry, interest groups).

Other policy goals

The effects (benefits and costs) of the measure on other social, economic, environmental policy goals will be discussed for each extent and type of commonality studied.

Barriers to successful implementation and options for addressing them

The case study will address questions related to the implementation of the measure, for example: whether there is a market for new technology developments; whether the necessary institutions exist; whether new infrastructure or behaviour change is needed before the measure can be successful; and what additional barriers might be relevant.

⁵ Other costs are covered under "other policy goals."

Time period

The case study will address the length of time it might take to implement the measure (e.g. to negotiate the voluntary agreement, or have legislation in place for standards); and when the effects of the measure are likely to be realised: now, to the year 2000, 2005, 2010 and 2020. This section will address whether measures are expected to give short-term emission reduction only, long-term emission reduction potential only, or a mixture of short and long term effects (for example a measure may have some effect on emissions in the short term but much greater effect in the longer term).

Impact on other countries

The impact of the measure on non-Annex I countries and non-participating Annex I countries, in terms of costs, trade impacts, greenhouse gas reduction, social, environmental and other impacts will be assessed to the extent possible.

Conclusion

The conclusion will focus on whether the measure is a good candidate for common action and why.

PAPER NO. 2: DENMARK

AGBM 2

30 October - 3 November 1995

Danish Delegation

31 October 1995

Statement by Denmark on Item 3b:
Quantified emission limitation
and reduction objectives within
specified time frames.

Denmark fully supports the statement by the European Union, presented by Spain, on quantified emission limitation and reduction objectives within specified time frames, and wishes to reiterate a few points.

As mentioned by Spain, we have noted with some interest that the IPCC WGII has recognized the existence of a significant technological potential for reductions of greenhouse gas emissions in the near future. A large part of these reductions could, in our opinion, be realized now, even while we are still working on the Berlin Mandate.

To take an example, one of the elements of twenty years of ambitious Danish energy policy has been the development of high-efficiency, solid fuel fired power plants, which have then been used in combined heat and power systems. This development has certainly been one of the key elements in the emission reductions realized up till now.

We have mentioned power plant technologies here, because investments in this sector have long-ranging consequences. A power plant built today, with even only a few percent less than the optimum energy efficiency obtainable today will add unnecessarily to CO2 emissions to the atmosphere for maybe 20 -30- 40 years. How can this be avoided?

From our point of view, one answer is that we would certainly want to develop targets and timetables which necessitate the earliest possible application of the best available technology. And we think that this can be brought about if initially we focus discussions within the Berlin Mandate on the establishment of aggressive reduction objectives in the earliest possible part of the time frame. This means focussing on the year 2005, and it could take the form of the 20% reduction by 2005, the Toronto target, which still forms the basis for the Danish energy policy - but we will certainly also encourage discussions on the development of incentives, that specifically encourage early action, as suggested by the Netherlands.

In Denmark, we are now working on energy planning for the years 2010 and 2020, but we are at the same time doing our utmost to ensure that decisions taken today and tomorrow give us a maximum of climate benefits. And we would like to see the AGBM, in its work, send a similar signal: Only by setting the highest standards for today can we realize the potentials available to us, and only by recognizing the importance of decisions taken now can we establish the foundations for the best possible limitation and reduction objectives for the longer term - be it the time frame of the BM protocol or the protocols to follow.

Paris, 20 September 1995

PAPER NO. 3: FRANCE

**French contribution to the work
of the Ad hoc Group on the Berlin Mandate (AGBM)**

(UNOFFICIAL TRANSLATION)

I. Introduction.

1. The Berlin Mandate has given a framework to the work of the AGBM in order to lead to a next step towards the ultimate objective of the United Nations Framework Convention on Climate Change.

2. For this purpose, the Berlin mandate considers necessary that :

- the developed country/other Parties included in annex I (Annex I Parties) should *"elaborate policies and measures as well as set quantified limitation and reduction objectives within specified time-frames - such as 2005, 2010, 2020 - for their anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, taking into account the differences of these Parties as to their starting points ..."* and *"the manner in which the Annex I Parties coordinate among themselves ... the appropriate economic and administrative instruments ..."* should be examined;
- the Parties not included in Annex I *"reaffirm existing commitments in article 4.1. and continue to advance the implementation of these commitments in order to achieve sustainable development"*.

3. The Berlin Mandate states that *"the process will include in its early stages an analysis and assessment to identify policies and measures for Annex I Parties which could contribute to limiting and reducing emissions by sources and protecting and enhancing sinks and reservoirs of greenhouse gases"*.

II. Analysis and assessment of policies and measures.

4. In order to contribute to the analysis and assessment of policies and measures, France would firstly like to recall the main points of the energy policy it has pursued since the first oil crisis. This policy indeed allowed it to reduce very considerably its CO₂ emissions and therefore its contribution to the human induced greenhouse effect already before 1990¹. These results were obtained owing to the combination of a strict energy economy policy and a vast nuclear power programme. The development of the nuclear park has made it possible to divide by ten the CO₂ content of a kWh.

Among the energy-saving policies and measures adopted, mention can be made of the following, for example :

- definition of strict regulations aimed at encouraging energy conservation. Thermal regulations for housing are a good example in this respect ;
- fiscal policy. High fuel taxes, higher than in most developed countries, have in the past greatly helped hold down carbon dioxide emissions. At the same time many tax incentives designed to improve energy efficiency were instituted as early as 1974, particularly in the housing and industrial sectors ;
- a major energy conservation and energy efficiency programme. To implement these actions France has had an Energy Conservation Agency (Agence pour les économies d'énergie) since 1974 which has influenced final demand and been active in working with industry. This structure has developed over the years into a centre of specialized skills and expertise.

A thorough national assessment is currently being made of these energy-saving policies and measures.

5. In accordance with subparagraph 4.2.a), France has adopted policies and measures to limit further its net emissions of greenhouse gases. It also wishes to draw the attention of the Parties to the lessons it has learnt from the elaboration of its national communication:

¹The scope of this policy allowed France, between 1980 and 1990, to reduce its CO₂ emissions per capita more than any other European Union Member State (-26% as against a Community average of -19.3%) ; within the OECD, only Sweden (today a member of the E.U.) has witnessed a greater reduction of this ratio.

- in order to introduce consistency in the measures to be taken in the various sectors of the economy and regarding the different greenhouse gases, France has endeavoured to examine, at national level, all the actions whose cost is lower than or equal to a reference level expressed in ecus per ton carbon equivalent whose emission can be avoided (or which has been removed from the atmosphere).
- this examination has also led to the adoption of measures designed to modify the long-term trends of net anthropogenic emissions of greenhouse gases, even if the latter had only a quite low impact by the year 2000. This is particularly the case of measures aimed at strengthening the thermal regulation of buildings or encouraging storage of carbon in forests and in wood products.
- the experience of the European Union internal market demonstrates that many measures cannot be implemented effectively unless they are coordinated in a sufficiently large area. Therefore initiatives which are today a matter for Community level are particularly important and effective in many areas such as transports, taxation on fuels, various regulations (notably in environmental matters) and the Common Agricultural Policy.
- bearing in mind the policies and measures adopted and those which will have to be introduced at European Union level, emission forecasts allow it to be estimated that France should reduce to their 1990 level its net aggregated greenhouse gas emissions (CO₂, CH₄, N₂O) in 2000. It is however to be emphasized that there is a considerable margin of uncertainty regarding the forecasts of CO₂ emissions by the year 2000, in the order of more or less 7%. *Irrespective of the programme adopted*, this uncertainty is tied, inter alia, to economic growth, the price of oil, the availability of nuclear plants and the climate. For the other greenhouse gases (CH₄, N₂O), assessment uncertainties make emission forecasts even more imprecise.

III. Other conclusions drawn from the experience acquired while fulfilling the current commitments and gathered from the available analysis work (notably the elements produced during the elaboration process of the second assessment report by the IPCC).

6. Based on a quantitative objective for the limitation of greenhouse gas emissions, and fixed a priori without prior examination of what each Party could reasonably hope to accomplish, in other words heedless of "national circumstances" (notably the different starting points of the Parties), the present form of the commitments applying to the Annex I Parties leads to weakened results (cf. the first examination of national communications made by the Convention Secretariat, or the declaration by the USA at the first session of the AGBM); however, on the face of it, this was an "easily" achieved first stage;

The main advantage of the present form of the commitments is the simplicity of their expression; on the other hand, they do not respect some criteria the importance of which is underscored in many analyses:

- *efficiency criterion*: seeking to minimize the global cost of the climate change strategy implemented;
- *fairness criterion*: leading to an acceptable burden sharing between the Parties concerned;
- *criterion of compatibility with the rules of international trade*: avoiding distortions of competition between companies of the various Parties, notably in international markets.

7. Further, it must be recognized that present scientific knowledge does not allow the elaboration *on an objective basis* of emission scenarios which countries could undertake to respect (the accent is currently on a rougher indicator, the aggregated level of greenhouse gas emissions over the next hundred years, about which experts are not able to reach a precise decision moreover); in this context, the major trends of emission evolution really are important (the aim is to obtain a progressive inflexion in the trajectories of greenhouse gas emissions of the various countries, hence the greater importance to be granted to the evolution of "derivatives" rather than "arrival points" in a near future²).

² It is to be emphasized that the "return of greenhouse gas emissions to their 1990 level before the end of the decade", at the heart of the current commitments, does not guarantee that the Parties will make real headway towards the ultimate objective of the Convention; this commitment may indeed be kept by means of measures having only a transitional effect and in no way modifying the determinants of the long term evolutions of emissions.

IV. Proposals by France for the Protocol or the other legal instrument to which the work of the AGBM should lead.

IV.1. Strengthening of the commitments of the Annex I Parties.

8. The cost of the new measures which may well be implemented by the Annex I Parties after the year 2000 is very different from one country to another bearing in mind in particular the intensity of the efforts already accomplished and the results obtained in energy policy matters. France believes these starting point differences between the Annex I Parties will have to be fully taken into account when determining new commitments, in accordance with the Berlin Mandate.

9. Further, in the light of the analysis factors presented above, France considers the future protocol should comprise commitments by the Annex I Parties on a set of policies and measures which they will decide to implement. The elaboration of quantified objectives with a phased timetable is useful in sizing policies and measures. However the uncertainties concerning emission forecasts will probably make any precise commitment on emission levels in the medium or long term very difficult, not to say impossible.

10. In its statement made in the name of the European Union during COP1, France gave, for guidance purposes, a list of policies and measures aimed at limiting the net emissions of greenhouse gases. The negotiation taking place within the framework of the AGBM should address first and foremost the policies and measures requiring coordination at international level for reasons of competitiveness or in order to raise their efficiency, and the implementation of which would allow significant progress towards the ultimate objective of the Convention. France considers the following as priorities in this framework :

- recourse to economic instruments including taxation on products emitting CO₂ and suppression of direct or indirect subsidies encouraging consumption of fossil fuel energy ;

- introduction of arrangements aimed at improving the energy efficiency of certain products whose markets are open to international competition (vehicles, combustion equipment, domestic appliances, etc.). These measures would allow the public authorities to raise the efficiency of fiscal instruments in sectors where the markets suffer various imperfections (lack of information, constraint on the financing capacities, etc.)³.

Further, it will be necessary to take into account the non-energy sector, and to consider measures concerning the other greenhouse gases (emissions of CH₄ by the agricultural sector and landfills, emissions of N₂O by the agricultural and industrial sectors, emissions of HFCs, etc.).

11. France has always considered that both the most efficient and also the most equitable manner of sharing the effort to reduce CO₂ emissions among developed nations is to get all the emission reductions whose cost is lower than a common reference level carried out in all these countries. The simplest way to achieve this result, the least ambiguous for all the actors involved and the least costly in terms of administrative management costs, is to institute in the tax regimes of all these countries a progressive tax on CO₂ at rates coordinated between them. This approach is also that which makes it possible to minimize in each country the CO₂ emission reduction cost. This fiscal approach is to be introduced within a geographic area that is large enough to encompass the zone of economic competition of the activities involved.

It should also be underscored how important it is to eliminate in all countries subsidies that encourage the consumption of fossil fuels. These subsidies may exist in the form of domestic fuel prices lower than world rates, or consist in selling electricity below cost price or in subsidizing certain activities that are heavy consumers of fossil fuel energy, for example in the transport sector, not charging road users for all the costs (infrastructure, congestion, insecurity, etc.) they cause.

³ It can be pointed out that while the prices of fossil fuel energy include a component internalizing the negative effects of climate change, it is in the interest of a country (on grounds of efficiency in the strict sense, leaving aside concerns about climate change) to implement such "side" measures and see to their success.

These positions are in keeping with the lessons of the work by the experts of Group 3 of the IPCC who, in the chapter devoted to the economic assessment of policies and measures to combat climate change, underscore the interest of eliminating, as a priority, all economic distortions encouraging greenhouse gas emissions and emphasize the fundamental role economic instruments should play in the global strategy for the prevention of climate change⁴.

12. The procedures adopted to organize the global effort must be defined with the concern to preserve fair competition between companies within the framework of international trade. It would be opportune for similar provisions to those of article 4 of the Montreal Protocol on CFCs to be adopted in order to prevent non-Party countries from drawing an unjustified benefit in international trade owing to the fact that they would not be participating in the collective effort to protect the atmosphere. Relocations which could arise from such practices would indeed be both unfair and ineffective, if not even prejudicial to the prevention of climate change.

13. As for policies and measures not requiring coordination at international level for reasons of competitiveness, France considers that the protocol should provide a list of them for guidance purposes and also recommendations concerning the criteria making it possible to determine the scope of the measures selected. Among these criteria, France reaffirms the important role which it would like economic aspects to play (in particular in comparison with purely political considerations) : a maximal common reference level could therefore be set for the cost of these measures per tonne greenhouse gas avoided expressed in carbon equivalent ; national statements, detailing the reasons why certain policies and measures have not been adopted and providing as transparent as possible an assessment on the cost of the selected ones, would make it possible to judge the efficiency as well as the fairness of the burden sharing among Annex I Parties.

⁴ The economic instruments considered by the IPCC experts comprise fiscal instruments (harmonized tax system) and negotiable permits (or quotas) which suppose binding commitments with respect to emission levels. In addition to the arguments developed above, the fact that the satisfactory operation of a negotiable permits market cannot in practice be guaranteed also strengthens France's conviction that it is preferable to pay greater attention to fiscal instruments at this stage.

IV.2. Progress in the fulfilment of the commitments of the Parties not included in Annex I.

14. The Berlin mandate clearly reaffirms that developed country Parties should take the lead in combating climate change; at the same time, it recognizes the need for the Parties not included in Annex I to continue to advance in the implementation of their present commitments, in other words, in particular, to also implement climate change mitigation measures.

France considers that participation, as soon as possible, of the greatest number of countries in the global climate change prevention effort is desirable for several reasons :

- the broader the intervention basis and the fewer the restrictions on actions which can be taken, the lower the global prevention cost ;
- the efficiency of the actions taken by developed countries to reduce greenhouse gas emissions is likely to be considerably lowered if they lead to higher emissions in countries steering clear of the prevention effort, either owing to the relocation of production activities or as a consequence of a fall in the world price of fossil fuel energy ;
- most prospective analyses demonstrate that the Convention's ultimate objective cannot be reached if there is no inflexion in the rhythm at which greenhouse gas emissions are rising in developing countries⁵. In the countries in the process of industrialization, given the inertia and even the irreversibilities imposed by certain technological choices (notably in the energy sector or the transport sector), it is certainly more efficient to consider already today development trajectories using little fossil fuel.

15. The manner in which the Parties not included in Annex I can make headway in the fulfilment of their commitments must be the subject of a serious analysis which should be made at the same time as the analysis concerning the contribution of Annex I Parties ; concrete proposals from the latter, directly concerned Parties, would be an essential contribution to the process.

⁵ CO₂ emission projections by the IEA for the 1990-2010 period reckon on an increase of 1.2 to 2.5 billion tonnes CO₂ in the OECD countries and 6 to 7 billion tonnes in developing countries. By the year 2010, the CO₂ emissions of developing countries could be higher than those of the OECD.

France, for its part, wishes to make the following proposals for consideration by the participants in the process started by the Berlin Mandate. In order to make headway in implementing their commitments, the Parties not included in Annex I could :

- develop, as quickly as possible, with the support of GEF, "country studies" to define an effective national climate change prevention strategy ;
- progressively implement those of the identified policies and measures which also favour economic development of these countries ;
- participate in possible coordinated actions started by Annex I countries, in accordance with procedures to be specified on a case per case basis, in order to prevent companies located in countries not included in Annex I from drawing unjustified benefit from that fact in international trade.

16. In accordance with article 4.7 of the Convention, France recognizes that the Parties not included in Annex I will all the more advance in the implementation of their commitments if Annex I Parties carry out in an effective manner their commitments regarding financial resources and technology transfer. This assistance commitment should be fulfilled either through multilateral action (contribution to the financial mechanism) or bilateral action (mention can be made of the French initiative that led to the creation of the Fonds français pour l'environnement mondial - French Fund for Global Environment).

France considers that, regarding the contribution of developed countries to the prevention of a global pollution in developing countries, the burden sharing among developed countries should evolve in the future in such a way as to take into account simultaneously the GDP of donor countries and the extent of global environment impairment (in particular the level of CO₂ emissions) caused by them.

Letter dated 14 September 1995 from the Head,
International Affairs Division, Ministry for
the Environment, to the Executive Secretary

With reference to the conclusion of the first meeting of the Ad-hoc Group on the Berlin Mandate, Iceland would like to identify the following issues that would benefit from analysis and assessment:

1.

Fishing and fish processing is the main pillar of the Icelandic economy. Emissions from fishing vessels constitute over one third of the total emission of CO₂ in Iceland. Thus, comprehensive efforts to curb the emission of greenhouse gases in Iceland are likely to seriously affect the fishing sector and will have significant consequences for the economy as whole.

Technical development concerning vessel design and fuel efficiency are brought forward by forces outside Iceland's jurisdiction. This fact limits the scope of action that can be taken with the aim of improving the energy efficiency of the fishing fleet.

In view of this, Iceland would like to request an assessment of the current technical potential for increasing fishing vessel's energy efficiency. Further, there is a need to analyse the feasibility of an internationally co-ordinated action that could promote the use of more energy efficient technology in fisheries.

2.

Soil erosion in Iceland has resulted in significant loss of vegetated cover and soil. Through a comprehensive programme of action, the National Soil Conservation Strategy initiated in 1991, this process is about to be reversed. In light of the potential for binding CO₂ in plants and soil, the reclamation and reforestation has become a high priority task for Iceland. Consequently, Iceland would like the quantification of increasing carbon sink capacity, including the effect of different soil reclamation practises, addressed in the assessment process.

3.

Transportation by motor vehicles is a major source of emission of greenhouse gases in Iceland. Due to the geography and the size of the country, the distribution of human habitat as well as the economic structure, the prospect for reducing current emissions from transportation are bleak, given the technology currently available. Consequently, Iceland would like to see the AGBM assess how technological development can be expected to have an impact on the energy efficiency of transport by motor vehicle in the years to come. Further, there is a need to assess if co-ordinated international action could promote the development of cleaner technology for motor

4.

Iceland has great potential to increase the use of renewable hydroelectric as well as geothermal energy sources. Currently only about 10 per cent of the economically feasible production capacity has been utilised. Consequently, there are vast opportunities for investments, both in power plants and industrial plants for energy intensive production. The Government would like to see these opportunities exploited. However, increase in industrial production will unavoidably lead to growth in the emission of greenhouse gases in Iceland, and this is a matter of grave national concern. Iceland would like to see these emissions viewed from a global perspective, as new industrial installation of similar production capacity in countries where energy would be provided through conventional thermal power plants, would result in considerably more emissions. For instance, the construction and operations of an aluminium plant using hydroelectricity only yields 10 per cent of the emission that similar production would yield where fossil fuels must be utilised.

The promotion of further use of clean and renewable energy is in accordance with the intentions of the FCCC and Agenda 21 (9.11). Consequently, Iceland finds it important to analyse and assess how future protocol, or other legal instruments, for limiting the emissions of greenhouse gases, can be formed without obstructing further exploitation of clean and renewable energy sources. In other words, it is important to secure that future obligations under the FCCC do not cause a conflict between local and global targets for the emissions of greenhouse gasses.

(signed)
Tryggvi Felixson
Head, International Affairs Division

PAPER NO. 5: PHILIPPINES
(On behalf of the Group of 77 and China)

STATEMENT BY THE PHILIPPINES
ON BEHALF OF THE GROUP OF 77 AND CHINA
First session of the Ad hoc Working Group
on the Berlin Mandate,
Geneva, 22 August 1995

I am honored to speak on behalf of the Group of 77 and China, and to reaffirm the support and cooperation of the Group to you, Mr. Chairman, in the performance of the difficult tasks before us at this first meeting of the AGBM.

At the outset, and since this is the first statement made on behalf of the Group, please allow me to express the grave concern of the Group on the lack of funding for the participation of developing countries, which sorely hampers the effective participation of these countries at this important first meeting. We feel that, if continued, this would be detrimental to the process itself, and we therefore hope that this funding through the Voluntary Fund would be given careful consideration for the continuation of this process.

The Group of 77 and China would like to underline two of the basic positions we have taken on this process:

Firstly, we would like to reaffirm our support for the carefully balanced text contained in Decision 1/CP.1 in its entirety, this being the only legal basis for this Working Group.

Secondly, we would like to recall that the consensus reached on this decision was based on the recognition, as stated in the preambular paragraphs, that Article 4, para. 2 (a) and (b) are not adequate, and that therefore, we have embarked upon this process to render adequate these commitments taken by Annex I countries.

We underline therefore what is stated in para. 2 (b) of the Decision, "that the process will not introduce any new commitments for Parties not included in Annex I", and would ensure that the discussions on analysis and assessment that will now take place would not in any way detract from this fundamental position.

G-77 and China remain committed to the fulfilment of Article 4.1 obligations for all Parties, and to "advance" the implementation of these commitments, not with reference for any timeframe, but with reference to taking forward the implementation of these obligations. We reemphasize that this commitment to implement these obligations is contingent upon the fulfilment of Annex I Parties of all obligations undertaken under Article 4 as a whole, in particular the Articles mentioned in para. 2 (b) of the decision.

These are the basic positions of the Group of 77 and China, and we join these discussions with these considerations in mind.

PAPER NO. 6: SPAIN
(On behalf of the European Community)



Statement of 22 August 1995 on analysis and assessment*

Es un gran honor para mi, como representante de España, tomar la palabra en nombre de la Unión Europea. Ante todo, desearía felicitarle Sr. Estrada, por su elección como Presidente de este grupo y agradecer a través suyo al Secretariado la rápida organización de la 1ª sesión del grupo Ad hoc del Mandato de Berlín.

Berlín ha conducido a un compromiso equilibrado acerca de las etapas a cubrir en relación con el período posterior al año 2000. El texto del Mandato de Berlín que fue aceptado por todos los participantes debe ser el punto de partida de nuestro trabajo futuro. La Unión Europea confía en que en todas las negociaciones, se mantenga el espíritu de la reunión de Berlín y se trabaje conjuntamente con el fin de avanzar cuanto sea posible en esta sesión del grupo Ad hoc. Nuestra tarea está clara: tenemos que negociar un protocolo u otro instrumento jurídico que incluye el reforzamiento de los compromisos de las partes incluidas en el Anexo I de la Convención, enunciados en los incisos a y b del párrafo 2 del artículo 4, lo antes posible en 1997, a fin de que los resultados puedan ser aprobados en la 3ª Conferencia de las Partes.

La Unión Europea entiende que el trabajo de este grupo se centra en tres elementos, de acuerdo con lo establecido en los párrafos 2 (a) y (b) del Mandato de Berlín. Estos tres elementos son:

- elaboración de políticas y medidas para las partes del Anexo I.
- establecimiento de objetivos cuantificados de limitación y reducción en unos



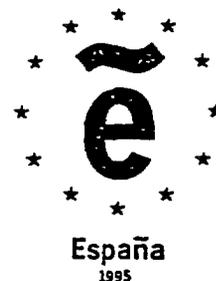
plazos determinados para las partes del Anexo I.

- reafirmación e impulso continuo del cumplimiento de los compromisos existentes para las partes no incluidas en el Anexo I.

La Unión Europea reconoce la importancia del trabajo de este grupo. El programa de trabajo sugerido ofrece importantes elementos para el proceso hasta la COP 2 así como hasta la COP 3.

En referencia al punto 3 (c) sobre Análisis y Evaluación, la Unión Europea recuerda que, tal como establece el Mandato de Berlín, la etapa inicial del proceso no sólo incluirá análisis y evaluación sino también, negociaciones en paralelo. Los resultados del análisis y evaluación han de ser tenidos en cuenta durante el proceso de las negociaciones; la Unión Europea, también quiere recordar la Sexta decisión de la 1ª Conferencia de las Partes sobre los órganos subsidiarios establecidos por la Convención, que determina en su párrafo (a), que el Organismo Subsidiario de Asesoramiento Científico y Tecnológico será el punto de enlace entre las evaluaciones científicas, técnicas y tecnológicas y la información facilitada por los órganos internacionales competentes y las necesidades de orientación normativa de la Conferencia de las partes.

Por estas razones la Unión Europea sugiere que durante el proceso de trabajo del grupo Ad hoc del Mandato de Berlín y tan pronto como sea posible, se identifiquen las políticas y medidas y posibles impactos y consecuencias con referencia a los



horizontes temporales en base a la compilación de material disponible tal como ofrece el Secretariado en el documento AGBM/1 párrafo 20. Para información más específica, el grupo Ad hoc del Mandato de Berlín puede pedir al Organo Subsidiario de Asesoramiento Científico y Tecnológico y a cualquier panel técnico asesor que provea evaluaciones y análisis adicionales, así como al Organo Subsidiario de Implementación que provea material en relación a su examen de las comunicaciones nacionales, con el fin de ser incluidos en el proceso ulterior de negociaciones.

Con relación a la cuestión suscitada por el punto 18 de las anotaciones a la Agenda (Doc. AGBM/1), tengo que hacer los siguientes comentarios :

- El análisis y evaluación de las políticas y medidas es útil para proporcionar la información adecuada y crear una imagen común de cuáles son las políticas y medidas para las Partes del Anexo I y cuál será el impacto posible. Estos aspectos podrían ser relevantes para su eventual aplicación e implementación.

Para las políticas y medidas, se debería tener en cuenta una serie de aspectos en cualquier decisión relativa a su aplicación e implementación. Como aspectos importantes, en este contexto, consideramos :

- Impactos medioambientales del cambio climático o de los gases de efecto invernadero



- otros impactos medioambientales
- aspectos técnicos y tecnológicos
- aspectos económicos y de mercado
- aspectos sociales y financieros
- aspectos institucionales y legislativos

Especialmente en aquellos casos en los que exista experiencia de las partes acerca de estas medidas, se puede obtener información válida para ser utilizada a estos efectos.

Este proceso de análisis y evaluación podría conducir a los siguientes resultados, en base, entre otros, a las comunicaciones nacionales y a las revisiones en profundidad :

- evaluación de objetivos/resultados que pueden ser alcanzados por políticas y medidas.
- identificación de aquellas políticas y medidas que resultan tener éxito o potencialmente pueden tenerlo.
- determinación de políticas y medidas que pueden ser apropiadas para una acción coordinada.

Particularmente en aquellas áreas donde se requiere coordinación internacional, tales como en aspectos referentes a la competitividad, se debería otorgar prioridad



a aquellos aspectos relacionados con políticas y medidas que requieren coordinación internacional.

- medidas relacionadas con aspectos de competitividad.
- medidas concernientes a sectores industriales de orientación global
- medidas en sectores en los que las decisiones pueden tener efectos adversos sobre el cambio climático.
- medidas relativas a productos comercializables.

Quedamos en espera de las conclusiones de 2º Informe de Evaluación del IPPC para proporcionar orientaciones a los objetivos cuantificados de limitación y reducción.



PAPER NO. 7: SPAIN
(On behalf of the European Community)

Statement of 23 August 1995 on requests for inputs to subsequent sessions of the AGBM*

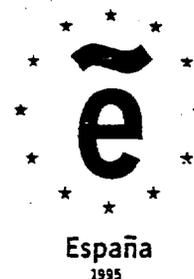
España en representación de la Unión Europea, desea contribuir al punto 3.d) del Programa -Solicitudes de aportaciones para los períodos de sesiones ulteriores del Grupo Especial- con una respuesta en forma de tabla que se está distribuyendo en estos momentos.

Esta tabla clasifica, para cada uno de los órganos considerados, las aportaciones al proceso de negociación de este grupo, en tres categorías :

- políticas y medidas
- objetivos y horizontes temporales
- progreso de la puesta en práctica de los compromisos existentes establecidos en el artículo 4.1.

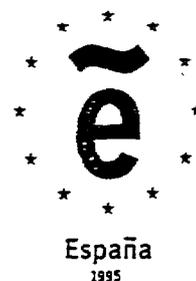
La tabla facilita también los plazos propuestos para la presentación de estas aportaciones a las sucesivas sesiones del Grupo.

* For the statement in English, see document FCCC/AGBM/1995/MISC.1/Add.2



Aportaciones al proceso de negociación, órganos a los que concierne su consideración y calendarios propuestos.

	Políticas/medidas	Objetivos/Horizontes temporales	Avance en la ejecución de los compromisos existentes art. 4.1
SBSTA	<p>* Resumen de recomendaciones del segundo informe IPCC (CPG/anex I/A 1.a) 3ª sesión AGBM</p> <p>* Evaluación de los efectos de las medidas ya tomadas (a partir del informe de síntesis y revisiones en profundidad) (CP6/annex I/A 1.b) 5ª sesión AGBM</p> <p>*Identificación de tecnologías/experiencia innovadoras, eficientes y de acuerdo con el estado -del-arte (CP6/annex I A.3) 5ª sesión AGBM</p> <p>* Análisis de sectores específicos provenientes de los paneles, inter alia, en las áreas mencionadas en las conclusiones del Consejo de la Unión Europea presentadas al COP.1 por la Presidencia Francesa 3ª sesión AGBM</p>	<p>* Resumen de recomendaciones del segundo informe IPCC (CPG/anex I/A 1.a) 3ª sesión AGBM</p> <p>* Compilación/síntesis de información sobre situación global de IPCC y otros 3ª sesión AGBM</p>	<p>* Informe de progreso sobre las comunicaciones nacionales (CN) de las partes no incluidas en el Anexo I 5ª Sesión AGBM</p> <p>*Identificación de tecnologías experiencia innovadoras eficientes y de acuerdo con el estado del arte (CP6/annex I/A.3) 5ª sesión AGBM</p>



SBI	<p>* Evaluación de los informes de revisión en profundidad de las comunicaciones nacionales del Anexo I (CP6/annex I/B.1) 5ª/6ª sesiones AGBM</p> <p>* Segundo informe de síntesis sobre comunicaciones nacionales del Anexo I 5ª sesión AGBM</p> <p>* Evaluación del efecto agregado de los pasos dados en la dirección del objetivo del Convenio (CP6/annex I/B.2) 3ª/4ª sesiones AGBM</p>		<p>* Informe de progreso sobre las comunicaciones nacionales disponibles de las Partes no incluidas en el Anexo 1 5ª sesión AGBM</p>
AGBM Trabajos existentes y en curso	<p>* Recopilación comentada de la información técnica y económica existente:</p> <ul style="list-style-type: none"> - OCDE/AIE Estudio de acciones comunes - PNUMA/RISO Estudios de costes - Comisión Europea Documento de trabajo : opciones de políticas - Primer informe de síntesis sobre comunicaciones nacionales - Otros <p>(Secr.: AGBM/1/parr-20)</p>	<p>* Recopilación comentada de la información existente sobre objetivos/horizontes temporales</p> <ul style="list-style-type: none"> - Propuesta AOSIS - Propuesta alemana de elementos para el protocolo - Propuesta ONG - Otras <p>2ª sesión AGM</p>	<p>* Informe de progreso sobre las comunicaciones nacionales de las Partes no incluidas en el Anexo 1 5ª sesión AGBM</p>

<p>AGBM Trabajos existentes y en curso</p>	<p>* Elementos de las conclusiones del Consejo de la UE de marzo, presentadas al COP-1 por la Presidencia Francesa</p> <p>2ª sesión AGBM</p> <p>* Compilación de las comunicaciones MISC (Secr. AGBM/1 parr.20)</p>	<p>* Compilación de las comunicaciones MISC (Secr. AGBM/1 parr. 20)</p>	
<p>AGMB Trabajos adicionales (*)</p>	<p>* Análisis adicional de posibles políticas/medidas</p> <p>* Resultados de los análisis mediante el empleo de enfoques ascendentes tales como modelos de evaluación integrados</p>	<p>* Evaluación de posibles objetivos/horizontes temporales y sus consecuencias para avanzar hacia el objetivo último (art. 2)</p> <p>* Evaluación de posibles estrategias de limitación y reducción de gases de efecto invernadero que sean efectivas desde el punto de vista de los costes y de métodos de minimización de costes.</p> <p>* Evaluación de la viabilidad de "objetivos de segundo orden"</p> <p>* Resultados de los análisis mediante el empleo de modelos descendentes</p>	

(*) La segunda sesión del AGBM debería especificar los trabajos necesarios e indicar quien los realizará y fijar plazos.

PAPER NO. 8: SPAIN
(On behalf of the European Community)

Statement of 30 October 1995 on the structure of a protocol
or other legal instrument and on policies and measures

La Unión Europea cree que, con el fin de avanzar en estas discusiones del AGBM, es importante tener clara la idea sobre el posible producto final. A tal fin presentamos hoy un posible esquema para estructura de un protocolo u otro instrumento legal que nos gustaría proponer al resto de las Partes y que se está repartiendo en estos momentos.

Lo que presentamos es únicamente un esquema. No contiene propuestas específicas sobre políticas y medidas particulares, o sobre objetivos y calendarios. Eso queda para una discusión posterior. Sin embargo, esperamos que definiendo la posible estructura del producto que emane de estas discusiones, podríamos ayudar a centrar y clarificar la reflexión, y nos permitiría avanzar más rápidamente en el tiempo limitado del que disponemos para nuestra tarea derivada del Mandato de Berlín. Asimismo, puede proporcionar un marco útil para el posterior trabajo de análisis y evaluación.

A la hora de redactar la propuesta nos han guiado tres principios fundamentales:

- primero, la coherencia con el Mandato de Berlín;
- segundo, la importancia de establecer un instrumento dinámico dotado de flexibilidad para desarrollarse y evolucionar en el tiempo, reconociendo que existen límites prácticos a lo que se puede lograr antes de la Tercera Conferencia de las Partes; y
- tercero, enlazar lo más estrechamente posible el instrumento a los principios, procedimientos y mecanismos del actual Convenio de forma que no se pierda tiempo renegociando lo que ya está acordado, así como evitando el posible solapamiento y confusión entre los dos instrumentos legales.

El tercer principio nos permite concebir un instrumento bastante corto. Allí donde sea posible y apropiado se aplicarían las disposiciones del Convenio existente. Dando un ejemplo, la información acerca de la ejecución de cualquier nuevo compromiso derivado de un protocolo estaría mejor incluida en las comunicaciones que hay que suministrar de acuerdo al artículo 12 del Convenio, no en una comunicación separada y paralela.

Un elemento clave de la propuesta son los anexos que contienen listas de políticas y medidas. El modelo que concebimos tendría por el momento tres anexos. El primero incluiría políticas y medidas cuya adopción e inclusión en sus programas nacionales acuerden todas las Partes del Anexo I. El segundo contendría una lista de políticas y medidas respecto de las cuales haya acuerdo en que una temprana coordinación

consideración prioritaria para su inclusión en los programas nacionales. El tercero incluiría políticas y medidas que hayan sido identificadas como de probada efectividad y potencialidad, y cuya inclusión en los programas nacionales se debería considerar de forma apropiada a las circunstancias nacionales.

Es precisamente este elemento de la propuesta, los anexos sobre políticas y medidas, lo que pretende en particular dotarle de una estructura dinámica. Prevedemos que los anexos serán revisados y actualizados con frecuencia, si no continuamente, a la luz de análisis y evaluaciones posteriores, el progreso tecnológico, y los acuerdos alcanzados sobre la coordinación de instrumentos en este o en otros foros internacionales. Asimismo, prevedemos que se podrían añadir a los anexos a lo largo del tiempo políticas y medidas adicionales, así como enmiendas y especificaciones adicionales a las ya existentes.

Nos gustaría asimismo llamar la atención sobre otro elemento importante de la estructura propuesta: los objetivos cuantitativos de limitación y reducción en plazos específicos. La Unión Europea siempre ha estado comprometida con un enfoque combinado, entendiéndose que el protocolo u otro instrumento legal debería contener compromisos tanto referentes a políticas y medidas como a objetivos cuantitativos de limitación y reducción en plazos específicos. Este enfoque se haya recogido en los apartados (a), (b) y (c) del artículo 1 de nuestra propuesta.

Otras características de la estructura propuesta, a nuestro parecer, se explican por sí mismas y son coherentes en gran medida con los conceptos y enfoques recogidos en el Convenio. También se pretende que sean completamente coherentes tanto con el espíritu como con la letra del Mandato de Berlín.

Haciendo referencia más específicamente al tema de políticas y medidas, la Unión Europea querría recordar su declaración anterior en la primera sesión del Grupo Ad Hoc del Mandato de Berlín (AGBM) referente a la petición de aportaciones para sesiones subsiguientes del AGBM. En este contexto, nos gustaría reiterar la necesidad de adoptar en esta reunión una decisión que especifique los trabajos adicionales necesarios e indique quién los debe realizar y los plazos de ejecución.

Nuestra propuesta incluía dos cuestiones principales:

El primer punto se refería al análisis adicional de las políticas y medidas potenciales. La Unión Europea desearía informar al AGBM de que desarrolla actualmente el proceso de preparación del análisis sobre políticas y medidas potenciales específicas. Hemos basado nuestro trabajo en la lista indicativa de políticas y medidas que la Unión Europea presentó en Berlín. Confiamos en que nuestro trabajo pueda resultar útil al del AGBM y presentar un informe sobre su desarrollo a la Tercera sesión del AGBM. En este contexto, acogemos favorablemente el trabajo que está llevando a cabo sobre políticas y medidas para acción común el Grupo de Expertos del Anexo I sobre el Convenio Marco del Cambio Climático, apoyado conjuntamente por la Organización de Cooperación y Desarrollo Económicos y la Agencia Internacional de la Energía. Como hemos indicado al explicar nuestra propuesta para la estructura del protocolo, prevemos estructurar las políticas y medidas en tres anexos.

Nuestro segundo punto se refería a los resultados de los análisis de abajo a arriba tales como los Modelos Integrados de Evaluación.

Esperamos las aportaciones que sobre estas dos importantes cuestiones pueda proporcionar el Segundo Informe de Evaluación del Panel Intergubernamental sobre Cambio Climático (IPCC) que surga de la reunión a celebrar en Roma el próximo mes de Diciembre.

Otras aportaciones útiles podrían ser la presentación a la Tercera sesión del AGBM de un informe sobre el desarrollo de las

actividades de la Iniciativa Tecnológica sobre Cambio Climático (CTI) por las Partes del Anexo II y un informe del Secretariado sobre las posibilidades de cooperación con el Protocolo de Montreal, la Organización Internacional de Aviación Civil y la Organización Marítima Internacional.

Asimismo nos gustaría recordar que el AGBM pidió al Organo Subsidiario de Asesoramiento Científico y Tecnológico (SBSTA) y a cualquier grupo intergubernamental de asesoramiento técnico que el SBSTA pueda establecer que le proporcione informes, conclusiones y asesoramiento sobre cuestiones específicas sobre el trabajo del AGBM. Asimismo, esperamos que el AGBM requiera al SBSTA que proporcione información técnica adicional y trabajo preparatorio sectorial realizado por grupos de expertos. En este contexto, concedemos gran importancia al pronto establecimiento de los paneles como grupos de trabajo de expertos técnicos con el fin de terminar nuestro trabajo a tiempo para la Tercera Conferencia de las Partes.

(UNOFFICIAL TRANSLATION)

EU STATEMENT ON THE STRUCTURE OF A PROTOCOL
OR OTHER LEGAL INSTRUMENT

The EU believes that in order to make progress in these AGBM discussions it is important to have a clear idea of the possible end product. To that end we have tabled today a possible outline for the structure of a protocol or other legal instrument, which we would like to commend to other Parties.

What we have proposed is an outline only. It does not make specific proposals on particular policies and measures, or on objectives and timeframes. These are for separate discussion. But we hope that by defining a possible structure for the outcome of those discussions, this may help to focus and clarify thinking, and to enable us to make more rapid progress in the limited time we have available for completing our task under the Berlin Mandate. It may also provide a useful framework for further analysis and assessment work.

In drawing up the proposal we have been guided by three main principles:

first, consistency with Berlin Mandate;

second, the importance of setting in place a dynamic instrument, which has the flexibility to develop and evolve over time - recognising that there are practical limits to what can be achieved ahead of our COP3 deadline; and

third, linking the instrument as closely as possible to the principles, procedures and mechanisms of the existing Convention - so that we do not have to waste time renegotiating what is already agreed, and so as to avoid the potential for overlap and confusion between the two legal instruments.

The third principle allows us to envisage a rather short instrument. Wherever possible and appropriate the existing provisions of the Convention would be cross-applied. To give just one example, information about the implementation of any new commitment in a protocol would best be included in the communications already to be supplied under Article 12 of the Convention, not in separate, parallel communications.

A key element of the proposal are the annexes containing lists of policies and measures. The model we envisage would for the time being have three such annexes. The first would include policies and measures which all Annex I Parties agreed to adopt and include in their national programmes. The second would contain a list of policies and measures which it was agreed would benefit from early international coordination, and which should be given high priority consideration for inclusion in national programmes. The third would include policies and measures which are identified as having proven effectiveness or potential, and which should be considered for inclusion in national programmes as appropriate to national circumstances.

It is this element of the proposal, the annexes on policies and measures, which is intended in particular to give it a dynamic structure. We envisage that the annexes would be frequently, if not continually, reviewed and up-dated in the light of further analysis and assessment, technological progress, and agreements reached on the coordination of instruments in this or other international fora. We envisage further policies and measures could be added to the annexes over time, and existing ones further specified or amended.

Let me also shortly touch on another important element of our proposed structure: the quantified limitation and reduction objectives within specified timeframes. The EU has always been committed to a combined approach meaning that the protocol or other legal instrument should contain both commitments regarding policies and measures as well as quantified limitation and reduction objectives within specified timeframes. This approach is reflected in our proposed elements (a) to (c).

Other features of the proposed structure are, I hope, self-explanatory and are largely consistent with concepts and approaches already found in the Convention. They are also, as I have indicated, intended to be fully consistent with both the spirit and the letter of the Berlin Mandate.

Copies of our proposal are being circulated. We would be interested to have the comments of other Parties on it.

Geneva, 30 October 1995

EU PROPOSAL

OUTLINE OF POSSIBLE PROTOCOL STRUCTURE

ARTICLE 1

Commitments by developed country and other Annex I Parties:

(a) General commitment regarding policies and measures

- Commitment to adopt policies and take measures within national ⁽¹⁾ programmes referred to in FCCC Article 4.1(b) to limit and reduce greenhouse gas emissions from all relevant sectors, and to protect and enhance sinks and reservoirs.

(b) Further commitments regarding policies and measures

- Policies and measures in Annex A shall be common to all national programmes of Annex I Parties and applied as set out in the annex
- Policies and measures in Annex B shall be given high priority consideration for inclusion in national programmes; requirement to work towards early coordination of such policies and measures
- Policies and measures in Annex C shall be given priority consideration for inclusion in national programmes as appropriate to national circumstances.

(c) Commitment regarding limitation and reduction objectives

- Quantified limitation and reduction objectives to be set within specified timeframes, such as 2005, 2010 and 2020 for anthropogenic emissions by sources and removals by sinks

⁽¹⁾ This includes policies and measures adopted by regional economic integration organisations.

(d) *Commitments regarding communication of information related to implementation*

- Annex I Parties to include in communications under Article 12 of FCCC detailed description of the policies and measures adopted and considered to implement commitments under (a) to (c), specific estimates of their effects, and resulting projected anthropogenic emissions .
- Date of next communication and periodicity thereafter.
- Communications to include results of reviews of national policies and practices referred to in Article 4.2 (e) (ii) and any significant changes identified.

(e) *Voluntary application by non-Annex I Parties*

- Based on Article 4.2 (g) of FCCC.

(f) *Possible annexes on methodological questions*

- eg list of GWPs, effects of measures, projection of emissions

ARTICLE 2

Commitments by all Parties

Provisions on continuing to advance the implementation of existing commitments by all Parties.

ARTICLE 3

Conference of Parties to review the adequacy of these commitments in the light of FCCC Article 2, of the implementation of commitments contained in FCCC Article 4, of best available scientific information and assessment of climate change and its impacts, as well as relevant technical, social and economic information.

Date of first review and periodicity thereafter.

Conference of the Parties to take appropriate action within specified deadline

Annexes to be reviewed on entry into force and up-dated regularly (and more frequently) in the light of progress on the coordination of policies and measures between Parties, new scientific or technological advice, and other relevant developments.

ARTICLE 4

Provisions cross-applying relevant articles of FCCC, eg on definitions, secretariat, finance, settlement of disputes, etc.

ARTICLE 5

Provisions on amendments, including simplified procedures for amending the annexes.

ARTICLE 6

Final clauses (entry into force, etc)

ANNEX A

POLICIES AND MEASURES TO BE COMMON TO NATIONAL PROGRAMMES OF ALL
ANNEX I PARTIES

List of policies and measures to be adopted and implemented by
all Annex I Parties.

ANNEX B

POLICIES AND MEASURES TO BE GIVEN HIGH PRIORITY FOR CONSIDERATION

List of policies and measures which would benefit from common or
coordinated application (together with guidance on manner of
application, if appropriate) and which must be given high
priority consideration by Annex I Parties for inclusion in their
national programmes and for early coordination.

ANNEX C

NATIONAL POLICIES AND MEASURES LIKELY TO BE EFFECTIVE IN REDUCING
EMISSIONS TO BE CONSIDERED AS APPROPRIATE

List of policies and measures of proven or potential
effectiveness which should be given priority consideration, as
appropriate, by Annex I Parties for inclusion in their national
programmes (with possible indications of potential).

As regards more specifically the issue of policies and measures, we would like to recall our previous statement at AGBM 1 referring to the request for inputs to subsequent sessions of the AGBM. In this connection, we would like to reiterate the need to adopt, at this meeting, a decision in order to specify the necessary further work and to indicate who will undertake it and set deadlines.

Our proposal included two main issues:

The first point referred to additional analysis of potential policies and measures. The European Union would like to inform the AGBM that it is now in the process of preparing analysis of potential policies and measures on specific issues. We have based our work on the indicative list of policies and measures that the EU tabled in Berlin. We hope our work can be a contribution to the AGBM work and to present a progress report to AGBM3. In this context, we welcome the ongoing work on policies and measures for common action of the Annex I Experts Group supported by the OECD/IEA. As we have explained above, we envisage the policies and measures to be structured in three annexes.

Our second point referred to the results of analysis using bottom-up approaches such as Integrated Assessment Models.

We expect inputs on these two important points from the IPCC Second Assessment Report (Rome, December 1995). Other useful inputs could be a progress report of CTI activities by Annex II Parties at AGBM3, report of the Secretariat on opportunities for cooperation with the Montreal Protocol, ICAO and IMO.

We also recall that the AGBM requested the SBSTA and any intergovernmental technical advisory panels SBSTA may establish to provide reports, conclusions and advice on specific issues related to the work of the AGBM. Furthermore, we expect the AGBM to ask the SBSTA to provide for additional technical information and some preparatory sectorwise work by expert groups. In this context we attach a great importance to the early establishment of panels as technical experts working groups in order to deliver our work in time for CoP3.

PAPER NO. 9: SPAIN
(On behalf of the European Community)

Statement of 31 October 1995 on quantified emission limitation and reduction objectives within specified time-frames

España, en nombre de la Unión Europea, desearía comentar algunos aspectos de este importante elemento del Mandato de Berlín. Somos plenamente conscientes de que nuestra tarea constituye un reto. Los esfuerzos de la Unión Europea para alcanzar la estabilización de las emisiones de CO₂ en su conjunto al nivel de 1990 para el año 2000 se están evaluando anualmente. Actualmente se está preparando la segunda evaluación, que tiene en cuenta los datos más recientes tanto de la Unión Europea como de los distintos Estados Miembros. Los informes de los Estados Miembros de la Unión Europea, basados en los análisis preliminares más recientes de la Comisión Europea, indican que la Unión Europea está en vías de retornar en el año 2000 a su nivel de emisiones de CO₂ del año 1990, aunque aún se requieren esfuerzos ulteriores a nivel nacional y comunitario para asegurar que se alcance el objetivo de estabilización. Los resultados finales de la evaluación estarán disponibles al final de este año. Estos resultados se comunicarán al Secretariado del Convenio Marco sobre Cambio Climático como aportación a este Grupo Ad Hoc compartiendo así nuestra experiencia en lo que se refiere al objetivo de estabilización de CO₂.

1. Comentario General

Como ya indicamos al explicar nuestra propuesta para la estructura del protocolo, la Unión Europea cree firmemente en un enfoque combinado tanto de políticas y medidas, como de objetivos cuantitativos de limitación y reducción de emisiones para las Partes del Anexo I. El Mandato de Berlín es muy claro en este punto. Ya no se trata de discutir si son necesarios los objetivos de emisiones por fuentes y absorciones por sumideros en plazos específicos. La única cuestión es cómo se deben formular estos objetivos y qué marcos temporales deben elegirse.

Los objetivos de limitación y reducción deben ser suficientemente ambiciosos para reflejar el cambio de las tendencias de emisiones de las Partes del Anexo I con el fin de avanzar hacia el objetivo último del Convenio. A la luz de dicho objetivo último, el nivel absoluto de emisiones y eliminaciones debe jugar un importante papel, pero también deberían estudiarse objetivos relativos tales como criterios de eficiencia.

2. Consideración de los gases de efecto invernadero

Otra cuestión que tiene que ser resuelta es cómo se consideran los diversos gases de efecto invernadero. Aunque el Mandato de Berlín indica claramente que todos los gases de efecto invernadero, las fuentes y los sumideros y todos los sectores relevantes deben ser contemplados en el protocolo, hay que optar todavía entre el llamado enfoque gas por gas o aquel en el que los gases se consideran conjuntamente utilizando el Potencial Global de Calentamiento definido por el IPCC para determinar su efecto total. La Unión Europea no ha adoptado todavía una posición definitiva al respecto. Las dos posibilidades se están siguiendo en la Unión Europea.

3. Calendarios específicos

En el tema de calendarios específicos para los objetivos cuantificados de emisiones, el Mandato de Berlín sugiere los años 2005, 2010 y 2020. Hay que considerar dos aspectos importantes:

- 1- En vista del objetivo último de la Convención y al mensaje del IPCC según el cual se requiere que las emisiones globales disminuyan frente a los niveles actuales para alcanzar ese objetivo, el protocolo debería potenciar cambios fundamentales en las tendencias de emisión de gases de efecto invernadero. Para establecer un marco estratégico en el que adoptar decisiones de planificación e inversión, es necesario considerar calendarios a más largo plazo.
- 2- En vista de la necesidad de que las Partes sean fiscalizadas y para facilitar una evaluación periódica de su situación relativa al desarrollo de sus emisiones totales, es importante considerar también plazos más cortos.

Por lo tanto, la Unión Europea considera apropiado incluir en el protocolo los especificados en el Mandato de Berlín: 2005 y 2010 como preferibles, y 2020 como una posible perspectiva a más largo plazo.

4. Incentivos para una pronta acción

En este contexto se debería reflexionar sobre la posibilidad de crear incentivos para una pronta acción de las Partes, especialmente dado que el IPCC indica que son las emisiones acumuladas (suma de las emisiones anuales a lo largo de un período de tiempo) las que determinarán el futuro nivel de las concentraciones de gases de efecto invernadero. La acción temprana sería particularmente relevante en el caso de decisiones de inversión con impacto a largo plazo, tales como la reposición o ampliación de centrales eléctricas, nuevas infraestructuras de transporte y disposiciones sobre eficiencia energética en nuevos edificios. A lo largo de la vida útil de estas inversiones de infraestructura se pueden evitar cantidades significativas de gases de efecto invernadero. Creemos que el AGBM debería explorar en el contexto de su trabajo futuro el potencial y la promoción de estos incentivos.

5. Cuantificación de objetivos

Sr. Presidente, los cuatro puntos anteriores han completado la parte fácil de nuestra declaración. Las cuestiones más difíciles sin duda están relacionadas con la determinación del nivel exacto de los objetivos de limitación y reducción y también con la cuestión de cómo distribuirlos.

Los objetivos cuantitativos de limitación y reducción del protocolo deberían determinarse tanto mediante la necesidad de reducir los riesgos de cambio climático (basados en la evaluación científica del IPCC) como por el potencial técnico para alcanzar reducciones, así como por los costes y el impacto económico. Permítame ahora tratar algunos aspectos de esta cuestión:

¿Qué nos dice la ciencia?

Las evaluaciones científicas del IPCC apuntan a la necesidad de que las emisiones globales de gases de efecto invernadero disminuyan bastante por debajo de los niveles actuales si queremos estabilizar las concentraciones de estos gases a un nivel inferior al triple de los valores preindustriales. Tal vez este nivel es incluso demasiado alto a la vista del objetivo último del Convenio. Podría, por ejemplo, elevar la temperatura media mundial a niveles que la Tierra no ha experimentado en las últimas decenas de milenios. También sabemos que la contribución de los países en vías de desarrollo a las emisiones globales crecerá para alcanzar sus necesidades sociales y de desarrollo.

El mensaje está claro: los países industrializados necesitan seguir encabezando la reducción gradual de emisiones durante décadas después del año 2000, lo que conduciría a una significativa reducción a mediados del próximo siglo para el conjunto de dichos países. Sin embargo, basándose en el próximo Segundo Informe de Evaluación del IPCC, las cifras deberían determinarse con mayor precisión con el fin de proporcionar una directriz estratégica al AGBM acerca de la limitación y reducción de las emisiones globales mediante el protocolo.

Potencial técnico

El potencial técnico para la reducción de emisiones está determinado por las tecnologías disponibles. El análisis realizado por el grupo de trabajo 2 del IPCC a este respecto (que recientemente ha sido aprobado por el grupo al completo) indica claramente que hay un potencial técnico significativo para reducir las emisiones de gases de efecto invernadero en el futuro próximo. Este potencial técnico, por lo tanto, no será el factor limitante.

Costes y escenarios económicos

El coste de las políticas y medidas y los impactos económicos (dentro de los países del Anexo I así como en otros países) son muy importantes en un contexto político. Antes de poder alcanzar conclusiones, algunos aspectos necesitan consideración adicional. Dos cosas están claras ya:

Primero, el IPCC confirma sus anteriores mensajes en el sentido de que el cambio climático debería ser considerado como un riesgo serio, que requerirá medidas progresivas de limitación y adaptación a lo largo del tiempo. El grupo de trabajo 3 del IPCC ha confirmado en su informe de síntesis, recientemente aprobado, el amplio potencial existente de políticas y medidas que se justifican por otros motivos, las llamadas "no regret". Por supuesto, este potencial de medidas "no regret" debe ser aprovechado completamente en el protocolo. En vista de los riesgos de cambio climático, políticas y medidas más allá de las "no regret" habrán de ser incluidas en el protocolo igualmente. Y se deberían llevar a cabo las acciones necesarias al menor coste posible, es decir, de una manera eficaz desde el punto de vista de los costes. Segundo, los costes y los impactos económicos que cada Parte tendrá que aceptar serán un elemento importante. Ello requerirá una consideración cuidadosa sobre cómo lograr contribuciones equitativas y apropiadas de cada una de las Partes del Anexo I al esfuerzo global.

6. Naturaleza de los objetivos

Es importante la naturaleza de los objetivos cuantitativos de limitación y reducción en el protocolo. El Mandato de Berlín especifica que deberían incluirse tanto las políticas y medidas como los objetivos cuantitativos. La tarea es seria, así que el protocolo no puede ser construido solamente con buenas intenciones. Es el resultado lo que cuenta: el resultado en términos de control de las emisiones de gases de efecto invernadero. Y ésto solamente puede lograrse a través de compromisos vinculantes de introducir políticas y medidas en el contexto de objetivos cuantitativos de limitación y reducción.

(UNOFFICIAL TRANSLATION)

On behalf of the European Union I would like to address a few aspects of this important element of the Berlin Mandate. We are fully aware of the fact that we are facing a challenging task. The EU's efforts to achieve stabilisation of CO₂ emissions at 1990 levels by the year 2000 in the EU as a whole are being evaluated on an annual basis. The second evaluation, which takes into account the most recent developments at both Community and individual member States level, is in preparation. EU member States' reports, based on the latest preliminary analysis by the European Commission, indicate that the EU is on course to return its CO₂ emissions to 1990 levels in the year 2000 - though further efforts on a national and Community level are still required to ensure that the stabilisation objective is achieved. The final results will be available by the end of this year. They will be submitted to the FCCC Secretariat as a token of the EU's willingness to share its experiences with the AGBM as regards the CO₂ stabilisation target.

General

As we indicated when expressing our views about the structure of the protocol, the EU strongly believes in a combined approach of both policies and measures as well as quantified emission limitation and reduction objectives for Parties included in Annex I. The Berlin Mandate is very clear about this. It is no longer the question whether these objectives for emissions by sources and removals by sinks within specified time-frames are necessary. The only question still is how these objectives should be formulated and what time frames should be chosen.

Limitation and reduction objectives should be ambitious enough to reflect the change in emission trends in Annex I Parties needed in order to progress towards the ultimate objective of the Convention. In the light of the Convention's ultimate objective, the absolute level of emissions and removals must play an important role, but also relative objectives such as efficiency criteria should be explored.

Coverage of greenhouse gases

Another question that has to be resolved is the coverage of the various greenhouse gases. Although the Berlin Mandate clearly indicates that all greenhouse gases, both sources and sinks as well as all relevant sectors should be addressed in the protocol, there is still a choice to be made between a so called gas-by-gas approach and an approach where gases are put in one basket using the IPCC's Global Warming Potential to determine their total. The EU is not taking a formal position on this question at this stage. The two possibilities are being pursued in the EU.

Specified time-frames

On the question of the time-frames to go with quantified emission objectives the Berlin Mandate suggests the years 2005, 2010 and 2020. There are two important aspects to take into consideration:

- (1) in view of the ultimate objective of the Convention and IPCC's message that overall global emissions below the current levels will be required to meet that objective, a protocol should encourage fundamental changes in the trends of greenhouse gas emissions; this would call for longer time-frames to create a reliable strategic framework for planning and investment decisions
- (2) in view of the need for accountability of Parties and to facilitate regular stock taking regarding the development of overall emissions shorter time frames are also important.

The EU therefore considers it appropriate to include in the protocol the time-frames specified in the Berlin Mandate: 2005 and 2010 as preferable and 2020 as a possible longer term perspective.

Incentives for early action

In this context some further thought should be given to the possibility of creating incentives for Parties to take early action, especially since IPCC indicates that it is the cumulative emissions (sum of annual emissions over period of time) that will determine the future level of greenhouse gas concentrations. Early action would be particularly relevant in case of investment decisions with a long-term impact, such as replacement or addition of a power plant, new transportation infrastructure and energy efficiency provisions in new buildings. Over the life-time of such infrastructural investments significant amounts of greenhouse gases can be avoided. We believe that AGBM should further explore in the context of its further work the potential and promotion of these incentives.

Quantification of objectives

Mr. Chairman, this completes the easy part of our statement. The most difficult questions no doubt are related to the determination of the exact level of the limitation and reduction objectives and also to the question of how to distribute them.

Quantified limitation and reduction objectives in the protocol should be determined by the need to reduce the risks of climate change (based on IPCC's scientific assessment), by the technical potential to realise reductions and by the costs and the economic impact. Let me address a few aspects of these issues now:

*** What does the science tell us?**

IPCC's scientific assessments point to the need for overall global emissions of greenhouse gases to go down well below current levels if we are to stabilise greenhouse concentrations at a level below tripling the pre-industrial values. This might already be too high in view of the ultimate objective of the Convention. It could for instance bring the average world temperature to levels the earth has not experienced in the last tens of thousand of years. We also know that the share of

global emissions originating in developing countries will grow to meet their social and development needs.

The message is clear: industrial countries need to continue to take the lead in gradually reducing emissions for decades after the year 2000, leading to a significant reduction by the middle of the next century for all industrialised countries together. But on the basis of the upcoming Second Assessment Report of IPCC the figures should be determined more precisely, in order to provide strategic guidance to the AGBM on the limitation and reduction of overall emissions through the protocol.

* **The technical potential**

The technical potential for emission reductions is determined by the technologies that are available. The analysis done by IPCC Working Group II on this aspect (which was recently accepted by the full Working Group) clearly indicates that there is a significant technical potential to reduce greenhouse gas emissions in the near future. This will therefore not be the limiting factor.

* **Costs and economic impacts**

The costs of policies and measures and the economic impacts (inside Annex-I Parties as well as on other countries) are very important in a political context. Before conclusions can be drawn, some aspects need further consideration. Two things are clear already:

(1) IPCC is confirming its earlier messages that climate change should be considered a serious risk, which will require progressive mitigation and adaptation measures over time. IPCC Working Group III confirmed in its recently approved summary report the large potential of policies and measures that can be warranted on other grounds ("no regret"). This "no regrets" potential needs of course to be fully used in the protocol. In view of the risks of climate change further policies and measures beyond "no regrets" are likely to have to be included in the protocol

as well. And everything should be done to take the necessary action at the lowest possible costs, that is in a cost-effective manner.

(2) The costs and economic impacts a Party will have to accept will be an important element. This will require careful consideration of how to achieve equitable and appropriate contributions by each Annex I Party to the global effort.

Character of objectives

The character of the quantified emission limitation and reduction objectives in the protocol is important. The Berlin Mandate specifies that both policies and measures as well as quantified objectives should be included. The task is serious, so the protocol cannot be built on good intentions alone. It is the result that counts - the result in terms of controlling emissions of greenhouse gases. And that can only be achieved through binding commitments to introduce policies and measures in the context of quantified limitation and reduction objectives.



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AD HOC GROUP ON THE BERLIN MANDATE
Second session
Geneva, 30 October - 3 November 1995
Agenda item 6

REPORT OF THE AD HOC GROUP ON THE BERLIN MANDATE

**Draft report of the Ad Hoc Group on the Berlin Mandate
on its second session**

Chairman: Raúl Estrada-Oyuela (Argentina)

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I. OPENING OF THE SESSION

1. The second session of the Ad Hoc Group on the Berlin Mandate (hereinafter referred to as "the AGBM") was held at Geneva from 30 October to 3 November 1995. The session was convened in accordance with the schedule confirmed at the first session (FCCC/AGBM/1995/2, para. 15).

2. The Chairman of the AGBM, Ambassador Raúl Estrada-Oyuela, opened the session at the 1st meeting, on 30 October 1995. In welcoming the participants, he noted that recent work by the Intergovernmental Panel on Climate Change (IPCC) had confirmed the concerns motivating the Convention and the potential for serious consequences of global climate change on developing countries. He recalled the importance of the precautionary principle and the principle of common but differentiated responsibilities, and emphasized the responsibility of developed countries to take the lead. In view of the limited time and resources available, the Chairman appealed to the Parties to take decisions and make progress regarding the analysis and assessment at this session. He drew attention to the fact that at some point the number of policies and measures to be analysed should be limited in order to achieve concrete results. The Chairman also welcomed two new Parties, observing that there were now 138 Parties to the Convention.

3. The Executive Secretary welcomed all participants to the session. He expressed satisfaction that it had been possible to offer funding to the full range of eligible Parties for this session. With regard to the provisional agenda, the Executive Secretary pointed out that the agenda formulations were deliberately brief and that the Berlin Mandate remained the basic element in all cases. He then introduced the documentation prepared for the session. In his comments on the work of the session, he noted the importance of balancing the aim of comprehensiveness with the need to begin focusing future work. He also observed that the AGBM was a forum to which the results of technical analysis could be presented for assessment rather than one where such analysis could be most usefully undertaken.

II. ORGANIZATIONAL MATTERS

(Agenda item 1)

A. Adoption of the agenda

(Agenda item 1 (a))

4. At the first meeting of the AGBM, on 30th October, the Chairman and the Executive Secretary explained the basis and structure of the provisional agenda. Statements were made by seven Parties, including one speaking on behalf of the Group 77 and China, one speaking on behalf of the European Community and its member States, and another speaking on behalf of the Alliance of Small Island States (AOSIS). An observer State also made a statement. The AGBM, at its 1st meeting, on 30 October, adopted the following agenda, on the

understanding that relevant agenda items encompass all aspects in an integrated manner, including analysis and assessment:

1. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of work of the session;
 - (c) Organization of the work of future sessions.
2. Election of officers other than the Chairman.
3. Strengthening the commitments in Article 4.2(a) and (b):
 - (a) Policies and measures;
 - (b) Quantified emission limitation and reduction objectives within specified time-frames.
4. Continuing to advance the implementation of Article 4.1.
5. Possible features of a protocol or another legal instrument.
6. Report on the session.

B. Organization of work of the session
(Agenda item 1 (b))

5. At the 1st meeting of the AGBM, on 30 October, the Chairman recalled that there would be services available for one morning and one afternoon meeting with interpretation each day. The AGBM agreed to proceed on the basis of the proposed schedule of work contained in annex II of document FCCC/AGBM/1995/3/Add.1.

C. Organization of the work of future sessions

6. At the __th meeting,

[to be completed]

D. Attendance

7. The lists of attendance at the second session of the AGBM are given in annex I below.

8. The AGBM welcomed the fact that sufficient resources had been available in the special voluntary fund to offer funding to all 106 eligible Parties and that so many were able to participate in the session. The AGBM expressed its gratitude to contributors and hoped that it would be possible to maintain such a high level of participation at future sessions.

E. Documentation

9. The documents prepared for the AGBM at its second session are listed in annex II below.

III. ELECTION OF OFFICERS OTHER THAN THE CHAIRMAN
(Agenda item 2)

10. At the 1st meeting of the AGBM, on 30 October, the Chairman reported on his consultations with regional groups in respect of nominations for the Bureau of the AGBM. He recalled that he had been authorized by the Conference of the Parties at its first session (COP 1) to undertake such consultations and indicated that these consultations would continue.

11. The Chairman provided further reports on his consultations at the 3rd meeting, on 31 October.

[to be completed]

IV. STRENGTHENING THE COMMITMENTS IN ARTICLE 4.2(A) and (B)
(Agenda item 3)

A. Policies and measures
(Agenda item 3 (a))

[to be completed]

B. Quantified emission limitation and reduction objectives within specified time-frames
(Agenda item 3 (b))

[to be completed]

V. CONTINUING TO ADVANCE THE IMPLEMENTATION OF ARTICLE 4.1
(Agenda item 4)

[to be completed]

**VI. POSSIBLE FEATURES OF A PROTOCOL OR
ANOTHER LEGAL INSTRUMENT**
(Agenda item 5)

[to be completed]

VII. REPORT ON THE SECOND SESSION
(Agenda item 6)

12. At the __th meeting, on __ November, the [Chairman, in the absence of an elected] Rapporteur, presented the first part of the draft report of the session (FCCC/AGBM/1995/L.2). The AGBM considered and adopted the first part of the draft report.

13. At its __th meeting, on __ November, the AGBM requested the [Rapporteur] [under the guidance of the] Chairman and with the assistance of the secretariat, to complete the report, taking into account the discussions of the AGBM, the conclusions on agenda items 2, 3, 4 and 5 and the need for editorial adjustments.

14. The Chairman, after thanking all participants for their constructive cooperation, declared the second session of the AGBM closed.

[to be completed]

Annex I

LISTS OF ATTENDANCE

1. The second session of the AGBM was attended by representatives of the following [number] Parties to the United Nations Framework Convention on Climate Change:

[to be completed]

2. The session was also attended by observers from the following States not parties to the Convention:

[to be completed]

3. The following United Nations offices and programmes were represented:

[to be completed]

4. The following specialized agencies of the United Nations and related organizations were represented:

[to be completed]

5. The following intergovernmental and non-governmental organizations were represented:

Intergovernmental organizations:

[to be completed]

Non-governmental organizations:

[to be completed]

Annex II

**DOCUMENTS PREPARED FOR THE AD HOC GROUP ON
THE BERLIN MANDATE AT ITS SECOND SESSION**

The following documents were prepared for the AGBM at its second session:

[to be completed]

Article 13 Report

Conclusions on future work of the Ad Hoc Group on Article 13
for inclusion in the report of the session

1. The Group agreed there was need for careful and detailed examination of all issues relating to the establishment of a multilateral consultative process and its design. As this would take some considerable time, work on Article 13 would not be completed by COP 2 and, in consequence, it would be necessary to plan a programme of work extending beyond that session.

2. The Group decided to request Parties to make written submissions relating to a multilateral consultative process, including submissions on a number of key issues regarding the design of such a process. These, and any other issues Parties consider to be relevant to the exercise, would be identified through a questionnaire to be circulated by the secretariat no later than 30 November 1995. Inputs were requested from Parties by 8 February 1996 and would be compiled and synthesized by the secretariat. Inputs from non-Parties would also be welcomed and would be included in a separate section of the compilation. The compilation would be made available during the sessions of the AGBM, SBI and SBSTA to be held in February/March 1996. It and the synthesis will be considered by the Group at its second session in July 1996 which should, if possible, be of three days duration. The questionnaire should seek views from Parties on, inter alia, the following points and concerns raised during the first session of the AG13:

(a) What should be understood by the term "multilateral consultative process" and what "questions regarding the implementation of the Convention" should be covered by such a process?

(b) What linkages would need to be established with other Articles of the Convention, notably, Articles 7.2(c), 8.2(c), 10, 12 and 14? (For example, are the provisions on the review process complete in themselves or is there scope for them to receive support through the process envisaged under Article 13? What is the relationship of Article 13 to Article 14? Would the process under Article 13 automatically be halted if a Party invokes Article 14?)

(c) Is there a gap between the processes on review of implementation and on settlement of disputes? If so, what is the extent of that gap and how could Article 13 contribute to narrowing it?

(d) Should the multilateral consultative process be made to apply to related legal instruments in addition to the Convention?

(e) Is there a relationship between the Article 13 process and the subsidiary bodies established under the Convention, for example, the AGBM?

(f) In addition to the questions raised in paragraph 10 of the annotated agenda (FCCC/AG13/1995/1), a number of other questions were raised that could be included in the questionnaire:

(i) What principles should govern the process? Is it sufficient that the process should be simple, transparent, facilitative and non-confrontational in character?

(ii) What is the legal status of the process?

(iii) What is meant by the Article 13 phrase: "Parties on their request"? Who may trigger the process apart from the Parties themselves? Is this process compulsory or optional?

(iv) What is meant by the word "process" in Article 13? Should it be understood as a sequence of events or as a mechanism or as an institution? Could it imply all of these?

(v) If a new mechanism or institution were to be established under Article 13, should its membership be general or restricted to specialists such as legal, economic, social or technical experts? In this context, should a roster of experts to provide advice be envisaged?

(vi) Is it necessary to establish such a multilateral consultative process? If so, what measures should the Conference of the Parties take for its adoption: decision of COP? Amendment? Protocol?

3. The Group requested the secretariat to organize a half-day panel discussion on experience of comparable consultative procedures to be held on the opening day of the second session of the AG13 and to circulate relevant materials in advance.

G-77 and China Position on Non-Annex 1 Guidelines

**G-77 AND CHINA POSITION PAPER ON A WORKSHOP/FORUM
FOR INITIAL COMMUNICATIONS OF
NON-ANNEX I PARTIES**

I. PREAMBLE

The initial national communications of non-Annex I Parties shall be made in accordance with Article 4.1 and Article 12 of the Framework Convention on Climate Change.

In view of this, the non-Annex I Parties shall develop a format for initial communications in fulfilment of their commitments under the Convention, keeping in mind Decision 8/CP.1 of the First Meeting of the Conference of the Parties.

II. OBJECTIVE

To develop a format for the preparation of initial communications of non-Annex I Parties in a workshop/forum in accordance with Article 12 of the FCCC, the Approach Paper of G-77 and China (Doc. no. A/AC.237/Misc.40), and Decision 4/CP.1 of the First Meeting of the Conference of the Parties.

III. WORKSHOP/FORUM

A core group of regional experts from G-77 and China will constitute a panel to examine the inputs of non-Annex I Parties to this workshop/forum.

This experts' group would meet as necessary to present proposals for further consideration of non-Annex I Parties for adoption of a format for initial communications in a workshop/forum.

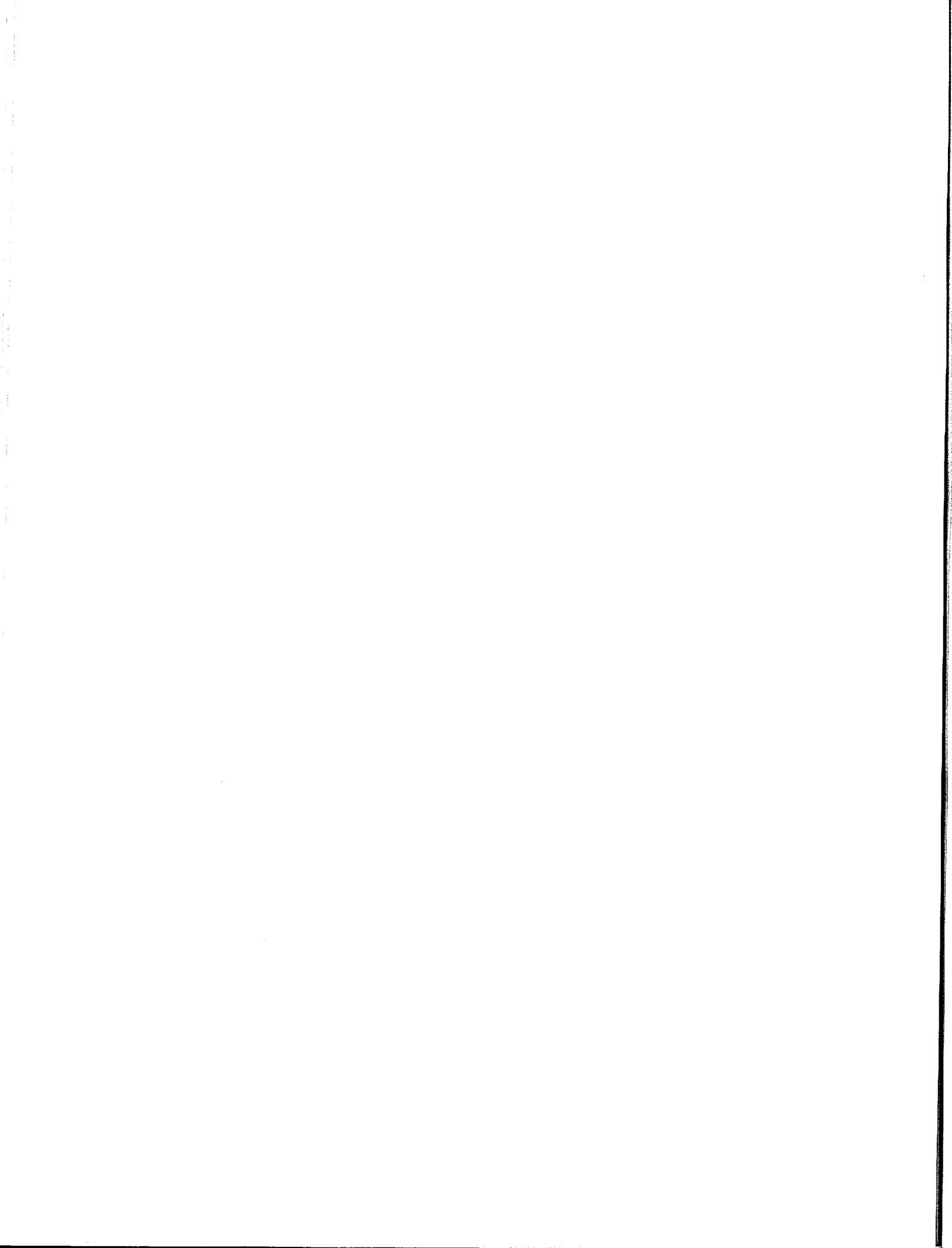
Experts from other countries would be invited as resource persons, if necessary.

IV. FUNDING

The Secretariat is requested to assist in mobilizing funds necessary for the workshop/forum in accordance with Articles 8 (2) (c) and 12.7 of the Convention. Parties who are interested to provide resources for the workshop/forum are requested to course their financial assistance through the Secretariat.

V. TIMING

Whenever possible, the workshop/forum should precede the meetings of SBSTA.



Chairman's Final Report

AD HOC GROUP ON THE BERLIN MANDATE
Second session

CHAIRMAN'S CONCLUSIONS
(As agreed in informal consultations)

(procedural elements to be added later)

Agenda item 3

Strengthening commitments in Article 4.2 (a) and (b)

1. In opening this item, there was general agreement that it was critical to the Berlin Mandate process, guided by the provisions of the Convention and its objective. The goal of the process is, inter alia, to strengthen the commitments in Article 4.2 (a) and (b) through an approach that elaborates policies and measures as well as sets quantified emission limitation and reduction objectives within specified time-frames in accordance with the Berlin Mandate.

Agenda item 3 (a)

Policies and measures

2. The AGBM began its substantive deliberations by considering the elaboration of policies and measures for Annex I Parties. In keeping with the Berlin Mandate and the conclusions of the first session, the AGBM discussed questions surrounding the analysis and assessment of policies and measures, including environmental and socio-economic costs and benefits for all Parties and results that could be achieved. The responsibilities of individual Annex I Parties to undertake and/or report on technical and analytical work was highlighted, and the need for all Parties in the AGBM to assess analytical results was also confirmed.

3. It was concluded that it would not be possible in the time available to conduct a detailed analysis and assessment of all possible policies and measures. The need to begin to narrow down, but not close off, the range of policies and measures under consideration was generally agreed. Some Parties considered the second session too early to undertake this task. Others sought to launch this effort by identifying policies and measures on which to focus or those already subject to some form of analysis and assessment, by proposing criteria to evaluate policies and measures or by suggesting vehicles and procedures to achieve that end, including additional submissions from Parties. This narrowing exercise will have to advance at the third session if the process is to remain on track to COP 3. Some Parties requested the secretariat to conduct an analysis and assessment of policies and measures on a selected sector for experience gaining.

4. A number of different approaches to the treatment of policies and measures were advanced: an annex-based approach reflecting different degrees of common actions, a sectoral and cross-sectoral approach, a technology approach, an instrument approach, a menu of options approach and mechanisms to develop these. Technology research, development and diffusion were seen as particularly important. The need to respect differing national circumstances, starting points and approaches and the other underlying considerations mentioned in paragraph 2 (a) of the Berlin Mandate was emphasized.

5. The AGBM welcomed the progress report from the Annex I Experts Group relating to their project on policies and measures for common action by Annex I Parties. It requested the Experts Group to take account of the views expressed during the session and looked forward to receiving regular reports and, in due course, substantive analytical inputs.
6. The AGBM looked forward to reviewing the aspects of the IPCC second assessment report related to policies and measures. This was seen as a substantive source of information for its deliberations at the third session. The AGBM invited the Chairman and other concerned officers of the IPCC to present the IPCC findings at that time.
7. The AGBM invited the Parties sponsoring the Climate Technology Initiative to make a progress report to the third session.
8. The AGBM invited Parties to make preliminary submissions to the secretariat by 15 January 1996 offering additional ideas and comments on policies and measures, including, if possible, information on cost-effectiveness and on environmental and socio-economic costs and benefits for all Parties and on how they might be incorporated in a protocol or another legal instrument. It requested the secretariat to compile these submissions, in their original language(s).
9. The AGBM requested the secretariat to organize an informal workshop focusing on policies and measures, recognizing the linkage with quantified objectives, in conjunction with the third session. Parties were invited to communicate to the secretariat by 30 November 1995 their views on the organization and content of such a meeting. On the basis of these views and expressions of interest, the secretariat was requested to invite a number of Parties and organizations, including those from non-Annex I Parties, to make presentations, taking care to ensure an adequate balance among presenters.
10. The AGBM further requested the secretariat, drawing on the national communications, available in-depth review reports, the IPCC second assessment report and comments from Parties, to develop, for consideration at the third session, a document that will follow up on document FCCC/AGBM/1995/6.

Agenda item 3 (b)

*Quantified emission limitation and reduction objectives
within specified time frames*

11. The AGBM held an initial exchange of views on the establishment of quantified limitation and reduction objectives within specified time-frames, such as 2005, 2010 and 2020, for anthropogenic emissions by sources and removals by sinks of greenhouse gases for Annex I Parties (FCCC/CP/1995/7/Add.1, decision 1/CP.1, para. 2 (a)).

12. The AGBM reiterated the importance of such objectives. Some Parties underlined the linkages between them and the elaboration of policies and measures. The importance of the underlying considerations included in paragraph 2 (a) of the Berlin Mandate was also reaffirmed.

13. Existing approaches for quantified objectives, such as those listed in document FCCC/AGBM/1995/4, annex, section II, para. 4 were mentioned as options. A number of alternative approaches were also broached, such as cumulative, multi-Party, differentiated, or collective objectives, as well as a system of emissions budgets (that is, a certain amount of emissions over a given period, for example 5 years). Such options require further elaboration and definition; Parties were invited to do so.

14. The need for the AGBM to assess the results of available analysis of a number of such objectives was stressed. The third session of the AGBM presents an initial opportunity to make progress on assessing relevant information and narrowing the range of options taking account, inter alia, of the environmental and socio-economic costs and benefits for all Parties.

15. Concepts relating to differentiation among Annex I Parties and equitable burden sharing, including possible indicators or criteria for differentiation in the context of sustainable development and vehicles to implement this were also thought to need further study by Parties.

16. With regard to time-frames, it will be necessary to combine the time needed to achieve shifts in patterns of emissions and removals with the need for accountability and stock-taking at regular intervals. The concept of providing incentives for early action merits further elaboration and consideration by Parties.

17. The AGBM looked forward to reviewing the aspects of the IPCC second assessment report related to quantified emission limitation and reduction objectives. This was seen as a substantive source of information for its deliberations at the third session. The AGBM invited the Chairman and other concerned officers of the IPCC to present the IPCC's findings at that time.

18. The AGBM requested the secretariat to organize in conjunction with the third session, an informal meeting featuring technical presentations by Parties and intergovernmental organizations of existing analytical information on quantified objectives and time-frames and their impacts. Parties were invited to communicate to the secretariat by 30 November 1995 their views on the organization and content of such a meeting. On the basis of these views and expressions of interest, the secretariat was requested to invite Parties and organizations, including those of non-Annex I Parties, to make technical presentations, taking care to ensure an adequate balance among presenters.

19. The AGBM further requested the secretariat to prepare, for consideration at the fourth session, a document reviewing possible indicators that could be used to define criteria for differentiation among Annex I Parties.

Agenda item 4

Continuing to advance the implementation of Article 4.1

20. A number of Parties reported on measures being undertaken to implement Article 4.1, including cooperation between Parties. Parties not included in Annex I to the Convention expressed the readiness to advance the preparation of their initial communications, taking into account Article 4.3, 4.5 and 4.7 of the Convention and paragraph 2 (b) of the Berlin Mandate, in order to supplement their sustainable development.

21. It was noted that the SBSTA at its second session would consider recommendations from the secretariat on guidelines for the preparation of national communications from Parties not included in Annex I to the Convention (FCCC/SBSTA/1995/3, para. 35).

22. The AGBM took note with appreciation the position paper of G-77 and China on the organisation of a workshop/forum on initial communications of non-Annex I Parties (see Misc.1/). The need for a workshop/forum, in which experts from Parties not included in Annex I could exchange experiences on the methodologies for and preparation of the initial communications, was discussed. The AGBM invited its Chairman to consult with the Chairman of the SBSTA, as well as with the Chairman of the G-77 and China, and Parties not include in Annex 1, and requested them, with the assistance of the secretariat, to organise such a workshop/forum in conjunction with the second session of SBSTA, that is, before the next session of the AGBM. The technical experiences of Annex I Parties in using the methodologies and preparing their communications would be helpful to the workshop/forum.

23. The importance of the timely availability of financial resources to enable Parties not included in Annex I to the Convention, including least developed countries, to prepare their communications was stressed. The AGBM noted that the GEF was taking initial steps in this regard, and encouraged the GEF to ensure an adequate and timely flow of funding for this purpose.

24. The need for a discussion in the third session of the AGBM on innovative, efficient and state-of-the-art technologies and knowhow was reiterated.

new paragraph 26(bis)

A number of Parties reiterated their support for the draft protocol submitted by AOSIS and welcomed the outline of a possible protocol structure as presented by Spain on behalf of the European Union.

Agenda item 5

Possible Features of a protocol or another legal instrument

25. The AGBM held preliminary discussions on this item. It identified a number of issues including institutional linkages between the Convention and a ~~new~~ legal instrument, the role of the secretariat, reviews of commitments, reporting and review mechanisms, subsidiary bodies, the use of annexes and the need to avoid duplication and overlap and took note of a number of proposals in this regard. The secretariat was requested to examine how institutions and processes established by the Convention could be linked to a future legal instrument and present a paper to the AGBM for consideration at a future session. *of Annex I Parties* *protocol or another*

26. A protocol or another legal instrument should cover all greenhouse gases, their emissions by sources and removals by sinks, and all relevant sectors.

27. The AGBM requested the secretariat to prepare a review of existing relevant Conventions. The review should cover the nature of their commitments, common but differentiated responsibilities of the Parties, institutional arrangements and linkages between the conventions and their protocols, and possible regional parameters for consideration by the AGBM at its fourth session.

28. The AGBM invited Parties to make preliminary submissions to the secretariat by 15 January 1996 offering additional ideas on possible features of a protocol or another legal instrument. It requested the secretariat to compile *or other legal instruments* the submissions, in their original language(s). *all relevant*

Canadian Delegation List

CANADIAN DELEGATION

Ad hoc Group on the Berlin Mandate (AGBM)

30 October-3 November, 1995

Article 13: Ad hoc Group on Multilateral Consultative Process

30 October-31 October, 1995

Geneva

- 1) Doug Russell - (Co-Chair) Director, Air Issues Branch, Environment Canada
- 2) Peter Fawcett - (Co-Chair) Deputy Director, Environment Division, DFAIT
- 3) John Drexhage - Policy Advisor, Global Air Issues Branch, Environment Canada
- 4) Kristi Varangu - Senior Policy Analyst, Environment Division, Natural Resources Canada
- 5) Silvia Maciunas - Lawyer, Legal Division, DFAIT
- 6) Frank Ruddock - Counsellor, Permanent Mission of Canada to United Nations, Geneva, DFAIT
- 7) Pierre Guimond - Manager of Government Relations, Canadian Electrical Association
- 8) Steven Guilbeault - Coordinator, Climate Change Coalition (QCCC), Montreal, Quebec

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Berlin Mandate (AGBM) Ad Hoc Group
on Article 13 (AG13) :
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