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Geneva, 28 June 1991

INTERVENTION OF THE NETHERLANDS DELEGATION
ON BEHALF OF THE EUROPEAN COMMUNITY
AND ITS MEMBER STATES

Second session of the Intergovernmental Negotiating Committee
for a framework Convention on Climate Change
(Geneva, 19-28 June 1991)

Mr Chairman,

You have asked for comments on the structure of the Convention. On behalf of the European Community and its Member States I want to stress the need for a Convention which will be, at the same time, strong, effective and flexible. In our view the Convention should inter alia commit contracting parties to establish policies and strategies to limit emissions of greenhouse gases taking into account their economic possibilities and need for development and to promote the use of the best available - environment friendly - technology with lower or no emission of greenhouse gases. The Convention must also facilitate the transfer of such technology and provide for adequate financial resources to developing countries in order to help them meet commitments.

In order to ensure a continuous process and an increasingly effective implementation of the commitments, the Convention should include what has come to be called a pledge and review process. Contracting parties will have to report on the measures they take or plan to take in order to meet their obligations. This reporting will be subject to formal review.

The need for flexibility stems from the nature of our task, which extends over a long time span, well into the next century at least. We will have to deal with a whole range of different substances and our action will affect activities in many important economic sectors. Long-term measures, to be continuously adapted to evolving circumstances, will be required in order to achieve the objectives of the Convention.

Protocols, which allow for a rapid implementation of specific commitments concerning groups of countries are, in our opinion, a way to achieve this. Stabilization of CO₂ emissions by the year 2000 in general at 1990 level by industrialized countries, individually or jointly, is in our view a crucial part of the package to be agreed in Rio in 1992 - and an example of a commitment that should preferably be embodied in a protocol. Similarly, measures to curb deforestation and promote sustainable forest management and afforestation should be agreed in a protocol.

NGO STATEMENT
28 June 1991
INC SESSION GENEVA

Mister Chairman, delegates.

As environmental organizations from all the major regions of the world, we would like to thank you for this opportunity to briefly address your Committee today.

A great many disparaging things are said about 'committees', -- but yours has to be an exception. It may be a 'Committee' but it is also the world's best hope for avoiding the potential catastrophe of run-away climate change.

Your work is therefore vital to the future of this planet, -- and its outcome is eagerly awaited by people all over the world. The world will be pleased to hear that the Intergovernmental Negotiating Committee For A Framework Convention On Climate Change has completed its organizational work -- and started to negotiate that Convention.

We might also say the world will be relieved. Millions of people are already under the threat of sea level rise, desertification and cyclones will be mightily relieved. Your mandate is not to treat the likelihood of climate change as a theory, but as a fact.

Fortunately there is indeed some progress to report. Yet you still stand at the foot of a mountain which you must climb. After two sessions, you are still in the base camp. Only now are you discussing - indeed negotiating - which routes you might take to the summit, or even which summit you are climbing to.

This is a difficult task in itself but it is not one which the waiting world will be particularly impressed by. It may seem unfair to those of us who work our way through the necessary preliminaries of international agreements -- but it is results that will count -- and only those.

The world expects to see significant progress by the time of the 'Earth Summit', the United Nations Conference on Environment and Development. That is now under a year away.

In less than twelve months you must agree not just a framework but some commitments to action. If, by the time of the UNCED Earth Summit, more developed countries are not seen to commit themselves to cut carbon dioxide emissions, if the Convention does not bring in new and additional commitments as well as funds: it will be seen to have failed.

Right now our fear is that the Negotiations will fail to live up to worldwide expectations for an effective climate convention by 1992. So by your Nairobi session it is essential that the developed countries agree on common action to reduce their greenhouse gas emissions.

This means all developed nations Mr Chairman, from the biggest industrial carbon dioxide polluters down to the smallest. And especially the biggest. Without such commitments Mr Chairman, by the time of the Earth Summit, your mountaineers will remain stuck in base camp. At present some of them are even refusing to leave their tents.

Unless we see movement very soon, June 1992 will arrive, the attention of the world will focus on this Intergovernmental Committee, and we will find that while it has a route map, it is still at the foot of the mountain.

For politicians this will be an embarrassment. For future generations, for the poor and vulnerable, it would be a disaster.

We urge the bureau and all countries to use the intersessional period to do all they can to consult and advance consensus. And to secure the resources needed to enable developing countries to play an effective part in negotiations. This does not only mean air tickets and per diems, it means the capacity to educate the public and to provide all levels of decision-makers with the information they need, from the village to Ministries in national capitals. Mister Chairman, in recent days we have heard many of the right words being used.

The 'precautionary principle' -- taking preventative action, new and additional funding - - better use of existing resources -- binding limits on greenhouse gas emissions. In our view, the tragedy is that few of the delegations are yet using all of the right words together. We fervently hope that this will change.

We hope that all countries will come to realise that reaching an agreement on averting the threat of climate change is not an option but a common historical necessity. We appeal to those in every continent who are presently standing back from commitments, to recognize that this will be an easy process to keep out of, but a very difficult one to get back into.

We urge the North and the South to come together -- and use the vital need for agreement on the climate issue to resolve long-standing differences over development and environment, rather than to allow those differences to stand in the way of agreement.

We welcome the growing recognition that additional resources are needed to ensure the effective participation of developing countries in these negotiations. We urge all developed countries to contribute immediately to the Trust Funds set up for that purpose and for the work of the Secretariat. Including those already giving on a bilateral basis.

We agree with the G77 that developed countries must lead by example and not impose counter-productive solutions. We applaud those developed countries which have already made commitments to cut their emissions.

The target must be to stabilize greenhouse gas concentrations at a level which will prevent dangerous anthropogenic interference with climate. As the Stockholm Environment Institute has pointed out, only a rise of one degree centigrade, or a tenth of that each decade, stands between us and the widespread destruction of major ecosystems.

Governments must tread more lightly on the earth - we already tax her capacities to the limit. Mister Chairmen, Ladies and Gentlemen, we are aware of your problems, and as a network of Non- Governmental Organizations from over thirty countries, with partners in many more, we are ready to play our part in helping overcome them where we can.

But time is not on our side. It is no longer appropriate to say that the world stands at a threshold, or at a crossroad. There are many reputable scientists who believe that climate change has already begun. We therefore wish you all speed in reaching an agreement, and urge you to make sure it lives up to the world's expectations. Mister Chairman, Delegates, we thank you.

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ED/Conf./G.2
18 June 1991

MINISTERIAL CONFERENCE OF
DEVELOPING COUNTRIES ON
ENVIRONMENT AND DEVELOPMENT
BEIJING, 18--19 JUNE 1991

BEIJING MINISTERIAL DECLARATION
ON ENVIRONMENT AND DEVELOPMENT

We, the Ministers from forty-one developing countries,* met in Beijing, at the invitation of the Government of the People's Republic of China, from June 18 to 19, 1991, at the Ministerial Conference on Environment and Development, and having discussed in depth the challenges faced by the international community in establishing norms of cooperation for the enhancement of environment and development, particularly the implications for the developing countries, declare as follows:

1. We are deeply concerned about the accelerating degradation of the global environment. This is largely on account of unsustainable development models and life styles. As a result, the basic elements indispensable for the human life -- land, water and atmosphere -- are gravely threatened. The more serious and widespread environmental problems are air pollution, climate change, ozone layer depletion, drying up of fresh water resources, pollution of rivers, lakes and the marine environment including the coastal zones, marine and coastal resources deterioration, floods and droughts, soil loss, land degradation, desertification, deforestation, loss of biodiversity, acid rain, proliferation and mismanagement of toxic products, illegal traffic of toxic and dangerous products and wastes, growth of urban agglomerations, deterioration of living and working conditions in urban and rural areas, especially of sanitation, resulting in epidemics and other such problems. Furthermore, poverty in the developing countries is becoming aggravated, hampering the efforts to meet the legitimate needs and aspirations of their people and exerting greater pressures on the environment.

2. We affirm that environmental protection and sustainable development is a matter of common concern to humankind, which requires effective actions by the international community and provides an opportunity for global cooperation. Against this background and out of a strong concern for the present and future generations, we hereby reaffirm our solemn commitment to

* For the list of developing countries attending the Conference, please see Annex.

7/12

regard, particularly by establishing an international funding mechanism for this purpose.

12. We are gravely concerned with the continuous increase in the green-house gases leading to climate change and its likely implications for the global ecological system, especially the threat that they pose to the developing countries, and to the island and low-lying developing countries in particular. Responsibility for the emission of green-house gases should be viewed both in historical and cumulative terms, and in terms of current emissions. On the basis of the principle of equity, those developed countries which have contaminated more must contribute more. Developed countries should therefore commit themselves to adopting measures to halt human-induced climate change and to setting up mechanisms to guarantee the environmental security and development of the developing countries, including the transfer to the developing countries, on preferential and non-commercial terms, of technologies for this purpose.

13. The framework convention on climate change currently being negotiated should clearly recognize that it is the developed countries which are mainly responsible for excessive emissions of greenhouse gases, historically and currently, and it is these developed countries which must take immediate action, ~~with time-bound targets,~~ to stabilize and reduce such emissions. Developing countries cannot be expected to accept any obligations in the near future. However, they should be encouraged through technical and financial cooperation to undertake measures within their plans, priorities and programmes which contribute both to their economic development and to the efforts to tackle the problem of climate change, without prejudicing their growing energy needs. The framework convention must include, inter alia, firm commitments by developed countries towards the transfer of technology to developing countries, the establishment of a separate funding mechanism, and the development of the economically viable new and renewable energy sources as well as sustainable agricultural practices, which constitutes an important step to deal with the major cause of climate change. In addition, the developing countries must be provided with the full scientific, technical and financial cooperation necessary to cope with the adverse impacts of climate change.

14. We further agree that the purpose and principles of the Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, as amended in June 1990, are positive in nature. The implementation by the developing countries of the obligations under the amended Protocol is subject to the effective implementation by the states parties to the Protocol of the arrangements for the provision of financial resources and transfer of technology to the developing countries. We urge the developed countries to commit themselves to the long-term arrangements for providing adequate financial resources and the expeditious transfer of technology as required of them under the

Ständige Vertretung der Bundesrepublik Deutschland

Mission permanente de la République Fédérale d'Allemagne
Permanent Mission of the Federal Republic of Germany



Memorandum

Germany

Prof. Dr. Ansgar-Otto Vogel

Intergovernmental Negotiating Committee
for a Framework Convention on Climate Change

Second Session

Geneva, 19 June 1991

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I.

The Federal Republic of Germany has always given its sustained support to the decision taken by the international community to draw up as speedily as possible an international Climate Convention together with implementing protocols within the framework of government negotiations. The global threat increasingly being posed by the greenhouse effect and the expected changes in the climate demand immediate, consistent action in a worldwide environmental partnership. It would, we believe, be irresponsible to have further delays.

II.

Given this particularly urgent situation and the extraordinarily great need for action, the Federal Republic of Germany does not believe that the way negotiations have been going on in the past at this Intergovernmental Negotiating Committee is satisfactory.

During the last round of negotiations we used up a great deal of precious time discussing procedural and organisational questions and were still unable to find final answers to all of them. We feel a certain degree of disquiet at this fact. Thus we urge that the questions which are still outstanding with regard to office occupancy for both working groups be resolved right at the beginning of this meeting and that we get down to the substantial negotiations as soon as possible.

III.

The Federal Republic of Germany is striving to ensure that the Climate Convention and at least two initial implementing protocols be signed during the UN Conference on Environment and Development to be held in June 1992 in Brazil, with priority being given to limiting and reducing climate-relevant emissions and forest protection and afforestation. We are convinced that in these negotiations general obligations and special commitments should be

derived from the principle of prevention in the following three areas:

1. Measures to limit and reduce emissions of anthropogenic climate-relevant greenhouse gases, particularly the energy-induced greenhouse gases, especially CO₂. Other gases such as methane, nitrous oxide and the precursor substances of tropospheric ozone - nitrogen oxide, carbon monoxide and volatile organic compounds - ought also to be limited.

We believe it is obvious however that substances subject to the Montreal Protocol - chlorofluorocarbons (CFCs) - cannot be part of the obligations contained in a Climate Convention.

2. Measures to conserve, improve and create CO₂ reservoirs and sinks in particular with regard to forests, and
3. Development of strategies and measures to adapt to changes in the climate and to reduce climate-related damage.

Basic binding obligations in these three areas should be contained in the Convention itself. Furthermore we believe it is necessary for other specific regulations to be contained in related implementing protocols.

Furthermore, it is necessary to carry out further research and systematic observation in order to deepen further scientific knowledge both on the complex interrelations between various implications of climate change and on strategies for action.

IV.

The provisions to limit and reduce greenhouse gas emissions, in particular carbon dioxide, must lead to a significant global decrease in these gases. We are of the opinion that a worldwide global stabilisation at 1990 levels of energy-related CO₂ emissions ought to be achieved by the year 2000.

We are moreover convinced that initial reduction steps are required for 2005 and 2010.

We are aware of the fact that this is a very ambitious objective which can only be reached by means of consistent efforts on the part of us all:

1. The economically strong industrialised countries must, we believe, take immediate and crucial action to reduce their emissions of CO₂. They have a particular responsibility to bear in this area since they are the ones who have caused most enrichment of greenhouse gases in the atmosphere and who have the scientific, technical and economic means required to find the solutions needed.

The Federal Republic of Germany took action as early as 1990 with its national CO₂ reduction programme. Its declared objective is a 25 to 30 % reduction by 2005 over 1987. We welcome without hesitation the fact that other countries have also begun to take similar measures.

2. Emissions in countries with hitherto relatively low energy consumption and thus low emissions are, in view of the necessary economic and social development, set to increase in future. These countries too, however, ought to play a part in the global effort against the greenhouse effect by striving after more efficient energy use in their economic activities, thus limiting their emissions. For us it is self-evident that the economically stronger countries, recognising both the principle of equal rights within an environmental partnership and that of environmental solidarity, support these countries in realising their obligations by means of technological cooperation and additional financial resources.

V.

For the purposes of forest protection in their capacity as CO₂ reservoirs and sinks, we believe the following action must be prescribed in the Convention and in a related protocol:

- to conserve forests as extensively as possible in the best structure possible by counteracting the causes for the threat posed to them and by setting differentiated objectives and

measures to reduce annual rates of deforestation, and even put an end to forest destruction;

- the implementation of site-related afforestation and regeneration measures in order to create additional forests as CO2 sinks and improve CO2 binding processes in existing forests.

VI.

Every country should commit itself to developing national strategies and objectives to limit and/or reduce greenhouse gases. This requires, among other things, inventories of emissions and concentrations of greenhouse gases and of existing forest areas. It also demands an estimation of future developments and the analysis of possible strategies and measures and of what effects their application could have. Every country should cooperate closely with one another to take on this task on the basis of jointly agreed methods and procedures. The Convention will have to contain relevant provisions to allow and indeed guarantee these obligations are put into action by means of exchange of information, monitoring and review.

VII.

We know that measures to protect the earth's atmosphere demand international cooperation and coordinated international action. It is our desire to use the forthcoming Convention to contribute to a sustainable sound development. The aim should be to harmonize the exploitation of resources and mankind's economic activities into harmony with the finite nature of resources and the limited strain that can be put on the biosphere.

We are determined to protect man and the environment, both now and in future, from the damaging consequences of changes to the climate. It is my hope that we shall have success in this area. We ought not to leave Geneva without making satisfactory and substantial progress in our negotiations.

REPLACING CFCs with HFCs and HCFCs: OUT OF THE FRYING PAN, INTO THE FIRE.

Joe Farman OBE

The accumulation in the atmosphere of fully-halogenated halocarbons (CFCs and carbon tetrachloride) has had two adverse effects of global importance: depletion of the stratospheric ozone layer and increased forcing of global warming.

In response to the growing concern about these effects, in June last year the Parties to the Montreal Protocol agreed to phase out the production of CFCs by the year 2000. Thirteen of the Parties declared their determination to achieve an earlier phase-out. In March 1991 a regulation came into force in the European Community requiring the phase-out to be completed by July 1997.

However, it is also necessary to look at the proposed alternatives. One response of industry to the ozone problem was to introduce two new names: **hydrochlorofluorocarbons (HCFCs)** and **hydrofluorocarbons (HFCs)**.

Both these classes of halocarbons are powerful greenhouse gases, and whilst HFCs pose no threat to stratospheric ozone, HCFCs will carry chlorine to the stratosphere. Damage to the ozone layer from the CFCs will continue to increase for several years after phase-out, because the chlorine partitioning between the lower and the upper atmosphere is far from equilibrium. Irresponsible use of HCFCs will delay the onset of ozone recovery.

We should be wary too of allowing long-term growth in releases of HFCs. The chemical industry has claimed that HFCs and HCFCs will contribute only 1% to the human-enhanced greenhouse effect in the decades to come. *But the reality is that this seriously underestimates the possible contribution of these gases to global warming.* For example, the substitution of HFC-134a for CFC-12 in car air-conditioning units, as envisaged by industry, would lead by the year 2075 to a doubling of the global warming already produced from CFC use in this one application alone. We shall fail to realise the potential benefits of the phase-out of CFCs if releases of HCFCs and HFCs are allowed to grow.

DO WE NEED OTHER HALOCARBONS TO REPLACE CFCs?

In many applications CFCs are no longer needed. Halocarbon-free processes are already available. According to the Technology Review Panel of the Montreal Protocol (1989) the global breakdown of CFC consumption in 1986 was:

- a) 34% (340 kt) in aerosol products, sterilisation, food freezing, and other applications involving immediate release;
- b) 25% (250 kt) in foam-blowing;
- c) 25% (250 kt) for refrigeration, air-conditioning and heat-pumps (little more than 1%, about 10 kt, in domestic refrigerators);
- d) 16% (160 kt) for solvent applications (all CFC-113).

An early assessment by the chemical industry concluded that the HCFCs might capture 30% and HFCs 10% of this market. More recent studies suggest that the mix will include more HFCs and less HCFCs.

Running through the four CFC-application sectors:

- a) **Aerosols etc:** no halocarbons are required, except perhaps in very small quantity for a few medical applications.

b) **Foam-blowing:** most types of foam can now be blown without halocarbons. Exceptions are extruded polystyrene slabs (XPS), where HCFC-22 and HCFC-142b seem to be the only alternatives to CFCs, and rigid polyurethane foam, where CFC-11 is still needed to produce the most effective insulation. Foam glass is a possible replacement for XPS and vacuum panels could with considerable potential gains in effectiveness replace rigid foam where dimensions are critical.

c) **Refrigeration and air-conditioning:** the release of CFC 12 from mobile air-conditioning units has been estimated to be 44 kt annually in the US alone, almost 10% of global use. Halocarbon-free processes must be developed in the long term. In the rest of this sector, recycling and better working practices can greatly reduce the demand for refrigerants.

d) **Solvent applications:** Halocarbon-free processes are already available in all but a very few technical solvent applications.

It is not unreasonable to conclude that between 80 and 90% of the 1986 consumption of CFCs was unnecessary. This must not be forgotten in assessing future needs for HCFCs and HFCs.

EVEN IF HCFCs AND HFCs ARE DEEMED NECESSARY, DO WE NEED *GROWTH* IN PRODUCTION, AS INDUSTRY PLANS?

If there is no waste and halocarbons are recycled, *constant* production will sustain a linearly growing market. *Growth* in production is only needed to sustain an *exponential growth* in the market. In the past, growing production was usually associated with accelerating waste, as typified by the growth of aerosol products. Consumers were, effectively, encouraged to throw CFCs away. As a result there is six times more chlorine in the atmosphere than in 1900.

The whole bank of refrigerants in the world can be replaced in a decade with quite modest constant production. For example, the total bank of CFC refrigerants in the European Community is almost certainly less than 60 kilotonnes (kt), and for all practical purposes that market is saturated. Thus, with modest plant producing say 10 kt annually, after 6 years the makers will be looking for other applications to justify running the plant at full capacity. The great variety of CFC applications arose in just that way. The production capacity set up initially was far too large to be employed in the refrigeration industry, once the initial phase of expansion had passed, and applications involving immediate release (which would have been called waste if the CFCs had been valued more highly) were eagerly sought.

Even in the few applications where HCFCs and HFCs are deemed to be necessary, constant production, and low wastage, are quite sufficient to sustain growth of application. Use need not involve release.

ENERGY-EFFICIENCY AND RELEASE OF GREENHOUSE GASES.

Refrigeration and air-conditioning use large amounts of energy. In Sweden and in the United States, for example, these processes account for about 25% of the domestic consumption of electrical power. With hermetically-sealed units, emissions occur only as a result of accident, or by failure to recycle when equipment is scrapped. Energy efficiency is more important than the greenhouse effect of emissions. And considerable savings of energy are possible by using refrigerant mixtures. The most efficient which have yet been developed contain some mildly combustible components (for example, ammonia and HFC-152A, or propane). Compared with fire risks which already exist in most kitchens, the additional risk from a few ounces of refrigerant in a sealed unit appears small.

There is an urgent need to re-appraise regulations and attitudes which at present stand in the way of the introduction of combustible refrigerants capable of doing the same job planned for HCFCs and HFCs.

ABOUT THE AUTHOR:

Joe Farman OBE is the scientist responsible for discovering the ozone hole in Antarctica. An atmospheric physicist who has worked in Antarctica since 1956, Dr Farman is author of many distinguished research papers, and holder of a Polar Medal and a UNEP Global 500 award. He recently retired from the British Antarctic Survey.

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TELEGRAM

PAGE 01 OF 06 STATE 181217 040007Z
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OUTLINES SOME INITIAL U.S. THINKING ON THESE SUBJECTS AND REQUESTS POSTS OBTAIN INFORMATION AND REACTIONS FROM HOST GOVERNMENTS ON HOW WE MIGHT DEVELOPE A COUNTRY STUDY PROCESS AND INVENTORY CLIMATE CHANGE RELATED TECHNOLOGY COOPERATION. POSTS ARE REQUESTED TO PROVIDE RESPONSES TO QUESTIONS POSED IN NON-PAPER FORM. THERE IS AN ADDITIONAL ACTION REQUEST IN THE FOLLOWING PARAGRAPH. END SUMMARY

BEGIN FYI FOR POSTS ONLY:

2. INTER-AGENCY INITIATIVE:

THE DEPARTMENT HAS ESTABLISHED A TECHNOLOGY COOPERATION (TC) SUB-GROUP UNDER THE INTER-AGENCY OES POLICY COORDINATING COMMITTEE WORKING GROUP (OCCWG) ON CLIMATE.

THE PURPOSE OF THE SUB-GROUP, AMONG OTHER THINGS, IS TO DEVELOP A BETTER UNDERSTANDING OF WHAT ACTIVITIES SHOULD BE INCLUDED IN THE CLIMATE CHANGE COUNTRY STUDY PROCESS, TO INVENTORY U.S. RESOURCES AND PROGRAMS ADDRESSING RELATED TECHNOLOGY COOPERATION AND TO IDENTIFY HOW THESE

EXISTING RESOURCES AND ACTIVITIES MIGHT BE USED TO SUPPORT A BETTER COORDINATED AND TARGETED EFFORT. IF APPROPRIATE, WE WOULD LIKE TO INITIATE INFORMAL DISCUSSIONS WITH OTHER INTERESTED INDUSTRIALIZED COUNTRIES REPS ON APPROACHES TO TECHNOLOGY COOPERATION ISSUES. THIS MIGHT BE DONE ON THE MARGINS OF THE NEXT SESSION OF THE INTERGOVERNMENTAL NEGOTIATING COMMITTEE (INC) ON CLIMATE CHANGE, WHICH WILL TAKE PLACE IN GENEVA, JUNE 15-29. WE BELIEVE POSTS CAN MAKE AN IMPORTANT CONTRIBUTION TO THE DEVELOPMENT OF THIS COORDINATION INITIATIVE.

END FYI FOR POST ONLY

BEGIN NON-PAPER

1. TOWARD A COMMON APPROACH TO PROMOTE TECHNOLOGY COOPERATION

1. WE BELIEVE IT WOULD BE HELPFUL TO SHARE WITH SELECTED COUNTRIES SOME OF OUR INITIAL THINKING ON THE ISSUE OF TECHNOLOGY COOPERATION IN HOPE THAT THEY MIGHT SHARE SIMILAR INFORMATION AND THINKING WITH US. WE BELIEVE THAT THE EVOLUTION OF A COMMON APPROACH TO THE QUESTION OF TECHNOLOGY COOPERATION AS IT RELATES TO CLIMATE CHANGE WOULD HELP MOVE FORWARD NEGOTIATIONS ON THIS ISSUE, AND WE STAND READY TO WORK WITH COLLEAGUES TO THIS END.

2. WE USE THE TERM TECHNOLOGY COOPERATION RATHER THAN TECHNOLOGY TRANSFER BECAUSE WE BELIEVE THE LATTER TERM

DEFINES THE TECHNOLOGY ISSUE TOO NARROWLY. TECHNOLOGY TRANSFER SUGGESTS A LIMITED, ONE WAY ACTION THROUGH WHICH ONE GIVES AND ANOTHER RECEIVES. BUT THE ISSUE IS MUCH BROADER. THE TERM TECHNOLOGY COOPERATION SEEMS TO DESCRIBE MORE ACCURATELY THE PROCESS BY WHICH TWO OR MORE PARTIES IDENTIFY INDIVIDUAL AND COMMON INTERESTS TO SHARE INFORMATION, KNOWLEDGE, KNOW-HOW, EQUIPMENT, TECHNICAL PROCESSES, AND MANAGEMENT SKILLS. TECHNOLOGY COOPERATION RECOGNIZES THE DYNAMIC PROCESS AND MUTUALITY OF INTERESTS IMPLICIT IN ANY SUCCESSFUL SHARING OF KNOWLEDGE AND KNOW-HOW.

3. BELOW WE OUTLINE SOME INITIAL U.S. THINKING ON THE SUBJECT OF TECHNOLOGY COOPERATION IN THE HOPE OF

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DRAFTED BY: OES/EGC: SSKINNEY
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TAGS: SENV, ENRG, EF, IN, ETRD, EAID, KSCA, INC
SUBJECT: CLIMATE CHANGE, PROMOTING TECHNOLOGY COOPERATION
REF: (U) 91 STATE 145737 (NOTAL)
USEC/USOECDC ALSO FOR EMBASSY

THIS IS AN ACTION CABLE.

1. SUMMARY: IN PREPARATION FOR UPCOMING NEGOTIATING SESSIONS ON CLIMATE CHANGE, DEPARTMENT HAS INITIATED INTER-AGENCY CONSIDERATION OF HOW TO APPROACH THE ISSUE OF TECHNOLOGY COOPERATION, A.K.A. TECHNOLOGY TRANSFER. WE PREFER THE TERM TECHNOLOGY COOPERATION BECAUSE IT SUGGESTS A TWO WAY PROCESS IN WHICH PARTIES IDENTIFY INDIVIDUAL AND COMMON INTERESTS TO SHARE INFORMATION, KNOWLEDGE, KNOW-HOW, EQUIPMENT, AND MANAGEMENT SKILLS.

TECHNOLOGY TRANSFER SUGGESTS A MORE LIMITED, ONE WAY PROCESS IN WHICH ONE GIVES AND THE OTHER RECEIVES. TECHNOLOGY COOPERATION RECOGNIZES THE MUTUALITY OF INTERESTS IMPLICIT IN ANY SUCCESSFUL SHARING OF KNOWLEDGE AND KNOW-HOW.

WE BELIEVE IT WOULD BE HELPFUL TO DEVELOP AMONG DONOR NATIONS A COMMON APPROACH TO THE ISSUE OF TECHNOLOGY COOPERATION. TO DO THIS WE BELIEVE WE NEED TO START BY CONCEPTUALIZING WHAT IS NEEDED IN THE WAY OF COUNTRY STUDIES AND IDENTIFYING CURRENT INTERNATIONAL RESOURCES DEDICATED TO AND/OR AVAILABLE FOR PROMOTING TECHNOLOGY COOPERATION RELATED TO CLIMATE CHANGE. THIS CABLE

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PAGE 02 OF 06 STATE 181217 040007Z

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STATE 181217 040007Z

SH85661

STIMULATING FURTHER THINKING, INFORMATION GATHERING, AND DISCUSSION ON THIS IMPORTANT ISSUE. IF INTEREST WARRANTS, THE U.S. WOULD BE PREPARED TO MEET INFORMALLY ON THE MARGINS OF THE JUNE JNC WITH INTERESTED COUNTRIES TO DISCUSS HOW EFFORTS AND RESOURCES CURRENTLY DEDICATED TO CLIMATE CHANGE TECHNOLOGY COOPERATION MIGHT BE BETTER COORDINATED. IF AGREED, WE MIGHT DISCUSS HOW THE COUNTRY STUDY APPROACH FOR CLIMATE CHANGE WILL NEED TO DIFFER FROM PREVIOUS EXPERIENCE, WHAT WILL BE REQUIRED IN THE CLIMATE CHANGE CONTEXT, WHICH DEVELOPING COUNTRIES MIGHT BE BEST SUITED TO HELP DEVELOP A MODEL APPROACH, AND WHAT FINANCIAL ASSISTANCE WITHIN EXISTING RESOURCES MIGHT BE AVAILABLE TO UNDERWRITE SUCH PILOT WORK. HAVING BEGUN AN INVENTORY OF U.S. RESOURCES DEDICATED TO CLIMATE CHANGE TECHNOLOGY COOPERATION, WE WOULD LIKE TO DISCUSS THE UTILITY OF THIS CONCEPT WITH OTHER COUNTRIES AND INVITE THEM TO HELP DEVELOP AN INTERNATIONAL INVENTORY.

EASTERN EUROPEAN COUNTRIES TO MAKE JUDGEMENTS CONCERNING THE MOST COST EFFECTIVE AND FEASIBLE OPTIONS FOR REDUCING EMISSIONS.

-- IMPLEMENTATION NEEDS ASSESSMENTS WOULD CARRY OUT A DETAILED ASSESSMENT OF WHAT IS REQUIRED TO IMPLEMENT COMPONENTS OF A DESIRED STRATEGY. THESE ASSESSMENTS WOULD FORM THE BASIS OF AN ACTION PLAN. THEY WOULD CLEARLY INCLUDE NEEDED POLICY CHANGES, TECHNOLOGY, TRAINING, TECHNICAL ASSISTANCE, AND OTHER REQUIREMENTS RELATED TO IMPLEMENTATION. THEY MIGHT ALSO IDENTIFY TECHNOLOGY

COOPERATION RESOURCES WHICH COULD BE USEFUL IN IMPLEMENTING A DESIRED STRATEGY.

3. ECONOMIC FEASIBILITY AND COST/BENEFIT FACTORS WOULD BE IMPORTANT CONSIDERATIONS OF BOTH THE STRATEGY ANALYSES AND IMPLEMENTATION NEEDS ASSESSMENTS. THE STRATEGY AND NEEDS ASSESSMENT WOULD PROVIDE INFORMATION ESSENTIAL TO THE DEVELOPMENT OF A NATIONAL ACTION PLAN, AS WELL AS HELP BEGIN TO ASSESS THE RANGE OF POTENTIAL COSTS ASSOCIATED WITH THE ACTION PLAN.

4. THE CONCEPT OF COUNTRY STUDIES FOR EASTERN EUROPEAN AND DEVELOPING COUNTRIES HAS RECEIVED STRONG SUPPORT IN RECENT MEETINGS OF THE JNC AND THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), BUT THE CONCEPT REMAINS ILL-DEFINED. SUCH STUDIES PROVED EXTREMELY USEFUL IN THE MONTREAL PROTOCOL PROCESS, AND IT IS ASSUMED THAT AN EXPANDED COUNTRY STUDY APPROACH COULD PLAY AN IMPORTANT ROLE IN THE CLIMATE CHANGE CONTEXT. HOWEVER, THE CONCEPT OF A SINGLE STUDY PER COUNTRY MAY NEED TO BE REPLACED BY THE CONCEPT OF A COUNTRY STUDY PROCESS COMPOSED OF SEVERAL PHASES AIMED AT THE DEVELOPMENT OF NATIONAL ACTION PLANS.

5. LESSONS LEARNED FROM THE MONTREAL PROTOCOL PROCESS:

5A. UNDER THE MONTREAL PROCESS, INDUSTRIALIZED COUNTRIES VOLUNTEERED TO ASSIST ONE OR MORE DEVELOPING COUNTRIES IN ASSESSING THEIR TECHNOLOGY NEEDS AND ASSOCIATED INCREMENTAL COSTS. A WORKSHOP OF PARTICIPATING COUNTRIES SPONSORED BY EPA HELPED ESTABLISH A CONSISTENT APPROACH TO THE STUDIES. THESE STUDIES DEMONSTRATED THAT THE

INCREMENTAL COSTS TO DEVELOPING COUNTRIES OF USING CFC SUBSTITUTES WERE MUCH LESS THAN FIRST IMAGINED.

5B. IN GENERAL, THE MOST SUCCESSFUL COUNTRY STUDIES WERE THOSE IN WHICH THE TARGET COUNTRIES DESIGNED AND CONDUCTED THE STUDIES WITH THE HELP OF SPONSOR COUNTRY STAFF AND/OR CONSULTANTS. THE FIRST STUDIES COMPLETED HELPED INFORM NEGOTIATORS WHEN THEY TURNED TO THE ISSUE OF FINANCIAL ASSISTANCE. UPON COMPLETING THIS STUDY, FOLLOW-UP SEMINARS TO PROVIDE INFORMATION AND OPERATIONAL TRAINING PROVED NECESSARY AND USEFUL. FINALLY, THE MONTREAL COUNTRY STUDIES HELPED ENGAGE THE PRIVATE SECTOR BY ENCOURAGING DIRECT CONTACTS BETWEEN PRIVATE (COMMERCIAL) INTERESTS IN THE HOST AND SPONSOR COUNTRIES FOR DEvisING SOLUTIONS TO SPECIFIC HOST COUNTRY PROBLEMS. THIS LAST ELEMENT HAS LED TO THE IDENTIFICATION OF MANY SPECIFIC FIXES, MANY AT LOW OR NO COST.

5C. THE U.S. ACTED AS THE SPONSOR NATION FOR EGYPT, MEXICO AND BRAZIL. OTHER FIRST YEAR STUDIES WERE KENYA (SWEDEN), JENEZUELA (NO SPONSOR), CHINA (UNDP WITH NORWAY), AND INDIA (U.K.). SUBSEQUENT COUNTRY STUDIES ARE BEING CARRIED OUT IN ARGENTINA, CHILE, ECUADOR, GHANA, MALAYSIA, NIGERIA, THAILAND, TRINIDAD AND TOBAGO, TUNISIA, INDONESIA, AND THE PHILIPPINES.

II. PRIORITIES

1. U.S. DISCUSSION ON TECHNOLOGY COOPERATION HAS THUS FAR FOCUSED ON FOUR PRIORITIES:

- 1) THE NEED TO CLARIFY AND DEFINE A COUNTRY STUDY PROCESS;
- 2) THE NEED TO INVENTORY EXISTING TECHNOLOGY COOPERATION PROGRAMS AND RESOURCES AT HOME AND ABROAD;
- 3) THE NEED TO IDENTIFY HOW EXISTING RESOURCES DEVOTED TO TECHNOLOGY COOPERATION MIGHT BE BETTER COORDINATED AND UTILIZED; AND
- 4) THE NEED TO IDENTIFY RESOURCES AND/OR SERVICES THAT MIGHT BE NEEDED FROM EXISTING RESOURCES.

III. COUNTRY CASE STUDIES: THE NEED FOR A PROCESS

1. WE BELIEVE THAT THE FIRST STEP IN ANY TECHNOLOGY COOPERATION INITIATIVE IS TO ESTABLISH WHAT KIND OF COOPERATION, INCLUDING TECHNOLOGY TRANSFER NEEDS, IS REQUIRED. IMPLEMENTATION OF AN EXPANDED, MULTIFACETED COUNTRY STUDY PROCESS CAN BE OF SIGNIFICANT HELP IN THIS REGARD. FIRST, THE STUDIES THEMSELVES ARE A FORM OF "TECHNOLOGY", TRANSFERRING DATA, EXPERTISE AND ANALYTICAL CAPABILITIES TO THE HOST COUNTRIES. THIS WILL ALLOW THEM TO CARRY OUT IMPROVED ANALYSES OF THEIR OWN OPTIONS AND NEEDS IN THE FUTURE. SECONDLY, THE COUNTRY STUDIES WILL DEVELOP A CLEAR, CONSISTENT AND CREDIBLE BASIS FOR

ESTABLISHING TECHNOLOGY IMPLEMENTATION GOALS, OR ACTION PLANS, AND DEFINING THE POLICY, LOCAL IMPLEMENTATION AND INTERNATIONAL COOPERATION WHICH ARE REQUIRED TO ACHIEVE THESE GOALS.

2. WE BELIEVE THAT THE COUNTRY STUDY PROCESS MAY NEED TO BE QUITE DETAILED AND MAY USEFULLY BE BROKEN DOWN INTO THREE MAJOR COMPONENTS: COMPREHENSIVE INVENTORIES OF NET EMISSIONS TAKING A SECTORAL APPROACH; BROAD RESPONSE STRATEGY ANALYSES; AND DETAILED ASSESSMENTS OF IMPLEMENTATION NEEDS FOR SELECTED STRATEGIES:

-- EMISSIONS INVENTORIES ARE RELATIVELY STRAIGHTFORWARD, BUT PROVIDE AN ESSENTIAL BASIS FOR EVALUATING A RANGE OF SCENARIOS OF FUTURE EMISSIONS AND STRATEGIES FOR RESPONSE.

-- RESPONSE STRATEGY ANALYSES NEED TO EVALUATE ON A CONSISTENT BASIS A WIDE RANGE OF POSSIBLE TECHNOLOGY AND POLICY ACTIONS ACROSS DIFFERENT CASES AND SECTORS. THIS ANALYSIS SHOULD PROVIDE A FRAMEWORK FOR DEVELOPING AND

UNCLASSIFIED

TELEGRAM

Department of State

PAGE 03 OF 06 STATE 181217 040007Z

SH85681

STATE 181217 040007Z

SH85681

6. A COUNTRY STUDY PROCESS FOR CLIMATE CHANGE:

6A. WE SHOULD BUILD ON THE MONTREAL PROTOCOL COUNTRY STUDIES EXPERIENCE, ALTHOUGH WE WILL NEED TO BROADEN THE PROCESS TO ACCOMMODATE THE GREATER COMPLEXITY OF THE

CLIMATE CHANGE ISSUE. FOR CLIMATE CHANGE WE NEED TO SEEK AGREEMENT ABOUT WHAT INFORMATION IS NEEDED AND HOW IT CAN BEST BE OBTAINED. IT WILL BE ESSENTIAL TO HAVE A COMMON APPROACH (ALTHOUGH THE PARTICULAR STUDIES MAY DIFFER ACCORDING TO COUNTRY SPECIFIC CONDITIONS) AND TO MARSHALL AND COORDINATE EXISTING RESOURCES TO SERVE THIS PROCESS. DEVELOPING AN ORDERLY, IF NOT ALWAYS UNIFORM, APPROACH TO THE COUNTRY STUDY QUESTION SHOULD HELP MEMBERS OF THE INTERNATIONAL COMMUNITY AVOID REDUNDANT OR INEFFICIENT ACTION.

6B. IN ORDER TO EFFECTIVELY ASSESS IMPLEMENTATION NEEDS—SUCH AS TECHNOLOGY, TECHNICAL ASSISTANCE AND POLICY REQUIREMENTS, COUNTRIES WILL FIRST NEED TO INVENTORY THEIR NET GREENHOUSE GAS EMISSIONS TO GAIN SOME IDEA OF WHICH SECTORS OF THE ECONOMY MIGHT HOLD THE GREATEST POTENTIAL FOR COST EFFECTIVE ACTION. ANALYSES OF POTENTIAL RESPONSE STRATEGIES FOR NET EMISSIONS REDUCTIONS AND ADAPTIVE MEASURES IN THE AREA OF AGRICULTURE, FORESTRY AND SEA-LEVEL RISE, WILL FURTHER STRENGTHEN A COUNTRY'S ABILITY TO ASSESS ITS TECHNOLOGY, TECHNICAL ASSISTANCE, AND POLICY NEEDS. ONCE THESE NEEDS ARE IDENTIFIED, POLICY MAKERS WILL BE ABLE TO SET NATIONAL PRIORITIES THROUGH THE DEVELOPMENT OF NATIONAL ACTION PLANS.

7. NET EMISSIONS INVENTORIES: THE FOUNDATION FOR NEEDS ASSESSMENTS

7A. THE OECD, IN SUPPORT OF THE IPCC, IS DEVELOPING A STANDARD METHODOLOGY FOR CONDUCTING NATIONAL NET GREENHOUSE GAS EMISSIONS INVENTORIES. THIS METHODOLOGY

WILL ASSESS NET EMISSIONS FROM VARIOUS SECTORS: ENERGY, INDUSTRY, AGRICULTURE, FORESTS AND LAND USE. TO THIS END, OVER 100 EXPERTS FROM 44 COUNTRIES, INCLUDING 28 NON-OECD COUNTRIES, MET FEBRUARY 18-21 IN PARIS. DURING THAT MEETING, IT WAS NOTED THAT A NUMBER OF THE ATTENDING COUNTRIES, INCLUDING ARGENTINA, BURKINA FASO, CONGO, COSTA RICA, GAMBIA, MEXICO, NIGERIA, SENEGAL, TANZANIA AND VENEZUELA, WOULD BENEFIT FROM TECHNICAL ASSISTANCE IN BUILDING NET EMISSIONS INVENTORIES.

7B. THE FIFTH PLENARY OF THE IPCC SUBSEQUENTLY ENDORSED A WORK PLAN TO DEVELOP A FIRST DRAFT "GUIDELINE" FOR NATIONAL EMISSIONS INVENTORIES BY MID-1992 USING, AS ONE INPUT, COUNTRY-BY-COUNTRY ANALYSES. THIS INITIATIVE COULD PROVE VALUABLE IN ESTABLISHING AN AGREED UPON FIRST STEP IN THE COUNTRY STUDY PROCESS. EPA HAS PROPOSED A STUDY WITH BRAZIL THAT WILL FOCUS ON DEVELOPING A COMPREHENSIVE AND DETAILED INVENTORY OF NET GREENHOUSE GAS EMISSIONS, USING THE OECD METHODOLOGY AS A TEST OF THE METHODOLOGY AND A MODEL FOR OTHER DEVELOPING COUNTRIES. OTHER BILATERAL PROJECTS MAY BE INITIATED IN FY 92.

8. OTHER IPCC ACTIVITIES

8A. TO COMPLEMENT THE NET EMISSIONS INVENTORY, THE IPCC IS ALSO DEVELOPING AN INVENTORY OF TECHNOLOGICAL RESPONSE OPTIONS. BUILDING ON AN EARLIER ASSESSMENT BY THE WORKING GROUP III ENERGY AND INDUSTRY SUBGROUP (EIS) ON APPROPRIATE ENERGY AND INDUSTRY SECTOR TECHNOLOGIES, THE FIFTH IPCC PLENARY CALLED FOR STANDARDIZED STUDIES TO FOCUS ON THE ECONOMIC AND MARKET FEASIBILITY OF SUCH

MITIGATION TECHNOLOGIES. THE MANNER IN WHICH THESE EIS STUDIES WILL BE CONDUCTED WILL BE DISCUSSED IN MORE DETAIL DURING THE AUGUST 5-8 WGIII MEETING IN GENEVA.

8B. DEVELOPING A UNIFORM APPROACH TO ASSESSING THE APPLICABILITY AND FINANCIAL FEASIBILITY OF ON-THE-SHELF-TECHNOLOGY WILL ENABLE COUNTRIES TO EXPEDITE NATIONAL STUDIES DESIGNED TO IDENTIFY A COST EFFECTIVE RESPONSE STRATEGY. THE NEWLY MANDATED EIS STUDIES SHOULD BE DEVELOPED IN SUCH A WAY AS TO FEED INTO MORE COUNTRY SPECIFIC NEEDS ASSESSMENTS.

8C. MINDFUL OF THE NEED TO IDENTIFY OPPORTUNITIES FOR ADAPTATION AS WELL AS MITIGATION RESPONSES, THE IPCC FIFTH PLENARY ALSO ASKED THE AGRICULTURE AND FORESTRY SUBGROUP OF WORKING GROUP III (A) TO ASSESS AND EVALUATE MANAGEMENT PRACTICES AND SYSTEMS; (B) TO ASSESS AND EVALUATE ADAPTATION MEASURES; AND (C) EVALUATE SOCIO-ECONOMIC IMPACTS OF MITIGATION, ADAPTATION AND NON-ACTION RESPONSES TO CLIMATE CHANGE. THE INFORMATION GATHERED THROUGH THESE EVALUATIONS WILL HELP EXPAND THE FOUNDATION ON WHICH NATIONAL STRATEGIES AND NEEDS ASSESSMENTS CAN BE DEVELOPED. A NUMBER OF REGIONAL AND INTERNATIONAL WORKSHOPS ARE PLANNED TO CONDUCT THIS WORK - THE FIRST TOOK PLACE AT THE END OF APRIL IN BANGKOK.

8D. THE IPCC WORKING GROUP III COASTAL ZONE MANAGEMENT SUBGROUP HAS PROPOSED AN AMBITIOUS AGENDA, IN COOPERATION WITH THE UNEP REGIONAL SEAS PROGRAM, OF CONDUCTING COUNTRY CASE STUDIES TO ASSESS VULNERABILITY TO SEA-LEVEL RISE, AS WELL AS DEVELOP MODEL COMPREHENSIVE NATIONAL COASTAL

MANAGEMENT PLANS. ARGENTINA, BANGLADESH, GAMBIA, KIRIBATI, NICARAGUA AND VENEZUELA EXPRESSED A STRONG INTEREST IN BEING THE SUBJECTS OF SUCH STUDIES. OTHER COASTAL STATES HAVE ALSO EXPRESSED INTEREST IN CASE STUDIES. THE U.S. IS CURRENTLY WORKING WITH 10 COUNTRIES ON SUCH STUDIES. THE COMMON METHODOLOGY USED FOR THESE STUDIES, AND THE RESULTS THAT COME FROM THE STUDIES, WILL SUBSEQUENTLY BE PRESENTED IN THREE INTERNATIONAL WORKSHOPS - ONE IN THE CARIBBEAN WHICH VENEZUELA HAS OFFERED TO HOST, ONE IN THE SOUTH PACIFIC AND ONE IN A HEAVILY POPULATED DELTAIC AREA. CONSIDERATION SHOULD BE GIVEN TO HOW THIS WORK MIGHT BE COORDINATED SO AS TO CONTRIBUTE TO THE DEVELOPMENT OF COUNTRY SPECIFIC TECHNOLOGY AND TECHNICAL ASSISTANCE NEEDS.

9. RESPONSE STRATEGIES AND NEEDS ASSESSMENTS:

9A. THE HEART OF THE COUNTRY STUDY PROCESS SHOULD BE THE IDENTIFICATION BY SECTOR OF TECHNOLOGY NEEDS AND RELATED TECHNICAL ASSISTANCE, TRAINING, AND POLICY MEASURES NEEDED TO SUPPORT THE ACQUISITION OF SUCH TECHNOLOGY. SUCH ASSESSMENTS, HOWEVER, SHOULD BE DONE IN THE CONTEXT OF COUNTRY SPECIFIC RESPONSE STRATEGIES FOCUSED ON THE MOST PROMISING SECTORS FOR ACTION. THE DEVELOPMENT OF SUCH STRATEGIES WILL NEED TO TAKE INTO ACCOUNT THE RELATIVE IMPORTANCE OF DIFFERENT GREENHOUSE GASES AND THEIR MULTI-SECTORAL SOURCES AND SINKS. IN SOME CASES, COUNTRIES MAY FIND IT PRUDENT TO ADDRESS SEVERAL SECTORS AT ONCE; IN OTHER CASES, IT MAY MAKE MORE SENSE TO FOCUS ON ONLY ONE. THE CHOICE AMONG PROJECTS/STRATEGIES WILL DEPEND ON THE NET EMISSIONS BENEFIT AND COST EFFECTIVENESS

THEY MAY PRODUCE.

9B. AS A FIRST STEP, AT THE MARCH IPCC V PLENARY, THE U.S. DELEGATION EXPLORED THE POSSIBILITIES OF INITIATING A FEW COUNTRY STUDIES QUICKLY TO START GAINING FIELD EXPERIENCE FOR METHODOLOGICAL PURPOSES. AFTER DISCUSSIONS WITH OTHER

Department of State

TELEGRAM

PAGE 04 OF 06 STATE 181217 040007Z

SHB5681

STATE 181217 040007Z

SHB5681

INTERESTED AGENCIES, THE U.S. EPA RECENTLY WROTE TO THE MINISTER OF ENVIRONMENT, FORESTRY AND NATURAL RESOURCES IN POLAND TO PROPOSE A MITIGATION STRATEGY STUDY FOR THAT COUNTRY; A SIMILAR PROPOSAL IS BEING MADE TO THE GOVERNMENT OF MEXICO. THE POLISH AND MEXICAN PROPOSALS WILL SEEK TO INTEGRATE A RANGE OF NET EMISSION REDUCTION OPTIONS FOR KEY SECTORS AND GASES AND MORE COMPLETELY ADDRESS ECONOMIC ISSUES IN A DEVELOPING OR EASTERN EUROPEAN COUNTRY CONTEXT.

9C. THESE EPA COUNTRY CASE STUDIES WILL DIFFER FROM PRIOR COUNTRY STUDIES IN THREE WAYS:

--THEY WILL BE INITIATED THROUGH FORMAL GOVERNMENT TO GOVERNMENT CONTACT AND SHOULD ULTIMATELY RESULT IN OFFICIAL COUNTRY STUDIES MADE AVAILABLE TO OTHER COUNTRIES VIA SUBMISSION TO THE IPCC.

--THEY WILL DEVELOP A BASIS FOR ANALYSIS OF A "COMPREHENSIVE STRATEGY" INCLUDING ALL MAJOR GASES AND SOURCE AND SINK CATEGORIES COMPARABLE TO ANALYSES UNDERWAY IN THE U.S.

--THEY WILL USE MORE DETAILED AND SOPHISTICATED ANALYTIC APPROACHES. IN PARTICULAR, ECONOMIC ANALYSIS WOULD FOCUS

ON MARGINAL COSTS OF POLICY OPTIONS RELATIVE TO OTHER LIKELY SCENARIOS AND WOULD INVOLVE A BROAD SET OF MODELS AND COSTING APPROACHES.

9D. WE BELIEVE THESE AND OTHER STUDIES CARRIED OUT OVER THE COMING MONTHS MAY HELP US DEVELOP A BETTER IDEA OF WHAT WILL BE NEEDED TO ASSIST ALL COUNTRIES IN DEVELOPING STRATEGIES FOR RESPONDING TO CLIMATE CHANGE CONCERNS. WE WOULD BE INTERESTED TO KNOW WHETHER YOUR COUNTRY IS UNDERTAKING CLIMATE CHANGE RELATED CASE STUDIES WITH DEVELOPING COUNTRIES. WE BELIEVE IT WOULD BE USEFUL TO COORDINATE ACTIVITIES IN THIS REGARD. WE ALSO BELIEVE IT WOULD BE USEFUL TO DISCUSS HOW STRATEGY STUDIES MIGHT BE FOLLOWED UP WITH NEEDS ASSESSMENTS TO IDENTIFY THE TECHNOLOGY, TECHNICAL ASSISTANCE, TRAINING, AND POLICY MEASURES NEEDED TO IMPLEMENT THE STRATEGY.

10. ROLE OF THE GLOBAL ENVIRONMENT FACILITY (GEF)

10A. INTERNATIONAL ORGANIZATIONS AND FINANCIAL INSTITUTIONS ARE ALSO PREPARING TO CONDUCT STUDIES COUNTRY BY COUNTRY. WE NEED TO CLARIFY THEIR ROLE IN THIS AREA SO THAT IT CAN BE TAKEN INTO ACCOUNT AS WE FURTHER DEVELOP THINKING ON HOW A COUNTRY STUDY PROCESS COULD BE DEFINED.

10B. THE GLOBAL ENVIRONMENTAL FACILITY (GEF) IS A NEWLY-ESTABLISHED PILOT PROGRAM, JOINTLY IMPLEMENTED BY THE WORLD BANK, UNEP AND UNDP, UNDER WHICH GRANTS OR CONCESSIONAL LOANS WILL BE PROVIDED TO DEVELOPING COUNTRIES TO ASSIST THEM IN IMPLEMENTING PROGRAMS THAT HELP PROTECT THE GLOBAL ENVIRONMENT. THE GEF SCIENTIFIC

AND TECHNICAL ADVISORY PANEL IS CURRENTLY WORKING TO ESTABLISH GUIDELINES AND PRIORITIES FOR WHAT TYPE OF PROJECTS WILL BEST ACHIEVE THE FOUR GEF GOALS OF: PROTECTION OF THE OZONE LAYER (SUPPORTED PRIMARILY THROUGH THE MONTREAL PROTOCOL OZONE PROJECTS TRUST FUND); LIMITING EMISSIONS OF GREENHOUSE GASES; PROTECTING OF BIODIVERSITY; AND PROTECTING OF INTERNATIONAL WATERS. AT A MAY 1-2 MEETING WITH GEF PARTICIPANTS, THE SCIENTIFIC AND TECHNICAL ADVISORY PANEL (STAP) CHAIRMAN PROPOSED THAT THE GEF SHOULD HAVE A TARGETED RESEARCH COMPONENT THAT WOULD FACILITATE CURRENT OR FUTURE TECHNICAL ASSISTANCE OR INVESTMENT PROJECTS IN AREAS SUCH AS BIODIVERSITY AND

CLIMATE CHANGE. WE NEED TO ENCOURAGE THE EARLIEST AND MOST SUBSTANTIAL INVOLVEMENT OF THE STAP IN THE PROCESS OF DEVELOPING A COMMON METHODOLOGY FOR PERFORMING COUNTRY STUDIES.

10C. WHILE THE STAP CRITERIA AND GUIDELINES WILL NOT BE CIRCULATED TO GEF PARTICIPANTS FOR COMMENT UNTIL JULY, THE FIRST TRANCHE OF GEF PROPOSED PROJECTS INCLUDES A USD 2 MILLION GRANT FOR LIMITING EMISSIONS OF GREENHOUSE GASES IN CHINA. IF APPROVED, THE GRANT WOULD PROVIDE FUNDS FOR: ASSESSMENT OF GREENHOUSE GAS NET EMISSIONS AND FORMULATION OF A REDUCTION PLAN; IMPROVING THE QUALITY AND REDUCING THE OVERALL EMISSIONS OF SUPPLIED COAL; AND IMPROVING THE EFFICIENCY OF INDUSTRIAL BOILERS. SHOULD SUCH PROJECTS MEET THE CRITERIA AND PRIORITIES ESTABLISHED BY THE STAP AND APPROVED BY THE GEF PARTICIPANTS, THE GEF COULD PROVIDE FINANCIAL RESOURCES FOR EMISSIONS, TECHNOLOGY AND NEEDS ASSESSMENT, AND FOR FORMULATION OF A RESPONSE STRATEGY.

IV. TECHNOLOGY COOPERATION INVENTORY: IS ONE NEEDED?

1. IN DISCUSSING HOW WE MIGHT FORGE A COUNTRY STUDY PROCESS TO HELP ASSESS TECHNOLOGY COOPERATION NEEDS, WE HAVE BECOME AWARE OF THE CONCURRENT NEED TO INVENTORY CURRENT RESOURCES DEDICATED TO MEETING THESE NEEDS AND DETERMINE HOW THESE RESOURCES CAN BE BETTER UTILIZED. SUCH AN INVENTORY COULD BE HELPFUL IN TWO RESPECTS: 1) IT WOULD ENABLE US TO STRENGTHEN EXISTING INSTITUTIONS AND RESOURCES AND AVOID REDUNDANCY AND WASTE, AND 2) IT WOULD HELP IDENTIFY BILATERAL AND MULTILATERAL PROGRAMS AND MECHANISMS TO BE INCLUDED IN ANY TECHNOLOGY COOPERATION DATABASE THAT MIGHT BE DEVELOPED.

V. INVENTORY OF THE U.S. PUBLIC AND PRIVATE SECTORS

1. TO GET AN IDEA OF EXISTING PUBLIC SECTOR SUPPORT FOR BILATERAL CLIMATE CHANGE ACTIVITIES, WE INVENTORIED RELEVANT ACTIVITIES BEING CARRIED OUT BY NINE FEDERAL AGENCIES OR DEPARTMENTS WITH FIFTEEN DEVELOPING AND EASTERN EUROPEAN COUNTRIES. FUNDED ACTIVITIES RANGE FROM SUPPORT FOR MONITORING PROJECTS TO CASE STUDIES, FORESTRY PROJECTS, AND ENERGY EFFICIENCY TECHNOLOGY PROGRAMS. WE FOUND THAT THREE QUARTERS OF THESE ACTIVITIES ARE DEVOTED TO CLIMATE CHANGE TECHNOLOGY COOPERATION. WE HOPE TO REFINED THIS INVENTORY IN ORDER TO IDENTIFY THOSE

ACTIVITIES WHICH COULD CONTRIBUTE MOST TO A GLOBAL TECHNOLOGY COOPERATION RESPONSE. BY ITSELF, HOWEVER, THE INVENTORY DEMONSTRATES THE IMPORTANCE OF BILATERAL PUBLIC SECTOR TECHNOLOGY COOPERATION.

2. WE WOULD BE INTERESTED IN LEARNING OF OTHER COUNTRIES' ACTIVITIES AND PROGRAMS, ESPECIALLY IN THE AREA OF DEVELOPMENT ASSISTANCE AND ENVIRONMENT.

3. U.S. AID IS PARTICULARLY INTERESTED IN GLOBAL ENERGY EFFICIENCY. IT IS FOCUSING ON TRAINING AND INFORMATION, CAPITAL AVAILABILITY, AND COUNTRY IMPLEMENTATION PROGRAMS. ONE IDEA IS TO ENGAGE THE U.S. PRIVATE SECTOR, THROUGH THE ELECTRIC POWER RESEARCH INSTITUTE (EPRI), AND UTILITIES IN WESTERN EUROPE, JAPAN, CANADA, INDIA, CHINA, AND BRAZIL IN THE DEVELOPMENT OF AN INTERNATIONAL ELECTRIC UTILITY NETWORK TO SPONSOR COLLABORATIVE RESEARCH AND TECHNOLOGY DEVELOPMENT.

UNCLASSIFIED
Department of State

OUTGOING
TELEGRAM

PAGE 05 OF 06 STATE 181217 040007Z

SH85681

STATE 181217 040007Z

SH85681

4. IN FORESTRY, AID HAS EXPANDED PROGRAMS OF POLICY RESEARCH, TRAINING AND INSTITUTION STRENGTHENING FOCUSED ON TROPICAL DEFORESTATION RESEARCH AND IN-COUNTRY TROPICAL FOREST ASSISTANCE PROGRAMS. FOREST PROJECTS ARE BEING CONSIDERED IN KEY COUNTRIES INCLUDING PHILIPPINES, INDONESIA, BRAZIL, MEXICO, AND ZAIRE. OTHER POSSIBILITIES BEING EXPLORED IN AGRICULTURE INCLUDE INTERNATIONAL COLLABORATIVE PROGRAMS FOR MONITORING GREENHOUSE GAS EMISSIONS AND SOIL ORGANIC CARBON STOCKS.

5. EPA ALSO PLAYS AN IMPORTANT BILATERAL ROLE. IN ADDITION TO INITIATING WORK ON COUNTRY CASE STUDIES

RELATED TO CLIMATE CHANGE, EPA OPERATES A NUMBER OF TECHNICAL ASSISTANCE PROGRAMS AND INFORMATION CLEARINGHOUSES AND DATABASES RELATED TO CLIMATE CHANGE. FOR EXAMPLE, IN ADDITION TO COUNTRY STUDIES, EPA, IN COOPERATION WITH AID AND THE DEPARTMENT OF ENERGY (DOE), IS BUILDING A COMPUTERIZED INFORMATION SYSTEM CALLED ENVIROTECH. THIS SYSTEM WILL PROVIDE DOMESTIC AND INTERNATIONAL USERS WITH INFORMATION ON MAJOR TECHNOLOGIES, INCLUDING ENERGY EFFICIENCY AND RENEWABLE ENERGY TECHNOLOGIES. THE DEPARTMENT OF COMMERCE (DOC) HAS OPERATIONAL TECHNICAL CAPABILITY AND DATABASES FOR EASTERN EUROPE AND THE PERSIAN GULF REGION THAT COULD BE LINKED WITH EPA'S SYSTEM.

6. DGE PARTICIPATES IN A BROAD RANGE OF COOPERATIVE EFFORTS WITH OTHER COUNTRIES IN THE AREAS OF TECHNOLOGY ASSISTANCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT. OVER 100 SUCH AGREEMENTS ARE NOW IN PLACE. DOE ALSO MANAGES THE COMMITTEE ON RENEWABLE ENERGY, COMMERCE AND TRADE (CORECT) WHICH PUBLISHES AND WIDELY DISSEMINATES TO DEVELOPING COUNTRIES INFORMATION ON RENEWABLE TECHNOLOGY OPTIONS, COSTS AND TECHNOLOGY AND SERVICES. NEW INITIATIVES ARE UNDERWAY WITH EASTERN EUROPEAN COUNTRIES WHICH HAVE A DIRECT BEARING ON CLIMATE CHANGE. FOR INSTANCE, A 10 MILLION PROJECT IS UNDERWAY IN POLAND TO RETROFIT A COAL-FIRED POWERPLANT NEAR KRAKOW. ENERGY EFFICIENCY, RENEWABLE ENERGY, NUCLEAR SAFETY AND OTHER PROGRAMS WILL BE UNDERTAKEN WITH A VARIETY OF EASTERN EUROPEAN COUNTRIES.

7. WE BELIEVE IT MAY ALSO BE IMPORTANT TO ENCOURAGE

DEVELOPMENT OF AN INVENTORY OF PRIVATE SECTOR RESOURCES, GIVEN THE PRIVATE SECTOR'S PRIMARY ROLE IN DEVELOPING AND COMMERCIALIZING CLIMATE-RELATED TECHNOLOGIES AND IN PROVIDING NECESSARY TECHNICAL ASSISTANCE, TRAINING, AND KNOW-HOW. WE BELIEVE IT WOULD BE HELPFUL TO HAVE A CLEARER IDEA OF HOW THE PRIVATE SECTOR IN INDUSTRIALIZED COUNTRIES IS CONTRIBUTING TO TECHNOLOGY COOPERATION RELATED TO CLIMATE CHANGE.

8. FOR EXAMPLE, THIRTEEN MAJOR U.S. CORPORATIONS JOINED TO FORM THE INDUSTRY COOPERATIVE FOR OZONE LAYER PROTECTION (ICOLP). ICOLP JUST INITIATED A NEW COMPUTERIZED DATABASE, OZONET, DESIGNED TO HELP INDUSTRIAL USERS OF CFCs FIND SUBSTITUTES FOR OZONE-DEPLETING CHEMICALS. OZONET WILL BE EASILY ACCESSIBLE FROM MORE THAN 750 CITIES IN 35 COUNTRIES.

9. THE GLOBAL ENVIRONMENT MANAGEMENT INITIATIVE (GEMI), A U.S. CENTER FOR CORPORATE LEADERSHIP AND THINKING ON ENVIRONMENTAL MANAGEMENT, REPRESENTS ANOTHER POTENTIAL FOR THE PRIVATE SECTOR TO CONTRIBUTE KNOW-HOW AND EXPERTISE. MEMBERS OF GEMI HAVE PLEDGED FINANCIAL RESOURCES AND THE HUMAN RESOURCES OF THEIR GLOBALLY RECOGNIZED ENVIRONMENTAL MANAGERS AND STAFF TO FOSTER ENVIRONMENTAL EXCELLENCE BY

BUSINESS WORLDWIDE. WORKING WITH UNEP AND THE INTERNATIONAL CHAMBER OF COMMERCE, GEMI WILL SEEK TO SHARE THE EXPERIENCE AND EXPERTISE OF ITS MEMBER CORPORATIONS IN THE AREA OF ENVIRONMENTAL MANAGEMENT AND CREATE PARTNERSHIPS AROUND THE WORLD ENCOURAGING SIMILAR EFFORTS.

10. AS THE COUNTRY STUDY PROCESS DEVELOPS AND CLIMATE CHANGE TECHNOLOGY NEEDS ARE CLARIFIED, NEW MARKET OPPORTUNITIES WILL EMERGE, THUS ENGAGING THE PRIVATE SECTOR TO AN EVER GREATER EXTENT. THE PRIVATE SECTOR IN A NUMBER OF COUNTRIES CAN BE EXPECTED TO RESPOND TO MARKET INCENTIVES FOR PRODUCT DEVELOPMENT. SEVERAL COMPANIES ARE ALREADY WORKING TO POSITION THEMSELVES FOR NEW MARKETS IN THE AREA OF ENVIRONMENTAL TECHNOLOGY, THUS FACILITATING ITS WIDER DISSEMINATION.

VI. INVENTORY: INTERNATIONAL RESOURCES

1. WE WOULD LIKE TO DEVELOP A CLEARER PICTURE OF INTERNATIONAL RESOURCES DEVOTED TO PROMOTING TECHNOLOGY COOPERATION RELATED TO CLIMATE CHANGE. IT IS CLEAR FROM AN INITIAL SURVEY THAT A GREAT DEAL OF ACTIVITY IS ALREADY UNDERWAY. WE WOULD LIKE TO ENSURE THAT WE ARE AWARE OF ALL MAJOR INTERNATIONAL PROGRAMS AND EFFORTS, SUCH AS THE OECD'S STUDIES, DIRECTED AT CLIMATE CHANGE TECHNOLOGY COOPERATION.

2. AMONG THE INTERNATIONAL RESOURCES WE HAVE IDENTIFIED SO FAR, IT APPEARS THAT CLEARING HOUSES HAVE GARNERED CONSIDERABLE SUPPORT:

-- UNEP IS DEVELOPING AN INTERNATIONAL CLEANER PRODUCTION CLEARING HOUSE (ICPIC), WHICH WILL BE A COMPUTERIZED INFORMATION EXCHANGE SYSTEM BASED ON THE U.S. EPA'S POLLUTION PREVENTION INFORMATION CLEARING HOUSE. (THIS

PROJECT IS BEING CARRIED OUT UNDER THE AUSPICES OF THE CLEANER PRODUCTION PROGRAMME (ICPP) LOCATED IN UNEP'S INDUSTRY AND ENERGY OFFICE (IEO) IN PARIS. THE GOAL OF THE CPP IS TO ESTABLISH A NETWORK WHICH WILL ALLOW TRANSFER OF ENVIRONMENTAL PROTECTION TECHNOLOGY THROUGH THE ICPIC, EXPERT WORKING GROUPS, A NEWSLETTER, AND TRAINING ACTIVITIES.)

-- UNEP ALSO ADMINISTERS A CLEARING HOUSE UNDER THE AUSPICES OF THE MONTREAL PROTOCOL INTERIM MULTILATERAL FUND.

-- THE EUROPEAN COMMISSION SUPPORTS FOR ITS MEMBERS THE NETWORK FOR ENVIRONMENTAL TECHNOLOGY TRANSFER (NETT), WHICH PROVIDES LINKS TO COMMERCIAL COMPANIES AND PRIVATE-LED PUBLIC INSTITUTIONS SPECIALIZING IN ENVIRONMENTAL TECHNOLOGY TRANSFER MATTERS.

-- THE INTERNATIONAL CHAMBER OF COMMERCE IN PARIS IS ENCOURAGING BUSINESS TO SUPPORT TECHNICAL COOPERATION AND SPONSORS THE INTERNATIONAL ENVIRONMENT BUREAU (IEB) IN GENEVA, ANOTHER TECHNOLOGY TRANSFER CLEARING HOUSE.

-- THE INTERNATIONAL ENERGY AGENCY (IEA) HAS PROPOSED DEVELOPING A CLEARING HOUSE BASED ON ITS CENTER FOR THE ANALYSIS AND DISSEMINATION OF DEMONSTRATOR ENERGY TECHNOLOGY (CADDET).

3. WE ARE FAMILIAR WITH JAPAN'S NEW EARTH 21 AND THE CENTER FOR GLOBAL ENVIRONMENTAL TECHNOLOGY IT HAS PROPOSED

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TELEGRAM

Department of State

PAGE 06 OF 06 STATE 181217 040007Z
TO SPONSOR WITH UNEP, BUT WE DO NOT HAVE A GOOD IDEA OF

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ASSESS THEIR EFFECTIVENESS?

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WHETHER OTHER OECD COUNTRIES PROPOSE TO TAKE SUCH AN APPROACH TO THE PROBLEM. WE NOTE THAT THE CANADIAN GREEN PLAN INCLUDES SUPPORT FOR DEMONSTRATION PROJECTS, ESTABLISHMENT OF AN INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, AND PARTICIPATION IN THE BUDAPEST CENTER (REGIONAL ENVIRONMENTAL CENTER FOR CENTRAL AND EASTERN EUROPE), AS WELL AS A MAJOR ENVIRONMENTAL PRODUCTS AND TECHNOLOGY FAIR (GLOBE '92) SIMILAR TO GLOBE '90. THE UK HAS SUPPORTED THE TOUCHE-ROSS TECHNOLOGY TRANSFER STUDY. WE NEED TO IDENTIFY OTHER IMPORTANT BILATERAL INITIATIVES CURRENTLY PROMOTING CLIMATE CHANGE RELATED TECHNOLOGY COOPERATION.

END OF NON-PAPER

LAST PARA: ACTION ITEMS FOR POSTS ONLY:

VII. UTILIZING INVENTORIES

POSTS ARE ASKED TO SHARE NON-PAPER PROVIDED ABOVE WITH APPROPRIATE HOST GOVERNMENT OFFICIALS AND REPORT AS QUICKLY AS POSSIBLE ON RESPONSES TO THE QUESTIONS THEREIN, IN ADDITION POSTS ARE ALSO ASKED TO PROVIDE THEIR VIEWS ON THE FOLLOWING ISSUES:

1. BY BEGINNING TO INVENTORY OUR OWN TECHNOLOGY COOPERATION RESOURCES AND FAMILIARIZE OURSELVES WITH THE BILATERAL AND MULTILATERAL EFFORTS OF OTHERS, WE HAVE BECOME AWARE OF THE NEED TO CONSIDER HOW SUCH RESOURCES CAN BE BETTER COORDINATED AND UTILIZED. MORE INFORMATION ABOUT EXISTING RESOURCES IS NEEDED. ONCE THIS INFORMATION HAS BEEN GATHERED, A REPRESENTATIVE GROUP OF DEVELOPED AND DEVELOPING COUNTRIES MIGHT JOIN TOGETHER TO ASSESS HOW CURRENT ACTIVITIES AND PROGRAMS CAN BE BETTER COORDINATED AND UTILIZED. PERHAPS WE COULD IDENTIFY WHAT KIND(S) OF CLEARING HOUSE FUNCTION(S) ARE NEEDED AND HOW SUCH MIGHT BE FURTHER DEVELOPED. INFORMATION GATHERED IN THIS PROCESS COULD ALSO BE USED IN THE UNCED CONTEXT.

--HAS HOST GOVERNMENT DEVELOPED A POSITION OR STRATEGY FOR DEALING WITH THE ISSUE OF CLIMATE CHANGE TECHNOLOGY COOPERATION? IF SO, PLEASE SUMMARIZE.

--IN POST'S VIEW, HOW AMENABLE WOULD HOST COUNTRY BE TO SEEKING A COMMON APPROACH AMONG INDUSTRIALIZED COUNTRIES TO THE BROAD ISSUE OF TECHNOLOGY COOPERATION RELATED TO CLIMATE CHANGE, BEYOND COORDINATING A COUNTRY STUDY PROCESS RELATED TO CLIMATE CHANGE AND DEVELOPING INVENTORIES?

IN THE COURSE OF ASSESSING CURRENT RESOURCES, WE WOULD HOPE THAT IT WOULD BE POSSIBLE TO DETERMINE WHAT GAPS, IF ANY, EXIST IN THE INTERNATIONAL TECHNOLOGY COOPERATION INFRASTRUCTURE AND THEREBY BE IN A BETTER POSITION TO PROPOSE APPROPRIATE REDIRECTED BILATERAL AND MULTILATERAL RESPONSES.

--IS POST AWARE OF ANY TECH COOPERATION RESOURCES WITHIN THE COUNTRY NOT MENTIONED BY THE HOST GOVERNMENT?

POST SPECIFIC REQUESTS FOLLOW:

VIII. QUESTIONS:

FOR USUN: PLEASE ASSESS AS WELL AS IDENTIFY SIGNIFICANT NEW YORK BASED UN AGENCY PROGRAMS AND RESOURCES RELEVANT TO CLIMATE CHANGE TECHNOLOGY COOPERATION.

1. COUNTRY STUDY PROCESS:

FOR PARIS: THANKS FOR YOUR EXCELLENT REPORT ON UNEP/IEO.

IS YOUR GOVERNMENT FUNDING OR CONSIDERING FUNDING COUNTRY STUDIES FOCUSED ON CLIMATE CHANGE TECHNOLOGY COOPERATION WITH ANY DEVELOPING OR EASTERN EUROPEAN COUNTRIES? IF SO, WHAT ARE THE PRIMARY OBJECTIVES OF THE STUDIES AND WHICH MINISTRIES ARE SUPPORTING THEM? WITH WHICH COUNTRIES ARE THEY BEING (WILL THEY BE) CARRIED OUT?

FOR GENEVA: PLEASE ASSESS WORK OF THE IEB.

WOULD YOUR GOVERNMENT BE INTERESTED IN PARTICIPATING IN AN INFORMAL MEETING DURING THE JUNE IMC SESSION TO DISCUSS HOW EFFORTS MIGHT BE COORDINATED AND HARMONIZED TO BUILD A COUNTRY STUDY PROCESS?

FOR LONDON: HAS THERE BEEN ANY FOLLOW-UP TO THE TOUCHE ROSS STUDY? ARE THERE OTHER UK INITIATIVES OF WHICH WE SHOULD BE AWARE?

2. ASSESSING TECHNOLOGY COOPERATION NEEDS:

FOR UNEP, UNDP, FAO PERMREPS: PLEASE REPORT ON PROGRAMS AND RESOURCES YOUR ORGANIZATION CURRENTLY DEDICATES TO CLIMATE CHANGE TECHNOLOGY COOPERATION? PLEASE PROVIDE YOUR PERSPECTIVE ON THE PROGRAM'S EFFECTIVENESS. ARE SIGNIFICANT NEW INITIATIVES BEING CONSIDERED?

WHAT MAJOR RESOURCES AND/OR PROGRAMS DOES YOUR GOVERNMENT DEDICATE TO TECHNOLOGY COOPERATION RELATED TO CLIMATE CHANGE? DOES IT HAVE AN INVENTORY OF THESE RESOURCES? HAS YOUR PRIVATE SECTOR TAKEN ANY INITIATIVES IN THIS

FOR TOKYO: CONTINUED UPDATES ON IMPLEMENTATION PLANS FOR NEW EARTH 21 AND THE PROPOSED TECHNOLOGY INSTITUTE WOULD BE HELPFUL.

AREA? WHAT MAJOR PROGRAMS AND ACTIVITIES RELATED TO CLIMATE CHANGE TECHNOLOGY COOPERATION ARE SUPPORTED BY INTERNATIONAL ORGANIZATIONS IN YOUR COUNTRY? WHAT CLEARING HOUSE OPERATIONS ARE YOU AWARE OF? HOW DO YOU

PLEASE SLUG CABLE RESPONSES FOR OES/EGG. UNCLASS SUPPORTING DOCUMENTS CAN BE FAXED TO STEPHANIE KINNEY, OES/EGG, RM. 4329A, (202) 647-0191.

NB: THIS CABLE ALSO CLEARED BY: S/P:CLAWSON, L/OES:JEDONOGHUE, EB/IDF/ODA:JPRESTON,

EUP/RPE:CPIERANGELO, IO/T:TMARTIN BAKER

CO-CHAIRS SUMMARY

Working Group 2

When we established our work plan on Monday, we set for ourselves 2 objectives:

1. to do a complete first reading of all text relevant to our mandate, and
2. to make some progress on the development of draft text.

We are pleased that these objectives were achieved.

Of most importance, we feel that there was a constructive atmosphere in which people freely exchanged views and questioned and learned from each other, while engaging in productive dialogue.

We leave our first substantive session knowing a little more about the positions of others, the thinking behind those positions, and the magnitude of the task that lies ahead of us.

In making this summary, there are two important things to say at the outset:

1. Throughout our discussions we remained fully conscious of the determining influence the deliberations and conclusions of Working Group 1 will have on our work. In that sense, any tentative conclusions we drew can only be seen as preliminary.
2. Fortunately, we had in hand some excellent texts from which we could work. The thought that had gone into these texts assisted us greatly, and in most of our sessions we were able to begin to focus on 1 or 2 texts. This will be very important for future work. It was of course the understanding of the group that these texts were only starting points and the contributions of all delegations would continue to be sought.

With regard to the 3 parts of our mandate, we would offer the following comments:

Firstly, 7 a) With respect to legal and institutional mechanisms, including, inter alia, entry into force, withdrawal, compliance and assessment and review.

The following common themes emerged:

- that mechanisms should be defined pursuant to the commitments arrived at in Working Group 1.
- that national sovereignty is to be respected and any mechanisms should not be intrusive or supra-national.
- that mechanisms need to be flexible and adaptable.
- that a Conference of the Parties should be the supreme decision-making body.
- that a Secretariat, supporting the Conference of the Parties, should be independent of any other organization.
- that some form of non-adversarial review mechanism that does not focus exclusively on emissions would probably be appropriate.
- that the building of sufficient capacity will determine the ability of countries to meet their commitments.
- that reporting of information and data should be based on nationally-designated bodies.

There was a divergence of views on the following:

- whether a dispute settlement mechanism should be compulsory or voluntary.
- whether implementation and review mechanisms should be addressed in a convention or in protocols.
- whether entry into force should be pursuant to a specified number of ratifications or on the basis of ratification by countries producing a fixed percentage of global emissions.
- whether reservations to the convention should be allowed.

Secondly, 7 b) **With respect to legal and institutional mechanisms related to scientific cooperation, monitoring and information.**

There was unanimous agreement that science and the continuing development of our scientific knowledge through research, is the basis upon which our convention must rest. Therefore, we are pleased that considerable progress was made in developing a bracketed text which will be circulated prior to, and examined

further, in Nairobi. There was also general agreement that an annex on systematic observation and research would eventually be required.

Thirdly, 7 c) With respect to legal and institutional mechanisms related to adequate and additional financial resources and technological needs and cooperation, and technology transfer to developing countries corresponding to the commitments agreed to in Working Group 1.

Delegations were generally of the view that these subjects were among the most important for a framework convention on climate change. The historic and global nature of the challenge was noted.

Several common themes emerged:

- that transfer of technology and adequate and additional funding will be critical in order to allow developing countries to assume their obligations and responsibilities under the convention.
- that country studies could be very beneficial in clearly defining technology needs and that the lead in this process should be the country under study.
- that there is a need to devise mechanisms which recognize, support and further develop local and indigenous technology.
- that education, training, human resource development and institution-building are important components of technology transfer.
- that technologies must be appropriate to the specific situations of particular countries.
- that research to develop environmentally sound technologies should be encouraged.
- that institutional mechanisms concerning transfer of technology and financial resources should be based on a genuine partnership and under the decision-making control of the parties to the convention.
- that lessons learned, in particular from the Vienna Convention and Montreal Protocol were relevant to the establishment of mechanisms under a climate change convention.

- that mechanisms have to be found to promote equitable and democratic decision-making.
- that fulfilment of commitments on funding and technology should be subject to review.
- that institutional duplication should be avoided.
- that there could be a role for a technology clearing house.

There was a divergence of views on the following:

- whether financial resources must be new funds separate from aid or development assistance.
- whether the Global Environment Facility (GEF) is an appropriate mechanism or whether new and different institutions need to be created for the transfer of financial resources under this convention.
- whether a Climate Fund should be established and whether it should be based on mandatory assessment or voluntary contributions.
- whether the term technological transfer is more appropriate than technology cooperation.
- whether technology transfer and/or cooperation should be provided on a fair and most favourable or concessional and non-commercial basis.
- whether or not the question of intellectual property rights is an impediment to the transfer of technology.

Finally, Mr. Chairman, we are of the opinion that the decision of the Group to entrust to the Co-chairs the development of a single text related to our mandate will allow us to make significant and continued progress at our next meeting in Nairobi.

Both Ambassador van Lierop and I want to express our appreciation for the constructive cooperation exhibited by all delegations in the deliberations of Working Group 2. This positive attitude to our work allowed us to achieve the progress outlined above. We know that this momentum bodes well for our deliberations in Nairobi.



Environmental Defense Fund

257 Park Avenue South, New York, NY 10010

NEWS RELEASE

For Immediate Release

Contact: Jim Middaugh (202)387-3500

CLIMATE NEGOTIATIONS TAKE SMALL STEP TOWARD 'EARTH SUMMIT' U.S. KEEPS LOW PROFILE

Geneva, June 28, 1991-- The second session of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change ended in Geneva today as the U.S. managed to avoid a confrontation over its failure to adopt targets and timetables to cut CO₂. The committee failed to produce a draft text as the basis for future negotiations, as hoped for since the Chantilly session, but the session did at least move beyond organizational matters to lay the key issues on the table.

The U.S. position remains at odds with those of other major industrialized countries, which reiterated their commitment to adopt legally binding obligations to stabilize or reduce CO₂ emissions by the year 2000. At the next session in Nairobi in September it is expected that other industrialized countries will start the push to agree on such obligations. The pressure is still on the U.S. to join the carbon club.

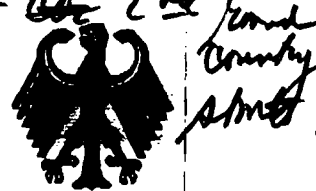
"The U.S. may have slipped through this round, but it can't dodge facing up to the international responsibilities much longer," said EDF senior attorney Scott Hajost, "the world expects leadership and its time for the U.S. to deliver in order for these negotiations to succeed."

"President Bush will face a clear choice before next year's Earth Summit in Rio --adopt targets and timetables or undermine an effective convention and the conference itself," NRDC senior scientist Daniel Lashof said.

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Ständige Vertretung der Bundesrepublik Deutschland

Mission permanente de la République Fédérale d'Allemagne
Permanent Mission of the Federal Republic of Germany



Memorandum

Germany

Prof. Dr. Ansgar-Otto Vogel

Intergovernmental Negotiating Committee
for a Framework Convention on Climate Change

Second Session

Geneva, 19 June 1991

Gent,
28 C, chemin du Petit-Saconnex
Case postale, 171
1211 Genève 19
Tel.: 7 30 11 11 - Telex: 22 211

I.

The Federal Republic of Germany has always given its sustained support to the decision taken by the international community to draw up as speedily as possible an international Climate Convention together with implementing protocols within the framework of government negotiations. The global threat increasingly being posed by the greenhouse effect and the expected changes in the climate demand immediate, consistent action in a worldwide environmental partnership. It would, we believe, be irresponsible to have further delays.

II.

Given this particularly urgent situation and the extraordinarily great need for action, the Federal Republic of Germany does not believe that the way negotiations have been going on in the past at this Intergovernmental Negotiating Committee is satisfactory.

During the last round of negotiations we used up a great deal of precious time discussing procedural and organisational questions and were still unable to find final answers to all of them. We feel a certain degree of disquiet at this fact. Thus we urge that the questions which are still outstanding with regard to office occupancy for both working groups be resolved right at the beginning of this meeting and that we get down to the substantial negotiations as soon as possible.

III.

The Federal Republic of Germany is striving to ensure that the Climate Convention and at least two initial implementing protocols be signed during the UN Conference on Environment and Development to be held in June 1992 in Brazil, with priority being given to limiting and reducing climate-relevant emissions and forest protection and afforestation. We are convinced that in these negotiations general obligations and special commitments should be

derived from the principle of prevention in the following three areas:

1. Measures to limit and reduce emissions of anthropogenic climate-relevant greenhouse gases, particularly the energy-induced greenhouse gases, especially CO₂. Other gases such as methane, nitrous oxide and the precursor substances of tropospheric ozone - nitrogen oxide, carbon monoxide and volatile organic compounds - ought also to be limited.

We believe it is obvious however that substances subject to the Montreal Protocol - chlorofluorocarbons (CFCs) - cannot be part of the obligations contained in a Climate Convention.

2. Measures to conserve, improve and create CO₂ reservoirs and sinks in particular with regard to forests, and
3. Development of strategies and measures to adapt to changes in the climate and to reduce climate-related damage.

Basic binding obligations in these three areas should be contained in the Convention itself. Furthermore we believe it is necessary for other specific regulations to be contained in related implementing protocols.

Furthermore, it is necessary to carry out further research and systematic observation in order to deepen further scientific knowledge both on the complex interrelations between various implications of climate change and on strategies for action.

IV.

The provisions to limit and reduce greenhouse gas emissions, in particular carbon dioxide, must lead to a significant global decrease in these gases. We are of the opinion that a worldwide global stabilisation at 1990 levels of energy-related CO₂ emissions ought to be achieved by the year 2000.

We are moreover convinced that initial reduction steps are required for 2005 and 2010.

We are aware of the fact that this is a very ambitious objective which can only be reached by means of consistent efforts on the part of us all:

1. The economically strong industrialised countries must, we believe, take immediate and crucial action to reduce their emissions of CO₂. They have a particular responsibility to bear in this area since they are the ones who have caused most enrichment of greenhouse gases in the atmosphere and who have the scientific, technical and economic means required to find the solutions needed.

The Federal Republic of Germany took action as early as 1990 with its national CO₂ reduction programme. Its declared objective is a 25 to 30 % reduction by 2005 over 1987. We welcome without hesitation the fact that other countries have also begun to take similar measures.

2. Emissions in countries with hitherto relatively low energy consumption and thus low emissions are, in view of the necessary economic and social development, set to increase in future. These countries too, however, ought to play a part in the global effort against the greenhouse effect by striving after more efficient energy use in their economic activities, thus limiting their emissions. For us it is self-evident that the economically stronger countries, recognising both the principle of equal rights within an environmental partnership and that of environmental solidarity, support these countries in realising their obligations by means of technological cooperation and additional financial resources.

V.

For the purposes of forest protection in their capacity as CO₂ reservoirs and sinks, we believe the following action must be prescribed in the Convention and in a related protocol:

- to conserve forests as extensively as possible in the best structure possible by counteracting the causes for the threat posed to them and by setting differentiated objectives and

measures to reduce annual rates of deforestation, and even put an end to forest destruction;

- the implementation of site-related afforestation and regeneration measures in order to create additional forests as CO2 sinks and improve CO2 binding processes in existing forests.

VI.

Every country should commit itself to developing national strategies and objectives to limit and/or reduce greenhouse gases. This requires, among other things, inventories of emissions and concentrations of greenhouse gases and of existing forest areas. It also demands an estimation of future developments and the analysis of possible strategies and measures and of what effects their application could have. Every country should cooperate closely with one another to take on this task on the basis of jointly agreed methods and procedures. The Convention will have to contain relevant provisions to allow and indeed guarantee these obligations are put into action by means of exchange of information, monitoring and review.

VII.

We know that measures to protect the earth's atmosphere demand international cooperation and coordinated international action. It is our desire to use the forthcoming Convention to contribute to a sustainable sound development. The aim should be to harmonize the exploitation of resources and mankind's economic activities into harmony with the finite nature of resources and the limited strain that can be put on the biosphere.

We are determined to protect man and the environment, both now and in future, from the damaging consequences of changes to the climate. It is my hope that we shall have success in this area. We ought not to leave Geneva without making satisfactory and substantial progress in our negotiations.

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

18 June 1991
ENGLISH ONLY

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 3

This addendum contains material received by 17 June 1991

List of informal papers

15. INDIA: Non-paper. Draft framework convention on climate change (sent with letter of 12 June 1991).

16. VANUATU: Elements for a framework convention on climate change, proposed by Vanuatu on behalf of States Members of the United Nations and of the specialized agencies that are members of the Alliance of Small Island States (AOSIS) (sent with letter of 5 June 1991).

PAPER NO. 15: INDIA

Non-paper

DRAFT FRAMEWORK CONVENTION ON CLIMATE CHANGE

Preamble

- A. Recalling the provisions of General Assembly resolutions 45/53 of 6 December 1988, 44/207 of 22 December 1989 and 45/212 of 21 December 1990 on Protection of Global Climate for present and future generations of mankind,
- B. Acknowledging that global climate change is a matter of common concern for mankind,
- C. Recognizing the valuable scientific work on global climate change initiated by the United Nations Environment Programme and the World Meteorological Organization,
- D. Recognizing also the need for continuing and extensive scientific research to promote a fuller and more definitive understanding of various aspects of climate change,
- E. Noting the fact that the largest part of the current emission of pollutants into the environment originates in developed countries, and recognizing therefore that these countries have the main responsibility for combating such pollution,
- F. Concerned that excessive past and present anthropogenic emissions of greenhouse gases have led to accumulated concentrations in the atmosphere which may, in the absence of ameliorative action result in such incremental warming as will adversely affect mankind,
- G. Reaffirming the direct interrelationship between environment and development, and recognizing therefore the crucial importance of a favourable international climate for ensuring sustained economic growth, particularly in developing countries,
- H. Recognizing that the developing countries have as their main priority the eradication of poverty and the achievement of economic and social development and that their emissions must grow to accommodate their development needs, reflecting the equal right of all peoples in matters relating to living standards,
- I. Recognizing also that adequate, new and additional financial resources and technology transfers on preferential and non-commercial terms are necessary to enable developing countries to effectively contribute to limiting, adapting to and mitigating the adverse effects of global climate change,

J. Reaffirming the importance of integrating environmental concerns and considerations into policies and programmes in all countries without introducing a new form of conditionality in aid or development financing or constituting a pretext for unjustified barriers to trade.

ARTICLE 1

Definitions

1. "Climate" means the statistical description of weather taken over a period long enough to be generally representative.
2. "Adverse effects" means changes in the global climate that have, or are likely to have, significant deleterious effects on the health of all life forms, or on natural and managed ecosystems or life-support systems.
3. "Greenhouse gases" means those gases which, when released into the atmosphere, block the outward reflection of the sun's energy from the earth's surface, and lead to a rise in the temperature of the earth's atmosphere.
4. "Developing countries" means those countries which are so defined for purposes of assessment of contributions to the budget of the United Nations, and "Developed countries" means all other parties to this Convention.
5. "Parties" means, unless the text indicates otherwise, Parties to this Convention.
6. "Protocols" means protocols to this Convention.
7. "Environmentally sound technology" means technology which satisfies both environmental and economic criteria and is otherwise appropriate in the specific circumstances prevailing in a country and which is so accepted by the Government of that country.

ARTICLE 2

Commitments

1. The Parties agree to cooperate by means of systematic and sustained research and information exchanges in order to better understand the causes and impacts of climate change and the response strategies required to deal with such change.
2. The Parties agree to work towards a common long-term objective of stabilizing the concentration of greenhouse gases in the atmosphere, at an appropriate level to be agreed upon in the light of future scientific findings, and on the basis of an equitable formula requiring, inter alia, that anthropogenic emissions of carbon dioxide from States should converge at a common per capita level, and which would take into account net carbon dioxide emissions during this century.

3. Developed country Parties shall, as immediate measures: (a) declare, adopt and implement national strategies to stabilize and reduce their per capita emissions of greenhouse gases, particularly carbon dioxide; stabilization of emissions of greenhouse gases other than those controlled by the Montreal Protocol, particularly carbon dioxide, should be achieved by the developed countries Parties at the latest by the year 2000 and should be set at 1990 emission levels, with the goal of achieving at least a (20%) (30%) (40%) (50%) reduction on these stabilized levels by the year 2005; (b) provide new and additional financial resources for developing country Parties for the objective described in paragraph 4 below and for them to adapt to and mitigate the adverse effects of climate change and for this purpose to establish a Climate Fund; (c) provide assured access to appropriate, environmentally sound technology on preferential and non-commercial terms, to developing countries; and (d) to support developing countries in their efforts to create and develop their endogenous capacities in scientific and technological research and development directed at combating climate change.

4. Developing country Parties may, in accordance with their national development plans, priorities and objectives, consider feasible measures with regard to climate change provided that the full incremental costs involved are met by provision of new and additional financial resources from the developed countries Parties.

ARTICLE 3

Research, systematic observation and assessment

The Parties undertake, as appropriate to initiate and cooperate in, directly or through competent international bodies, the conduct of research and scientific assessment on:

- (a) The physical, chemical and biological processes that may affect the global climate;
- (b) The identification of the substances, practices, processes and activities that have, or are likely to have significant adverse effects on the global climate, and of appropriate strategies for controlling them;
- (c) The methods of predicting future changes in the global climate that are due to human activities, including the preparation of improved climate models;
- (d) The techniques for monitoring and measuring greenhouse gas emission rates and their uptake by sinks;

(e) The impacts, in particular in low-lying coastal areas, on health and the environment, as well as the social and economic costs and benefits of changes to the global climate;

(f) The costs and benefits of implementing effective strategies to modify human activities that may result in significant adverse effects on the global climate;

(g) Environmentally sound technologies and practices for mitigating the adverse effects of changes in the global climate arising from human activities, including greater efficiency in energy use, due account being taken of the fact that measures appropriate in some countries may not be relevant elsewhere on account of, inter alia, differing economic, social or environmental situations;

(h) The full incremental cost to developing countries of limiting/adapting to and mitigating the adverse effects of global climate change.

2. The Parties undertake to promote or establish, as appropriate, directly or through competent intergovernmental bodies and taking fully into account national legislation and relevant ongoing activities at both the national and international levels, joint or complementary programmes for systematic observation of the state of the global climate.

3. The Parties undertake to cooperate, directly or through competent intergovernmental bodies, in ensuring the collection, validation and transmission of research and observational data on changes in the global climate through appropriate world data centres in a regular and timely manner.

ARTICLE 4

Cooperation in legal, technical and scientific fields

1. The Parties shall promote and encourage the exchange of scientific, technical, legal and other information relevant to this Convention. Such information shall be supplied to the Secretariat which shall ensure that information regarded as confidential by the supplying Party is not disclosed and is, where so requested by the supplying Party, aggregated to protect its confidentiality before it is made available to all Parties.

2. The Parties shall cooperate, consistent with their national laws, regulations and practices and taking into account the particular needs of developing countries, in promoting directly or through competent

intergovernmental bodies, the development and transfer of technology and knowledge relevant to scientific and technical research. Such cooperation shall be carried out particularly through:

- (a) Facilitation of the acquisition of environmentally sound technologies by other Parties;
- (b) Provision of information on environmentally sound technologies and equipment, including supply of special manuals or guides, to other Parties;
- (c) The supply of necessary equipment and facilities for research and systematic observations; and
- (d) Appropriate training of scientific, technical and managerial personnel.

ARTICLE 5

Climate Fund

1. The Parties shall establish a Climate Fund. The Climate Fund shall meet on a grant basis, and according to criteria to be decided upon by the Parties, the costs for developing countries Parties to adapt to and mitigate the adverse effects of climate change and for meeting the objective described in paragraph 4 of article 2 of this Convention. The secretarial services and related support costs of the Climate Fund shall be a charge on the Climate Fund.
2. The Climate Fund shall operate under the authority of the Parties who shall decide on its overall policies.
3. The Parties shall establish an Executive Committee to develop and monitor the implementation of specific operational policies, guidelines and administrative arrangements, including the disbursement of financial resources, for the purpose of achieving the objectives of the Climate Fund. The Executive Committee shall discharge its tasks and responsibilities, to be specified in its terms of reference as agreed by the Parties at their first meeting, with the cooperation and assistance of the United Nations Environment Programme. The members of the Executive Committee shall be selected on the basis of an equitable representation of developed countries Parties and of developing countries Parties.
4. The Climate Fund shall be financed by contributions from developed countries Parties in convertible currency or, in exceptional circumstances, in national currency.

5. The Parties shall decide upon the programme budget of the Climate Fund for each fiscal period.
6. Resources under the Climate Fund shall be disbursed only to developing countries Parties.
7. Decisions by the Parties under this article shall be taken by consensus as far as possible. If all efforts at consensus have been exhausted and no agreement reached, decisions shall be adopted by a two thirds majority vote of the Parties present and voting, representing a majority of the developed countries Parties and of the developing countries Parties, present and voting.
8. This article is without prejudice to any future arrangements as regards funding that may be developed with respect to Protocols under this Convention.

ARTICLE 6

Transfer of technology

Parties shall take every practicable step, consistent with the programmes supported by the Climate Fund, to ensure that:

- (a) Environmentally sound technologies are expeditiously transferred to developing countries Parties; and
- (b) The transfers referred to in subparagraph (a) above occur under preferential and non-commercial terms.

ARTICLE 7

Transmission of information

The Parties shall transmit, through the Secretariat to the Conference of the Parties established under article 8 information on the measures adopted by them in implementation of the Convention and of Protocols to which they are a Party in such form and at such intervals as the meetings of the Parties to the relevant instrument may determine.

ARTICLE 8

Conference of the Parties

1. A Conference of the Parties is hereby established. The first meeting of the Conference of the Parties shall be convened by the Executive Director of the United Nations Environment Programme not later than one year after entry into force of this Convention. Thereafter, ordinary meetings of the Conference of the Parties shall be held at regular intervals to be determined by the Conference at its first meeting.
2. Extraordinary meetings of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the

written request of any Party, provided that, within six months of the request being communicated to them by the Secretariat it is supported by at least one third of the Parties.

3. The Conference of the Parties shall by consensus agree upon and adopt rules of procedure and financial rules for itself and for any subsidiary bodies it may establish, as well as financial provisions governing the functioning of the Secretariat.

4. The Conference of the Parties shall keep under continuous review the implementation of this Convention, and take the decisions necessary to ensure its effective operation. To this end, it shall:

(a) Establish the form and the intervals for transmitting the information to be submitted in accordance with article 5 and consider such information as well as reports submitted by any subsidiary body;

(b) Review the scientific information concerning adverse effects on the global climate and on the likely consequences of such adverse effects;

(c) Monitor and review the implementation of measures envisaged in article 2, including the operation of its financial mechanism;

(d) Promote in accordance with article 2, the harmonization of appropriate policies, strategies and measures for controlling human activities that cause or are likely to cause adverse effects on the global climate, and make recommendations on any other measures necessary for the efficient operation of this Convention;

(e) Develop appropriate procedures for monitoring compliance with the provisions of this Convention;

(f) Adopt, in accordance with articles 3 and 4, programmes for research, systematic observations, scientific and technological cooperation, the exchange of information and the transfer of technology and knowledge;

(g) Consider and adopt, as required, in accordance with articles 11 and 12, amendments to this Convention and its annexes;

(h) Consider amendments to any protocol, as well as to any annexes thereto, and, if so decided, recommend their adoption to the Parties to the protocol concerned;

(i) Consider and adopt, as required, in accordance with article 12, additional annexes to this Convention;

(j) Consider and adopt, as required, protocols in accordance with article 10;

(k) Establish such subsidiary bodies as are deemed necessary for the implementation of this Convention;

(l) Seek, where appropriate, the services of competent international bodies and scientific committees, in particular the World Meteorological Organization and the World Health Organization, in scientific research, systematic observations and other activities pertinent to the objectives of this Convention, and make use as appropriate of information from those bodies and committees;

(m) Consider and undertake any additional action that may be required for the achievement of the purposes of this Convention.

5. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any States not party to this Convention, may be represented at meetings of the Conference of the Parties by observers. Any other body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to changes to the global climate which has informed the Secretariat of its wish to be represented at a meeting of the Conference of the Parties as an observer may be admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Conference of the Parties.

ARTICLE 9

Secretariat

1. The functions of the Secretariat shall be:

(a) To arrange for and service meetings provided for in Articles 8, 10, 11 and 12;

(b) To prepare and transmit reports based upon information received in accordance with Articles 4 and 7, as well as upon information derived from meetings of subsidiary bodies established under Article 8;

(c) To perform the functions assigned to it by any protocol;

(d) To prepare reports on its activities carried out in implementation of its functions under this Convention and present them to the Conference of the Parties;

(e) To ensure the necessary coordination with other relevant international bodies, and in particular to enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions;

(f) To perform such other functions relevant to the purposes of this Convention as may be determined by the Conferences of the Parties.

2. The Secretariat functions will be carried out on an interim basis by the United Nations Environment Programme until the completion of the first ordinary meeting of the Conference of the Parties held pursuant to Article 8. At its first ordinary meeting, the Conference of the Parties shall designate the Secretariat from amongst those existing competent international organizations which have signified their willingness to carry out the Secretariat functions under this Convention.

ARTICLE 10

Adoption of Protocols

1. The Conference of the Parties may at a meeting adopt protocols pursuant to Article 2.
2. Each such Protocol shall include, as an integral feature, a separate and distinct funding mechanism controlled by an executive committee composed of States Parties to such a protocol.
3. The text of any proposed protocol shall be communicated to the Parties by the Secretariat at least six months before such a meeting.

ARTICLE 11

Amendment of the Convention or Protocols

1. Any Party may propose amendments to this Convention and any Party to a Protocol may propose amendments to that protocol. Such amendments shall take due account, inter alia, of the present state of scientific and technical knowledge.
2. Amendments to this Convention shall be adopted at a meeting of the Conference of the Parties. Amendments to any protocol shall be adopted at a meeting of the Parties to the protocol in question. The text of any proposed amendment to this Convention or to any protocol, except as may otherwise be provided in such protocol, shall be communicated to the Parties to the instrument in question by the Secretariat at least six months before the meeting at which it is proposed for adoption. The Secretariat shall also communicate proposed amendments to the signatories to the Convention for information.

3. The Parties to the instrument in question shall make every effort to reach agreement on any proposed amendment to this Convention or a Protocol by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a two thirds majority vote of such Parties present and voting at the meeting, and shall be submitted by the Depositary to all such Parties for ratification, acceptance or approval.

4. Instrument of ratification, acceptance or approval of amendments shall be deposited with the Depositary. Amendments adopted in accordance with paragraph 3 above shall enter into force between parties having accepted them on the ninetieth day after the day of receipt by the Depositary of notification of their ratification, acceptance or approval by at least two thirds of the Parties to this Convention or a protocol thereto, unless otherwise provided in such protocol or in the amending instrument itself. The amendments shall enter into force for any other party on the ninetieth day after that Party deposits its instrument of ratification, acceptance or approval of the amendments.

5. For the purposes of this article, "Parties present and voting" means Parties present and casting an affirmative or negative vote.

ARTICLE 12

Adoption and amendment of Annexes

1. Annexes to this Convention or to any protocol shall form an integral part of this Convention or of such protocol, as the case may be, and, unless expressly provided otherwise, a reference to this Convention or its protocols constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to scientific, technical and administrative matters.

2. Except as may be otherwise provided in any protocol with respect to its annexes, the following procedure shall apply to the proposal, adoption and entry into force of additional annexes to this Convention or of annexes to a protocol:

(a) Annexes to this Convention or any protocol shall be proposed and adopted according to the procedure laid down in Article 11, paragraphs 2 and 3;

(b) Any Party that is unable to accept an additional annex to this Convention or an annex to any protocol to which it is party shall so notify the Depositary, in writing, within three months from the date of the communication of the adoption by the Depositary. The Depositary shall without

delay notify all Parties of any such notification received. A Party may at any time substitute an acceptance for a previous declaration of objection and the annex in question shall thereupon enter into force for that Party;

(c) On the expiry of six months from the date of the circulation of the communication by the Depositary, the annex shall become effective for all Parties to this Convention or to the protocol concerned that have not submitted a notification in accordance with the provision of subparagraph (b) above.

3. The proposal, adoption and entry into force of amendments to annexes to this Convention or to any protocol shall be subject to the same procedure as for the proposal, adoption and entry into force of annexes to the Convention or annexes to a protocol. Annexes and amendments thereto shall take due account, inter alia, of relevant scientific and technical considerations.

4. If an additional annex or an amendment to an annex involves an amendment to this Convention or to any protocol, the additional annex or amended annex shall not enter into force until such time as the amendment to this Convention or to the protocol concerned enters into force.

ARTICLE 13

Settlement of disputes

1. In the event of a dispute between Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation.

2. If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party.

3. When ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a State or regional economic integration organization may declare in writing to the Depositary that for a dispute not resolved in accordance with paragraph 1 or paragraph 2 above, it accepts one or both of the following means of dispute settlement as compulsory:

(a) Arbitration in accordance with procedures to be adopted by the Conference of the Parties at its first ordinary meeting;

(b) Submission of the dispute to the International Court of Justice.

4. If the parties have not, in accordance with paragraph 3 above, accepted the same or any procedure, the dispute shall be submitted to conciliation in accordance with paragraph 5 below unless the parties otherwise agree.

5. A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall be composed of an equal number of members appointed by each party concerned and a chairman chosen jointly by the members appointed by each party. The commission shall render a final and recommendatory award, which the parties shall consider in good faith.

6. The provisions of this article shall apply with respect to any protocol except as otherwise provided in the protocol concerned.

ARTICLE 14

Signature

This Convention shall be open for signature by States and by regional economic integration organizations in () from () to (), and at the United Nations Headquarters in New York from () to ().

ARTICLE 15

Ratification, acceptance or approval

1. This Convention and any protocol shall be subject to ratification, acceptance or approval by States and by regional economic integration organizations. Instrument of ratification, acceptance or approval shall be deposited with the Depositary.

2. Any organization referred to in paragraph 1 above which becomes a Party to this Convention or any protocol without any of its member States being a Party shall be bound by all the obligations under the Convention or the protocol, as the case may be. In the case of such organizations, one or more of whose member States is a Party to the Convention or relevant protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Convention or protocol, as the case may be. In such cases, the organization and the member States shall not be entitled to concurrently exercise rights under the Convention or relevant protocol.

3. In their instruments of ratification, acceptance or approval, the organizations referred to in paragraph 2 above shall declare the extent of their competence with respect to the matters governed by the Convention or the relevant protocol. These organizations shall also inform the Depositary, who will in turn inform the Parties, of any substantial modification in the extent of their competence.

ARTICLE 16

Accession

1. This Convention and any protocol shall be open for accession by States and by regional economic integration organizations from the day after the date on which the Convention or the protocol concerned is closed for signature. The instruments of accession shall be deposited with the Depositary.
2. In their instruments of accession, the organizations referred to in paragraph 1 above shall declare the extent of their competence with respect to the matters governed by the Convention or the relevant protocol. These organizations shall also inform the Depositary of any substantial modifications in the extent of their competence.
3. The provisions of Article 15, paragraph 2, shall apply to regional economic integration organizations that accede to this Convention or to any protocol.

ARTICLE 17

Right to vote

1. Except as provided for in paragraph 2 below, each Party to this Convention or to any protocol shall have one vote.
2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to the Convention or the relevant protocol and which are present and voting at the time the vote is taken. Such organizations shall not exercise their right to vote if their member States exercise theirs, and vice versa.

ARTICLE 18

Relationship between the Convention and its Protocols

1. Except as otherwise provided in a protocol for the purposes of that instrument, the provisions of this Convention relating to its protocols shall apply to any protocol to this Convention.
2. Decisions concerning any protocol shall be taken only by the Parties to the protocol concerned.
3. A State or regional economic integration organization may not become a Party to a protocol unless it is, or becomes at the same time, a Party to the Convention.

ARTICLE 19

Entry into force

1. This Convention shall enter into force on the ninetieth day after the date of deposit of the twentieth instrument of ratification, acceptance, approval or accession.
2. Any protocol, except as otherwise provided in such protocol, shall enter into force on the ninetieth day after the date of deposit of the twentieth instrument of ratification, acceptance or approval of such protocol or accession thereto.
3. For each Party which ratifies, accepts or approves this Convention or accedes thereto after the deposit of the twentieth instrument of ratification, acceptance, approval or accession, it shall enter into force on the ninetieth day after the date of deposit by such Party of its instrument of ratification, acceptance, approval or accession.
4. Any protocol, except as otherwise provided in such protocol, shall enter into force for a party that ratifies, accepts or approves that protocol or accedes thereto after its entry into force pursuant to paragraph 2 above, on the ninetieth day after the date on which the party deposits its instrument of ratification, acceptance, approval or accession, or on the date on which the Convention enters into force for that party, whichever shall be the later.
5. For the purposes of paragraphs 1 and 2 above, an instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organization.

ARTICLE 20

Reservations and Declarations

No reservations may be made to this Convention.

ARTICLE 21

Withdrawal

1. At any time after four years from the date on which this Convention has entered into force for a Party, that Party may withdraw from the Convention by giving written notification to the Depositary.
2. Except as otherwise provided in any protocol, at any time after four years from the date on which such protocol has entered into force for a Party, that Party may withdraw from the protocol by giving written notification to the Depositary.

3. Any such withdrawal shall take effect upon expiry of one year from the date of its receipt by the Depositary, or on such later date as may be specified in the notification of the withdrawal.

4. Any Party that withdraws from this Convention shall be considered as also having withdrawn from any protocol to which it is a Party.

ARTICLE 22

Depositary

1. The Secretary-General of the United Nations shall be the Depositary of this Convention and of any protocols thereto.

2. The Depositary shall inform the Parties, in particular, of:

(a) The signature of this Convention and of any protocol, and the deposit of instruments of ratification, acceptance, approval or accession in accordance with Articles 15 and 16;

(b) The date on which the Convention and any protocol will come into force in accordance with Article 19;

(c) Notifications of withdrawal made in accordance with Article 21;

(d) Amendments adopted with respect to the Convention and any protocol, their acceptance by the parties and their date or entry into force in accordance with Article 11;

(e) All communications relating to the adoption and approval of annexes and to the amendments of annexes in accordance with Article 12;

(f) Notifications by regional economic integration organizations of the extent of their competence with respect to matters governed by this Convention and any protocols, and of any modifications thereof;

(g) Declaration made in accordance with article 13, paragraph 3.

ARTICLE 23

Authentic text

1. The originals of this Convention of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

In witness whereof the undersigned, being duly authorized to that effect, have signed this Convention.

Done at this day of 1992.

PAPER NO.16: VANUATU

Elements

for a

FRAMEWORK CONVENTION ON CLIMATE CHANGE

Proposed by Vanuatu on behalf of States Members of the United Nations and
of the specialized agencies that are members of

THE ALLIANCE OF SMALL ISLAND STATES

4 June 1991

Elements of a

FRAMEWORK CONVENTION ON CLIMATE CHANGE

4 June 1991

PART I INTRODUCTION AND GENERAL MATTERS

1. Preamble
2. Definitions
3. Governing Principles
4. Special Needs of Certain Countries, Regions and Areas

PART II INTERNATIONAL AND REGIONAL COOPERATION

5. General Objectives
6. General Obligation of International Cooperation
7. Development of Improved Regional Cooperation
8. Scientific and Technical Research

PART III MONITORING, OBSERVATION AND INFORMATION SHARING AND DISSEMINATION

9. Monitoring and Observation
10. Information Dissemination
11. Environmental Impact Assessment
12. National Inventories
13. National Climate Plans
14. Education

PART IV SPECIFIC OBLIGATIONS

15. Greenhouse Gases: General Obligations
16. Emissions
17. Sinks and Reservoirs
18. Preparation for the Consequences of Climate Change

PART V IMPLEMENTATION: SUBSTANTIVE OBLIGATIONS

19. Financial Resources and Funding Mechanisms
20. Technology Transfer
21. Energy Conservation and Efficiency
22. Subsidies
23. Renewable Energy Resources

PART VI IMPLEMENTATION: INSTITUTIONAL ASPECTS

24. Conference of the Parties and Assembly
25. Executive Committee
26. Scientific Committee, Economic Committee, Legal Committee
 and Renewable Energy Resources Committee
27. Voting and Decision Making
28. Secretariat
29. Monitoring and Review of Implementation
30. Compliance and Enforcement
31. Dispute Settlement

PART VII TECHNICAL

32. Annexes
33. Protocols
34. Amendments to the Convention, Annexes and Protocols
35. Relationship with other International Conventions
36. Parties
37. Signature
38. Ratification, Acceptance, Approval
39. Accession
40. Entry into Force

- 41. Reservations and Declarations
- 42. Withdrawal and Denunciation
- 43. Depositary
- 44. Authentic Texts

Elements of a
FRAMEWORK CONVENTION ON CLIMATE CHANGE

4 June 1991

PART I. INTRODUCTION AND GENERAL MATTERS

1. PREAMBLE

1.1 Problem

Overwhelming importance of climate to the global environment and to human society

Need to protect atmosphere

Scientific observation that human activity is affecting climate in a manner that is unpredictable and potentially catastrophic

The very existence of low-lying coastal and small vulnerable island countries is placed at risk by the consequences of climate change

1.2 Action

Need to take immediate action based on the Precautionary Principle so that the consequences of climate change can be averted

1.3 Context of Action

Responsibility for the problem lies historically with industrialised countries. Currently responsibility lies with all countries, but not equally: the principle of differentiated responsibility

Responsibility for the solution lies with all countries on the basis of historic contributions and differentiated responsibility, taking into account the special circumstances of developing countries, particularly their need for appropriate technology and new and additional funding

Responsibility for the Global Commons

This convention, and participation in the negotiations leading to its conclusion, is without prejudice to the existing rights under international law, including rules governing international liability for damage to people, property and the environment

1.4 Relevant International Instruments

- (a) Declaration of the UN Conference on the Human Environment (Stockholm Declaration) Principle 21:

"States have ... the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction"

- (b) General Assembly Resolution 44/228 convening the UNCED
- (c) UNGA Resolution 45/53 establishing the IPCC and determining that action should be taken at a global level to combat climate change
- (d) The First Assessment Report of the IPCC
- (e) UNGA Resolution 45/212 convening the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change
- (e) The Ministerial Declaration of the Second World Climate Conference (A/45/696/Add.1, annex III)

2. DEFINITIONS

General Language of Convention:

"Climate"

"Activities affecting Climate"

"Climate Change"

"Consequences of Climate Change"

"Developing Country"

"Fiscal and other Incentives"

"Fossil Fuels"

"Greenhouse Gases" [exclude GHGs already the subject of international regulation]

"Sinks"

"Reservoirs"

"Subsidies"

"Industrialised / Developed Country"

"International Trade"

In the context of Funding: "New", "Adequate" and "Additional"

In the context of Technology Transfer: "Fair and most Favourable"

3. GOVERNING PRINCIPLES

This convention shall be based upon and interpreted in the context of the following principles:

- 3.1 The Precautionary Principle: the principle which operates where there is sufficient evidence to identify a threat of serious or irreversible harm to the environment to establish a duty to take measures which anticipate prevent and attack the causes of environmental degradation prior to conclusive scientific proof that the threat will or does harm the environment.
- 3.2 The Polluter Pays Principle: the principle that those responsible for causing damage to the environment bear the responsibility for rectifying that damage.
- 3.3 Sustainable Development
- 3.4 Equity
- 3.5 Inter-generational Equity: the duty of all States to preserve and protect natural capital for the benefit of present and future generations
- 3.6 Liability: This Convention shall be without prejudice to the application of the rules of international law governing the liability of States
- 3.7 Relevant Scientific, Technical and Economic Considerations: Implementation of this Convention shall be based on relevant scientific and technical considerations. Action shall be taken by the parties in accordance with the means at their disposal and their capabilities.
- 3.8 Clean Production

4. SPECIAL NEEDS OF CERTAIN CATEGORIES OF COUNTRIES, REGIONS AND AREAS

- 4.1 Small island developing countries - low-lying coastal areas - arid and semi arid areas - tropical regions liable to flooding - areas liable to drought and desertification
- 4.2 Entitlement to participate in the work of the Committees established to implement the Convention thus ensuring representation of the special needs
- 4.3 Financial assistance for adaptation strategies
- 4.4 Financial and technical assistance for monitoring, observation and scientific research
- 4.5 Consideration of specific localised problems including coral bleaching, increasing hurricane intensity, hydrology and storm surges

PART II. INTERNATIONAL AND REGIONAL COOPERATION

5. GENERAL OBJECTIVES

- 5.1 The Parties shall take all necessary measures in accordance with the terms of this Convention to ensure that human activities within their jurisdiction or control do not contribute to climate change
- 5.2 This Convention shall in no way affect the right of parties to adopt measures which go beyond its terms

6. GENERAL OBLIGATION OF INTERNATIONAL COOPERATION

- 6.1 Undertaking to cooperate with (i) other parties and (ii) the relevant competent international institutions to ensure:
 - Effective implementation of the convention
 - Sharing information
 - monitoring and observation
 - research into relevant areas
 - implementation

7. DEVELOPMENT OF IMPROVED REGIONAL COOPERATION

- 7.1 Recognition that the impact of climate change will differ from region to region
- 7.2 Development of Regional Response Strategies promoting regional cooperation in relation to, inter alia, research, monitoring and observation, implementation

8. RESEARCH

- 8.1 Continue and, where appropriate, implement research programmes on [specify the full details of projects] the following: climate; atmospheric protection; the effects of human activity on climate, including, inter alia, land use and energy generation; the consequences of climate change for the global environment, regional environment and human society
- 8.2 Positive duty to promote research into technology and techniques which:
 - minimise the effect of human activity on climate ("Abatement")
 - Allow human society to adapt to the predicted consequences of Climate Change ("Adaptation")
- 8.3 Parties are encouraged to develop joint technology research projects where Developed and Developing Countries work together to develop appropriate technologies and strategies

PART III. MONITORING OBSERVATION AND INFORMATION SHARING AND DISSEMINATION

9. MONITORING AND OBSERVATION

- 9.1 Creation of climate change monitoring network through coordination of existing international, regional and national climate data collection networks
- 9.2 The aim of the network shall be to: record collate and assess data; to provide uniform assessment criteria; to encourage improved harmonisation of methods of measurement; to provide objective reliable and comparable information ...
- 9.3 The network shall focus on: achieving a greater understanding of the mechanics of the world's climate; Greenhouse Gas concentrations and emissions; the operation and state of sinks ...
- 9.4 Coordination of National Data Banks

10. INFORMATION DISSEMINATION

- 10.1 The Parties must supply certain information, as specified in this Convention, to [an appropriate international body]
- 10.2 The Parties agree that all information held by that body will be made available to all Parties to this Convention and to all citizens under the jurisdiction and control of those Parties on request
- 10.3 Parties agree to establish channels of communication [eg. Public Information Offices, Government Departments] through which individuals will be able to access the information held by [the appropriate international body] at a national level
- 10.4 Establishment of national committees to collect and disseminate information and materials on climate change issues

11. ENVIRONMENTAL IMPACT ASSESSMENT

- 11.1 The parties shall ensure that all activities within their jurisdiction or control including, inter alia, policies on energy generation, transport, and land use are assessed to ascertain whether they are likely to affect climate
- 11.2 An activity will be deemed to have an adverse effect on climate if [it satisfies criteria to be specified]
- 11.3 Parties are under an obligation to prevent activities affecting climate
- 11.4 Parties agree to establish culturally appropriate mechanisms to allow public participation in EIAs

12. NATIONAL INVENTORIES

- 12.1 The Parties agree to compile information on activities within their jurisdiction or control which affect, or are likely to affect climate, in accordance with [specified criteria]
- 12.2 This information must be submitted to [appropriate international body] within six months of the deposit of the instrument which ratifies this convention
- 12.3 Annual Reports will be submitted to the [appropriate international body] thereafter
- 12.4 Information contained within National Inventories may be disseminated in accordance with the terms of Article 10

13. NATIONAL CLIMATE PLANS

- 13.1 The parties shall draw up specific action plans on the basis of the information submitted pursuant to Article 12 to reduce the effect of human activities on climate with the objective of achieving the goals set out in this Convention
- 13.2 Plans to cover [period] - to be submitted to [the appropriate international body] within [one year of ratification] and then annually

14. EDUCATION

- 14.1 Parties shall promote education programmes to inform all persons within their jurisdiction or control, including individuals and corporations, about:
- (i) the causes of climate change;
 - (ii) the potential consequences of climate change;
 - (iii) action that can be taken at an individual/local level to reduce the impact of human activity on climate [ie. energy efficiency, land use etc.];
 - (iv) achieving sustainable human development;
 - (v) global interdependence among people facing climate change.
- 14.2 The aims of the education programmes will be: to promote awareness and knowledge of climate change issues and; to encourage action to limit climate change
- 14.3 Development of informational and educational materials, providing objective, consistent and reliable information on climate change, to be available to all persons within the jurisdiction of the parties

PART IV. SPECIFIC OBLIGATIONS

15. GREENHOUSE GASES : GENERAL OBLIGATIONS

- 15.1 The parties undertake to stabilise atmospheric concentrations of Greenhouse Gases at [specified level] by [date]
- 15.2 Action taken to control the effects of human activity on climate must not have any consequential effects which are damaging to the environment

15.3 Immediate action shall be taken in accordance with the Annexes to this Convention. The Annexes do not preclude the negotiation of specific protocols dealing with the same topics.

16. EMISSIONS

16.1 To achieve the objectives of this Convention, especially those stated in Article 15, the Parties agree to reduce anthropogenic emissions of Greenhouse Gasses by taking immediate action in accordance with Annex 1

17. SINKS / RESERVOIRS

17.1 To achieve the objectives of this Convention, especially those stated in Article 15, the Parties agree to preserve protect and enhance Sinks of Greenhouse Gasses taking immediate action in accordance with Annex 2

17.2 Without prejudice to the development requirements of developing countries, action to be taken in relation to Sinks will include appropriate commitments on the preservation of bio-diversity

18. MEASURES TO COUNTER THE CONSEQUENCES OF CLIMATE CHANGE

18.1 Development of national coastal zone management plans to identify coastal areas at risk and deal with sea level rise in such a way that danger to populations is minimized and ecosystems are protected

18.2 Development of emergency procedures and coastal zone response mechanisms to reduce vulnerability to coastal storms

18.3 Development of a global ocean-observing network to monitor changes including coastal erosion and to disseminate data and information on sea level change and options in response

18.4 Monitoring the current state of natural resources and resource use and management practices

18.5 Undertaking studies and assessments of the resilience and adaptability of resources and their vulnerability to climate change, in order to formulate strategies for their preservation

18.6 Development of technologies which, while consistent with the principles of sustainable development, increase productivity and efficiency of land and water use

PART V IMPLEMENTATION : SUBSTANTIVE OBLIGATIONS

19. FINANCIAL RESOURCES AND FUNDING MECHANISMS

- 19.1 Funding will be on the basis of New, Additional and Adequate financial resources which will not have any effect on existing multilateral or bilateral financial assistance arrangements
- 19.2 Establishment of an International Climate Fund in accordance with Annex 3
- 19.3 Financial assistance for Developing Countries to enable them to adapt their development strategies to integrate consideration of the effect of those activities on climate
- 19.3 Fund to compensate Developing Countries (i) in situations where selecting the least climate sensitive development option involves incurring additional expense, and (ii) where insurance is not available for damage resulting from climate change

20. TRANSFER OF TECHNOLOGY

- 20.1 The parties are under a duty to make available to [an appropriate international body]: (i) any technology or technique that would assist the parties in carrying out their obligations under this convention which they are capable of obtaining or is in the public domain in the area under their jurisdiction or control (ii) the results of research into technology under Article 8
- 20.2 All parties shall have equal access to the information and techniques held by the international body
- 20.3 Transfers of Technology from industrialised to developing countries must be on fair and most favourable terms

21. ENERGY EFFICIENCY AND CONSERVATION

- 21.1 Parties to have obligations in respect of energy efficiency and conservation which are based upon their differentiated responsibility for climate change
- 21.2 Duty to encourage energy efficiency and energy conservation; Minimum energy efficiency standards targets to be set on the basis of differentiated responsibility

22. SUBSIDIES

- 22.1 Prohibition on subsidising activities which contribute to climate change

22.2 Elimination of subsidies and incentives for inefficient resource use

21.3 Prohibition on the dumping of goods benefitting from subsidies which support activities adversely affecting climate

23. RENEWABLE ENERGY RESOURCES

23.1 Parties shall develop and encourage use of renewable energy resources including wind, wave, biomass, solar and geothermal sources of energy

23.2 Parties shall be entitled to provide fiscal and other incentives, including subsidies, for the development and use of renewable energy resources

PART VI IMPLEMENTATION : INSTITUTIONAL ASPECTS

24. CONFERENCE OF THE PARTIES AND ASSEMBLY

25. EXECUTIVE COMMITTEE

26. SECRETARIAT

27. SCIENTIFIC COMMITTEE, ECONOMIC COMMITTEE, LEGAL COMMITTEE AND RENEWABLE ENERGY COMMITTEE

28. VOTING AND DECISION MAKING

29. MONITORING AND REVIEW OF IMPLEMENTATION

30. COMPLIANCE AND ENFORCEMENT

31. SETTLEMENT OF DISPUTES

PART VII TECHNICAL

32. ANNEXES

33. PROTOCOLS

34. AMENDMENTS TO THE CONVENTION, ANNEXES AND PROTOCOLS

35. RELATIONSHIP WITH OTHER INTERNATIONAL CONVENTIONS

36. PARTIES

37. SIGNATURE

38. RATIFICATION, ACCEPTANCE, APPROVAL

- 39. ACCESSION
- 40. ENTRY INTO FORCE
- 41. RESERVATIONS AND DECLARATIONS
- 42. WITHDRAWAL AND DENUNCIATION
- 43. DEPOSITARY
- 44. AUTHENTIC TEXTS

20 June 1991
ENGLISH ONLY

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Agenda item 2

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Corrigendum to Addendum 3*

* This Corrigendum contains additional material which was conveyed to the secretariat by the authors of the original Paper No. 16. The material contained herein has been reflected in document A/AC.237/Misc.2/Rev.1.

Paper No. 16: Vanuatu

1. Page 22, paragraph 1.1, Problem

The fourth entry should read

The very existence of low-lying coastal and small vulnerable island countries is placed at risk by the adverse consequences of climate change, particularly sea level rise.

2. Page 23, paragraph 1.4

Replace subparagraphs (b), (c), (d), (e) and (f) by the following:

- (b) UNGA Resolutions 43/53 and 44/207 recognize climate change as a common concern of mankind and urge that action should be taken at a global level to combat climate change
- (c) UNGA Resolution 44/206 recognizes the possible adverse effects of sea level rise on islands and coastal areas, particularly low-lying coastal areas
- (d) General Assembly Resolution 44/228 convening the UNCED
- (e) The First Assessment Report of the IPCC
- (f) UNGA Resolution 45/212 convening the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change
- (g) The Ministerial Declaration of the Second World Climate Conference (A/45/696/Add.1, annex III)

3. Page 24

Replace paragraphs 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 and 3.8 by the following:

- 3.2 The Principle of Inter-connectedness: the principle that all elements of the ecosystem are linked, interrelated, and interdependent, so that actions in one area influence and have effects upon other areas.
- 3.3 The Polluter Pays Principle: the principle that those responsible for causing damage to the environment bear the responsibility for rectifying that damage.
- 3.4 Sustainable Development
- 3.5 Equity: Action to be taken should be based on equity, in accordance with the proportionate contributions to the problem, with due regard to the development requirements of developing countries, especially those whose current emissions are low.

- 3.6 Differentiated Responsibility: There should be different targets with different time-frames for different categories of countries so that the right to development of developing countries is taken into account. Countries with low energy consumption can set appropriate targets by, inter alia, taking advantage of more energy efficient and less pollutive technologies.
- 3.7 Inter-generational Equity: the duty of all States to preserve and protect natural capital for the benefit of present and future generations.
- 3.8 Liability: This Convention shall be without prejudice to the application of the rules of international law governing the liability of States.
- 3.9 Relevant Scientific, Technical and Economic Considerations: Implementation of this Convention shall be based on relevant scientific and technical considerations. Action shall be taken by the parties in accordance with the means at their disposal and their capabilities.
- 3.10 Clean Production

4. Page 25

Paragraph 4.5 should read

- 4.5 Consideration of specific localised problems including coral bleaching (and related damage to near-shore marine systems and harvestable resources), increasing hurricane intensity, hydrology and storm surges.
-

11 June 1991
ENGLISH ONLY

INTERGOUVERNEMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

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Addendum 2

This addendum contains material received by 10 June 1991.

A/AC.237/Misc.1/Add.2
GE.91-61199

List of informal papers

13. FRANCE: Further submission of France, pertaining to national policies for the prevention of the greenhouse effect (sent with letter of 30 May 1991).

14. NORWAY: Norwegian non-paper (released 10 June 1991).

PAPER NO. 13: FRANCE

Translated from French

NATIONAL STRATEGIES FOR THE PREVENTION OF THE GREENHOUSE EFFECT

1. The draft article submitted by the French delegation (see annex 1) is to be studied in conjunction with the proposals already made by other delegations, such as the British paper of 27 March 1991. The concept of national inventories links up with the paper submitted by the American delegation on 15 March 1991 (see in particular subparagraph (c), General obligations).

The draft article refers in addition to a scientific council to be established under the convention; a draft article on this subject is also attached.

2. The purpose of a report on national strategies is to encourage the parties to draw up a policy to combat the greenhouse effect, analyse possible options and assess the results obtained.

Dialogue with the organs of the convention should make it possible to assist the parties in selecting and implementing such measures, and to draw lessons from experience.

3. The report should principally cover actions to prevent the greenhouse effect. The adoption of measures to limit greenhouse gas emissions or create sinks demands the implementation of complex and long-term economic strategies.

It is essential to be able to evaluate the measures taken by each State to limit its own contribution to the greenhouse effect and comply with its commitments.

This does not rule out the adoption of adaptation strategies, which could be covered in a separate article (see annex 2). Such strategies are a matter for national choice, and will not necessarily be the subject of obligations under the convention. Such adaptation strategies form part of the basis for cooperation between industrialized countries and developing countries.

4. A separate article in the convention should include provisions requiring the industrialized countries to report on action taken in pursuance of their commitments in the field of financial and technical cooperation to the benefit of the developing countries.

As with the national reports on the prevention of the greenhouse effect, this report would allow the secretariat to assess the measures adopted in the field of financial and technical cooperation.

These different elements would facilitate the process of checking that measures taken are in keeping with commitments entered into.

May 1991

ARTICLE ...

NATIONAL STRATEGIES FOR THE PREVENTION OF THE GREENHOUSE EFFECT

1. The Parties shall, within () years from the date the Convention enters into force, draw up national strategies to combat the greenhouse effect, taking into consideration all emissions and all sinks of greenhouse gases and precursors, and setting out emission limitation measures designed to fulfil the objectives of the Convention; each strategy may include a section on adaptation measures.

The strategy shall be the subject of a public national report.

2. Parties whose contribution to the anthropogenic greenhouse effect is considered to be lower than [] shall be required to prepare such a report only () years after the Convention enters into force, or when their emissions estimated in accordance with article () exceed (x) tonnes of carbon equivalent per capita .

3. Each national strategy shall subsequently be revised every () years. Each revision shall follow the same procedure as for the initial report.

4. At the midway stage, or every () years, each Party shall prepare a brief progress report containing an account of the implementation of the strategy adopted.

5. In the light of the inventory of emissions and sinks known for each gas, each strategy shall include:

- a cost/benefit statement of measures taken to limit the contribution to the greenhouse effect, as well as an evaluation of their impacts in economic terms and in terms of environmental protection;
- an examination of energy policy from the viewpoint of prevention of the greenhouse effect;
- a description of means of implementing these measures (economic, fiscal and regulatory instruments);
- an evaluation of results obtained in the recent period and those expected for the coming period, as measured against the objectives of the Convention.

6. The public report shall be organized in such a way as to contain at least the information listed in the annex.

7. Each Party shall send the report to the secretariat, which shall forward it to the Scientific Committee.

The secretariat shall assist the Scientific Committee with the analysis of the report. It may request the Party concerned to communicate to it any additional document, information or explanation that appears necessary to evaluate the content of the report ^{1/}.

The Scientific Committee shall, within a period of () months, furnish its opinion on the relevance and effectiveness of the measures selected in the light of the objectives of the Convention, and also on the technical and economic options selected under this strategy.

It may address directly to the Party concerned recommendations for the strengthening of the national strategy, which shall be communicated to all the contracting Parties.

The Executive Council shall present to each meeting of the Conference of the Parties a consolidated report on activities in this area (and results obtained). It may propose resolutions designed to foster the application of these provisions.

8. [This paragraph 8 might appear in a common provision in each of the various annexes of the same type.]

The annex referred to in item 6 may be revised at the suggestion of the Scientific Committee, the secretariat or a contracting Party.

Amendments shall be adopted by consensus; when all efforts to that end have been exhausted, an amendment may be adopted by a three-quarters majority of the contracting Parties. It shall enter into force for all the contracting Parties () months after its adoption, except where a Party makes a declaration, notified to the secretariat before the time limit expires, that it cannot accept the amendment, or requires an additional period in order to accept it.

Two amendments agreed by majority vote may not be introduced less than () years apart.

^{1/} Provisions of this type are predicated on the availability to the secretariat of ample resources and capabilities to discharge this ongoing function.

ANNEX

This annex might elaborate upon the following points, as far as presentation is concerned:

- The national inventory
- Economic options, measures selected and measures studied but not selected
- Energy policy
- For each measure, analysis of the risks that reductions will be offset by other emissions
- Quantified evaluation of past and expected results.

May 1991

ARTICLE ...

SCIENTIFIC COUNCIL

1. A Scientific Council shall be established. It shall be composed of high-level independent qualified experts designated by the Conference of the Parties at its first meeting. ^{1/}

2. The Scientific Council, which shall have a consultative role, shall perform the following functions:

(a) to examine the scientific data assembled by the secretariat and draw up a report and recommendations for presentation to the Executive Committee for information purposes prior to submission to the Conference of the Parties;

(b) to draft opinions and proposals, notably in matters of research and assessment;

(c) to examine reports on national strategies and furnish opinions on measures decided upon by the Parties;

(d) to perform any other function assigned to it by the Conference of the Parties or under any protocol to the Convention.

3. The opinions and proposals of the Scientific Council shall be addressed to the Party concerned and to the secretariat, which shall make them available to any other interested Party.

^{1/} The mode of designation of experts might be based on the election of judges to the International Court of Justice (Statute, articles 4 ff.).

May 1991

ARTICLE ...

NATIONAL MEASURES FOR ADAPTATION TO THE GREENHOUSE EFFECT

1. Parties which so wish shall draw up a national report on adaptation measures which shall be subject to the same review procedure as national prevention strategies.

2. Any Party having experience or special knowledge as regards adaptation to the greenhouse effect shall report on it regularly to the secretariat, which shall facilitate the dissemination of such knowledge and techniques to all interested Parties.

3. Parties deciding to develop a national adaptation programme in keeping with paragraph 1 may request assistance from the secretariat or another Party in the formulation of such a programme.

NORWEGIAN NON-PAPER

14.1 OUTLINE OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

PREAMBLE

I. PRINCIPLES

SPECIAL SITUATION OF THE MOST DISADVANTAGED COUNTRIES

II. DEFINITIONS

III. GENERAL OBLIGATIONS

1. OBJECTIVES, TARGETS AND COMMITMENTS

2. ALLOCATION OF EMISSION TARGETS AND OBLIGATIONS

3. NATIONAL STRATEGIES BASED ON COUNTRY STUDIES

4. TRANSFER/FUNDING MECHANISMS (FINANCIAL ENTITLEMENTS AND OBLIGATIONS) FOR MOBILIZATION AND TRANSFERS OF NEW AND ADDITIONAL RESOURCES TO DEVELOPING COUNTRIES, AS WELL AS

OBLIGATIONS ON FAIR AND EQUITABLE ASSISTANCE TO COUNTRIES WHICH HAVE TO BEAR AN ABNORMAL BURDEN

5. IDENTIFICATION, DEVELOPMENT, TRANSFER AND USE OF APPROPRIATE TECHNOLOGIES

IV. RESEARCH, SYSTEMATIC OBSERVATIONS (MONITORING) AND INFORMATION EXCHANGE

V. INTERNATIONAL MONITORING AND FOLLOW-UP MEASURES

VI. INSTITUTIONAL STRUCTURE

1. DECISION-MAKING PROCEDURES

2. CONFERENCE OF THE PARTIES
(Provisions for new institutional authority)

3. SECRETARIAT

VII. IMPLEMENTATION, COMPLIANCE AND SETTLEMENT OF DISPUTES

1. IMPLEMENTATION AND CONTROL MEASURES
2. COMPLIANCE
3. SETTLEMENT OF DISPUTES
4. PROVISIONS REGARDING CONTROL BY THE INTERNATIONAL COURT OF JUSTICE (ICJ)

VIII. ARRANGEMENTS WITH REGARD TO PROTOCOLS, ANNEXES AND AMENDMENTS AND REVIEWS

1. ADOPTION OF PROTOCOLS TO THE CONVENTION
2. AMENDMENT OF THE CONVENTION OR PROTOCOLS
3. ADOPTION AND AMENDMENT OF ANNEXES

14.2 OBJECTIVES, TARGETS AND COMMITMENTS IN A CLIMATE CONVENTION

Basic principles

A long-term objective of climate policies should be to take appropriate action to stabilize greenhouse gas concentrations in the atmosphere at a level which minimizes damages to the sustainable development of societies and to ecosystems, ecological processes, and climatic conditions essential for the functioning of the biosphere.

A balance must be struck between potential ecological and socioeconomic consequences of climate change, the cost of abatement policies and the cost of adaptation. Climate policies must be combined with policies to foster vigorous economic growth to combat poverty, safeguard the development priorities of developing countries and create the necessary resources to combat local and regional environmental degradation.

Climate policies should include all relevant sources and sinks of greenhouse gases. Emission targets should be defined in terms of net emissions of the greenhouse gases that are adequately measurable, measured as CO₂-equivalents, taking into account requirements under the Montreal Protocol and other agreements.

The need for equitable burden-sharing, both between industrialized and developing countries and between the industrialized countries, must be secured.

High priority must be given to solving the remaining major uncertainties regarding causes and effects of climate change, including the risk for non-linear and rapid changes, as well as uncertainties regarding economic projections and cost estimates.

Cost of measures to counter and adapt to climate change.

The possible ecological, social and economic effects of climate change will depend on a number of factors and may be difficult to quantify. The mobility of ecosystems in response to movements of temperature zones, and the vulnerability of low lying and arid areas will be important for the ecological effects. The impacts on agriculture, forestry, fisheries and on the need for relocation of population, industry and infrastructure will have crucial socio-economic consequences.

It is reasonable to assume that minor changes in temperature will have moderate impacts and that total costs will grow increasingly higher as temperature change increases. So far, we have no detailed information on how total impact may depend on the change in temperature, partly due to the lack of reliable regional estimates.

There have been some efforts to estimate levels of temperature change beyond which the risks of severe damages might be expected to increase rapidly. On the basis of research done so far, the UNEP/WMO/ICSU Advisory group on Greenhouse gases has stated that a rate of mean global temperature rise of 0.1 degree/decade, and an absolute rise of between 1 and 2 degrees above preindustrial mean temperature, might be a significant level.

The social and economic consequences of various abatement measures, such as emission reduction and sink enhancement may vary greatly. Some of these are "no-regrets" measures. Due to economic or other environmental reasons, such measures are justifiable in their own right. Other measures entail social and economic costs. For small limitations in emission patterns, the costs might be modest. On the other hand OECD-studies imply that global stabilisation of net emissions in the long run might entail costs amounting to 2-5 % of world GDP. If emission targets grow more ambitious over time, costs are expected to escalate rapidly.

Countries will have to consider various measures to adapt to climate change. This could include reducing vulnerability to sea level rise by building dikes and dams, changes in land use and agricultural policies and relocation of industries and populations.

The costs of adaptation may vary greatly between countries. Given a gradual implementation, the costs of adaptation policies may be fairly modest. An OECD report on potential costs of adapting to sea level rise of one meter indicates total costs to be in the order of 0,1 % of GNP within the OECD countries. For vulnerable regions adaptation costs may be very substantial. For some countries complete adaptation may not be possible. In the absence of effective adaptation measures the IPCC has estimated that some island countries and 10 - 15 % of the area of certain countries with large river deltas may be flooded.

There remain a number of major uncertainties regarding the possible extent as well as the effects of climate change, including potential socioeconomic costs, and the costs of abatement and adaptation measures. The question of how to handle this uncertainty and the development of "insurance policies" based on the precautionary principle will be essential in the development of efficient climate policies.

At this stage, research to reduce uncertainty about the extent, as well as the socioeconomic costs, of climate change and policy

measures should be given high priority. In addition, a balanced mix of adaptation and abatement policies should be pursued. The level and strength of climate policy targets should fully reflect the current state of risks and uncertainties and their expected resolution over time. Climate targets should at all times be based on the best available knowledge regarding the balance between possible damages, abatement costs and adaptation costs, and be revised at regular intervals.

Objectives, targets and commitments

The long-term objective in the initial framework convention on climate change should be of a general, qualitative nature. It should be linked to the major determinants for climate change, as well as the need to develop international cooperation to respond effectively to this challenge.

To achieve these objectives, it must be recognized that climate change is a global challenge that requires global participation. An environmentally efficient and cost-effective climate regime therefore requires short-term emission targets set at the global level.

Commitments by countries to meet long term global objectives and short term targets should be based on the principle of equity and the common but differentiated responsibility of countries. Therefore, groups of countries at different levels of economic development should take on different emission control commitments.

The short-term commitment for OECD countries should be stabilization of greenhouse gas emissions, excluding the requirements under the Montreal Protocol, at 1989 levels by 2000. Groups of non-OECD countries could take on commitments that are consistent with their economic circumstances and development needs as well as the long-term objectives of the convention.

14.3 MECHANISMS TO ALLOCATE AND IMPLEMENT OBJECTIVES, TARGETS AND COMMITMENTS

Introduction

Measures to counter climate change should be environmentally efficient, equitable and cost-effective. It is necessary to develop new and innovative mechanisms compared to previous environmental agreements. This might be a lengthy process. The framework convention that is scheduled to be signed in 1992 should be process-oriented, and thus have a structure that facilitates timely revision of current elements and inclusion of new elements.

The development of environmentally efficient climate policies and global targets, based on a balance between the potential social and economic costs of climate change, abatement and adaptation policies, is the topic of a separate paper. This paper discusses mechanisms to allocate the global targets between various countries.

Equity and cost-effectiveness

When discussing the concept of **equity**, there are two rules of thumb that have important implications:

"Vertical equity" implies that the burden of reaching a specific environmental target should be differentiated between countries at different stages of development and in different economic situations.

"Horizontal equity" implies that countries at the same stage of development and in the same economic situations should share a burden that is comparatively equal.

The climate agreement should aim at universal participation. The special circumstances of certain countries should, to the largest degree possible, be handled as an integral part of the climate agreement and not by their non-participation. To facilitate discussions regarding burden-sharing during the climate negotiations it might be fruitful to categorize countries in a limited number of groups, according to their economic situation.

Cost-effectiveness implies that the total costs of achieving a given target are as low as possible. The more cost-effective a mechanism is, the lower are the costs of reaching a given target. A frequent misunderstanding is that the objective of

cost-effectiveness is in some way contradictory to setting ambitious targets. This is not the case.

The costs of reaching a target are minimised when the costs of additional net emission reductions are equal for all sources and sinks, all sectors in a country and in all countries. If this condition is not met, total costs can be reduced by reducing emissions from a low-cost source and increasing emissions from a high-cost source with the same amount. Total emissions of greenhouse gases will then be unchanged, but total costs are reduced.

Previous environmental agreements are often based on equi-proportionate emission reductions in all participating countries. In these agreements, countries that already have made significant efforts, where the costs of further reductions are high, may incur very substantial costs. At the same time, countries that have done little to reduce emissions previously may incur far more moderate costs. It is obvious that agreements of this type are not cost-effective.

If commitments regarding net emission reductions result in a disproportionate burden-sharing, this could be off-set by financial transfers between countries. When emission reductions are allocated in a cost-effective manner, thereby minimising total costs, such schemes can be constructed in a way that benefits all countries.

Due to the dynamic nature of the negotiation process and uncertainty regarding different countries' motives, intentions and strategies, the issues of equity and cost-effectiveness will tend to be intertwined. It is important to keep in mind that these issues can be addressed through two separate mechanisms, namely the allocation of net emission commitments and the possible financial transfers.

Lack of information regarding the development of costs and benefits over time is a potential obstacle to the construction of a climate agreement that is cost-effective and equitable. One way to handle this uncertainty is by developing mechanisms that allow for a flexible formulation and implementation of policies towards climate change. Such policies will be less vulnerable to lack of information than more traditional, static approaches, which may turn out to be grossly ineffective in the long run.

Harmonisation of taxes

In order to achieve greenhouse gas emission targets in a cost-effective manner, abatement strategies in different sectors and countries must be consistent. Greenhouse gas taxes and other appropriate mechanisms, including incentives for sink enhancement, should be harmonized to the largest extent possible.

Under a system of greenhouse gas taxes, consumers and producers will reduce emissions until the costs of further reductions are larger than the tax. When taxes are harmonised as far as possible, and subsidies are abolished, the costs of further reductions will tend to be the same in all countries. Accordingly, the allocation of emission reductions will be cost-effective.

The climate agreement can contain more or less sophisticated provisions regarding harmonisation of taxes. The simplest version is that countries declare their general willingness to work towards a gradual coordination of emission-relevant taxes. The most elaborate would be the establishment of a global tax authority, collecting emission taxes from each country and redistributing the revenue according to specific criteria.

An intermediate solution could be that groups of countries, through the climate agreement, agree on certain minimum levels or intervals for a specific set of taxes. This last approach seems to be the most appropriate at the current stage. If called for, more advanced and elaborate schemes for harmonisation of taxes could be established later.

Provisions regarding coordination and harmonisation of greenhouse gas taxes should be combined with a system of financial transfer, for instance through a clearing house mechanism as discussed below.

If a country taxes its export industry more heavily than other countries, this may lead to a substantial loss of competitiveness. Because of this, many countries are inclined to exempt their export industries from greenhouse gas taxes. The effects of greenhouse gas taxes can also be offset by other changes in the national tax systems or by subsidisation.

Policies to avoid or offset taxation of export industries may cause significant distortions, both in the country that introduces these policies and in other countries. These policies are clearly neither equitable nor cost-effective. The climate agreement should include provisions aimed at avoiding unfair distortions in terms of trade.

Exchange of emission control commitments

A climate agreement that contains quantitative net emission reduction commitments by individual countries, needs flexible provisions for the implementation of these commitments, in order to ensure cost-effectiveness. Countries should have the option to decide whether they should achieve the reductions they had committed themselves to domestically or abroad, in cooperation with other countries. This can be done by

allowing for exchange of emission commitments between various countries.

In an exchange system, countries would agree on an initial allocation of commitments. Within defined limits, the parties would be free to achieve the net emission reductions they had committed themselves to wherever they wanted. For instance, industrialized countries might find that investing in energy efficient technology in Eastern Europe or in developing countries gives far greater emission reductions than investments in their own countries. Others might find support of sink enhancement in the developing world, for instance by reforestation, to be a cost-effective measure.

Foreign investments of this kind would also be beneficial to the countries where the investments take place. The transfer of resources will represent a significant contribution to the potential for economic development in these countries. In addition, measures to reduce greenhouse gas emissions may have a substantial impact on domestic and regional environmental problems.

Exchange of emission commitments allows for the least expensive actions to be undertaken first, regardless of country. Over time, this system will tend to equate the costs of further abatement measures in different countries.

Initial allocation of commitments

In an exchange system, the allocation of initial commitments between countries at different levels of economic development could be based primarily on equity grounds. This would imply that the most developed countries take on the largest emission reduction commitments.

Initial targets for developing countries and countries with economies in transition should be set at levels that are consistent with their economic circumstances and development needs. For some countries it might be appropriate to express commitments in relative terms, for instance as required reductions in energy intensities. This type of targets will leave the countries less exposed to uncertain economic prospects.

For countries at the same level of economic development, the criteria of equity and cost-effectiveness will to a large extent coincide. A cost-effective allocation of initial commitments between these countries would imply that countries with high emissions, where the cost of emission reductions are comparatively low, take on the largest commitments.

An allocation of initial emission commitments on the basis of a combination of maximum emissions per capita and per unit of GDP seems to be consistent with these criteria. The relative weights of each of the two factors must be settled through negotiations. The allocation could be revised at regular

intervals, to allow for a gradual development of targets on the basis of new information.

Clearing house system

An exchange system can be constructed at various levels of sophistication. One option could be a "bubble" system, based on a bilateral agreement between two countries or a regional agreement between several countries to pool the implementation of their commitments. The most elaborate option could be a system of emission permits that can be traded freely on a world market.

An intermediate variety could be a clearing house system. In our opinion, the establishment of a clearing house system seems to be the most promising option for further exploration and implementation in the initial framework convention. The agreement should also provide for research into further development and refinement of trading schemes, to be implemented as appropriate and with due consideration to the need for more elaborate compliance mechanisms. However, these more sophisticated trading schemes are probably not viable for implementation in the initial framework convention.

A clearing house could appraise and select projects for reducing emissions, according to their cost-effectiveness and coordinate the funding of these projects. The net reduction in emissions resulting from any specific project should be credited to the country that contributes to the funding of this project and deducted from its national commitment. A clearing house would have a large portfolio of potential projects, thereby facilitating a more efficient matching of projects and funds than a system of bilateral exchanges.

Even if one should not manage to agree on specific country commitments in the initial framework convention, a clearing house system might be of great value. Countries with self-declared commitments, or even without specific commitments, would still have the option to finance emission reductions in other countries as an alternative to more expensive reductions in their own countries.

In a clearing house mechanism, the transfer of financial resources between countries is integrated in the system. It seems probable that the flow of funds to a large extent will be from the industrialized countries to the developing countries and the countries in transition. This could be supplemented with other financial mechanisms. The clearing house mechanism should function in close cooperation with any such funding mechanisms. Eventually, these mechanisms should be integrated as much as possible. The Global Environmental Facility, which recently was established by the World Bank, UNEP and UNDP, gives a practical demonstration of how a financial mechanism could be organized.

Conclusions

- 1 The negotiation of an effective climate agreement will be a lengthy process. The initial agreement should be process-oriented and thus have a structure that facilitates timely revision of current elements and inclusion of new elements.
- 2 The climate agreement should aim at universal participation. The special circumstances of certain countries should, to the largest degree possible, be handled as an integral part of the climate agreement.
- 3 The initial framework convention should initiate the process towards harmonisation of greenhouse gas taxes and other appropriate mechanisms in the participating countries, for instance through a set of minimum tax levels. It should contain commitments to avoid unfair trade effects.
- 4 The allocation of initial net emission commitments between countries at different levels of economic development could be based primarily on equity grounds. This implies that the most developed countries take on the largest commitments. Initial targets for developing countries and countries with economies in transition should be of a kind consistent with their economic situation and development needs.
- 5 The allocation of initial commitments between countries at the same level of economic development should be based on both equity and cost-effectiveness. This implies that countries with high emissions, where the cost of emission reductions are comparatively low, take on the largest commitments.
- 6 Countries should have the option to achieve quantitative emission commitments alone or in cooperation with other countries. The framework convention should initiate the process towards the establishment of a clearing house system. This would facilitate transfer of financial resources to the developing countries and countries with economies in transition and contribute to a cost-effective allocation of net emission reductions on a global basis.

14.4 **FINANCIAL TRANSFER MECHANISMS/SPECIAL SITUATION
OF DEVELOPING COUNTRIES/COUNTRIES
WITH AN ABNORMAL BURDEN**

Developing countries have as their main priority alleviating poverty and achieving social and economic development. Their emissions will have to be allowed to grow, reflecting their present low energy consumption, in order to accommodate their development needs. Growth in emissions will be allowed to continue until an understanding/agreement to the contrary is reached. However, developing countries should be encouraged on their own accord to accede to developed country status as regards obligations.

Developing countries' obligations could i.a. consist of ensuring that energy efficiency is improved in an agreed period by reducing the tons of carbon emitted per GNP by a given percent (to be agreed upon).

Financial Mechanism

A mechanism will have to be established for the purposes of providing financial and technical co-operation, including the transfer of technologies, to developing countries (DC) or countries with an abnormal burden (AB), to enable their compliance with energy efficiency obligations or self-imposed emission control measures. Transfers should meet all agreed incremental costs in order to enable compliance with obligations, thereby guaranteeing that productive investments are not undercut. Thus, investments in the protection of the global atmosphere that otherwise would not be undertaken due to an insufficient national rate of return, will be secured. Contributions to the mechanism will be separate from and additional to other financial transfers to recipient countries, including development assistance. As an example of such an approach, Norway has established a new budget item for global climate funding, additional to and separate from the development assistance budget. The Norwegian 1991 contribution to the IBRD/UNEP/UNDP Global Environment Facility comes from these funds and thus represents genuine additionality.

The Financial Mechanism established will include a Multilateral Fund:

- (a) To meet, on a grant or concessional basis, agreed incremental costs.
- (b) To assist Parties (DC and AB) through country studies to identify their needs for co-operation.

- (c) To facilitate technical co-operation to meet identified needs.
- (d) To facilitate other multilateral co-operation to meet needs for capital investments in energy efficiency, low or non-greenhouse gas agricultural, forestry, industrial, transportation or infra-structural activities.
- (e) To facilitate operations favourable to the global environment that would not go forward without a special extra assistance to provide an acceptable return in relation to a given country's benefit.
- (f) To facilitate investment by one country in another country that could either be a developing country or a country with abnormal burden, based on provisions in the agreement to achieve the most cost-effective solutions to counteract climate change or meet obligated control measures. Such investments should be credited the investor country proportional to the net GHG emission limitations obtained.

The Multilateral Fund will operate under the authority of the Parties to the Climate Convention. They will also decide on its overall policies.

The Parties may establish an Executive Committee to develop and monitor the implementation of operational policies in co-operation with the IBRD/UNDP/UNEP "GEF" which may administer the Multilateral Fund.

An alternative would be to use the "GEF" as the Financial Mechanism. In that case, no Executive Committee needs to be established between the Parties and the Financial Mechanism/GEF. In order for this to take place, the GEF decision making structure needs to evolve in a fashion conducive to policy control by the Parties, and real influence by the developing countries not hitherto a part of the Bretton Woods structure. One option would be for the GEF to become a separate branch of the World Bank, such as the IFC, MIGA etc.

The Financial Mechanism is to initially receive direct budgetary contributions from industrial countries on the basis of burden-sharing (e.g. relative GHG emissions in a given year). However, as regards (a) to (e) above, the mechanism could progressively become an integral part of the very operation of the climate regime. In a system based on emission permits which would be freely tradable on the world market, arrangements for transfer of financial resources between countries are integrated in the system. It seems probable that the flow of funds to a large extent would be from the industrialized countries to the developing countries and countries in transition. This system could be supplemented by other financial mechanisms in order to secure adequate flows of funds for these countries. Eventually, these mechanisms should be integrated as much as possible.

The Financial Mechanism could as regards (f) above operate as a

clearing house or broker. These latter functions can also be expanded to concern trades in GHG emission rights between countries to fulfill obligations in a market-based, cost-effective fashion.

A first priority as regards a financing mechanism must be the undertaking of country studies, on a comparable basis, in order to clarify the costs and the distributional effects of a climate strategy based on the concept of incremental costs. See further Norwegian non-paper on this subject.

The above in no way suggests that all activities in developing countries need concessional financing in order to have a beneficial effect on climate change. A wide spectrum of investments, e.g. in the energy, forestry/agricultural and industrial field, are of a no-regrets nature and make sense both from an environmental and economic point of view and could thus be financed on non-concessional terms, be it on an equity or credit basis.

In the negotiating process, both sub-groups under the Negotiating Committee will have a role to play vis-a-vis the Financial Mechanism. Group I might have the role initially to oversee country studies, what activities are to be financed, financing needs, defining/agreeing on incremental costs and clarifying additionality in terms of commitments by industrial countries.

At a later stage, the institutional issues will come to the forefront through Group II: How are agreed commitments/obligations to be implemented, which existing agencies can deliver the goods, what changes are needed in existing institutional arrangements, which new institutions are needed, and their relation to the Convention, the UN and the Bretton Woods system.

14.5 TECHNOLOGY TRANSFERS IN A CLIMATE CONVENTION/CLIMATE REGIME.

Provisions for technology transfers will have their place in a climate convention alongside those pertaining to mechanisms for financial transfers.

The linkage of technology transfer and the transfer of financial resources

It would be useful if one could agree that as far as a Climate Convention will provide for covering developing countries incremental costs in taking actions in the climate field through the provision of new and additional financial resources, this coincides with the transfer of technology for the same purposes.

The technology needed to enable developing countries to undertake actions would be available in private markets and the incremental costs to acquire that technology should be covered. In this sense, there would be no residue for technology to be transferred outside the financial mechanism on non-commercial terms.

However, the two issues are not always overlapping. First, a large proportion of technology development takes place in the public sector, e.g. within public R & D institutions. When appropriate such public sector technological know-how should be made available to developing countries. Further, Governments have a separate responsibility to create a policy framework which promotes technology transfer and information exchange, and to assist in establishing contacts between potential partners, i.a. through rosters identifying technologies that are benign to the global climate.

Technology transfer - a wider concept than that of transfer of financial resources

The concept of technology transfer in one sense goes far beyond that of financing on concessional terms. It covers the whole range of developing countries' relations with the outside world through regular trade and investment patterns. It is therefore most likely that the bulk of technology transfer for climate purposes as for other aspects of economic intercourse will be made on regular commercial terms.

Technology transfer - not only the hardware

However, as technology transfer is also a very wide concept concerning not only the economic, be it commercial or non-

commercial side of financing, but such aspects as training, development of human resources, the identification of technology, soft ware education and the availability of technologies, the protection of patents and proprietary rights, i.e. the economic regulatory regimes of developed and developing countries. There is a strong case for a specific role under a Climate Convention/Climate Regime to establish mechanisms to contribute to the development, identification and inventory information on the availability of technologies as well as contributing to the training of personnel to handle technologies and through courses/curricula to educate populations in a more general sense.

Property rights and expropriation

Expropriation of privately owned technology would be illegal from the point of view of most national legal regimes and international patent treaties. The draw-backs of privately developed and owned technology including the right to discretion are, however, the same factors that ensure continued development of new technologies, i.e. the right to market them and earn a profit on superior new technologies from the point of view of productivity, environmentally qualities etc. Expropriation might be tempting as a short-term solution (in particular in reference to the unique and global significance of climate change) but would be based on a misunderstanding of the factors pushing technology development forward. It is also important to have in mind that by and large, private developers of new technologies are in the business of technology development in order to market the technologies and gain an increased market shares for their products overall. One should also note that much of the potential in developing countries as well as EE countries regarding reduction of greenhouse gas emissions is not dependent on advanced and specialized technology. The improvements needed also comply with the no-regret policy.

Avoid double compensation

What should be avoided in a Climate Convention is to establish financing mechanisms for technology transfers apart and separate from or in addition to a financing mechanism to recompense additional costs in acquiring technologies. Such un-financed technology transfer on non-commercial terms would be tantamount to expropriate technology from private proprietors/holders of technology/patents. Added to DC-financing to cover incremental costs this would amount to attempting to have the cake and eat it too. Worse, the attempt would probably be counter-productive and backfire on developing countries by barring/slowing down technology transfer rather than promoting it.

Technology transfer related to the Climate Convention

Technology transfer related to the Climate Convention should be within the following areas:

- Establishment and improvement of monitoring systems.

- Capabilities to assess alternative solutions.
- Technologies to stabilise and mitigate greenhouse gases (many sectors).
- Technologies to adapt to climate change: improved coastal mangagement and improved and robust agricultural technologies, including forestry.
- Energy sector:
Investment in human and institutional capabilities, for upgrading and more efficient use of existing investments in DCs.

Co-development, technological development cooperation, where funds should enable suppliers and public sector utilities to take part in international development projects on new and more efficient technology.

Towards a technology transfer mechanism

Steps towards a technology transfer mechanism must comprise:

- an analysis of the needs of the developing countries and the EE countries;
- overview of present obstacles to technology transfer;
- overview over present organisations and systems dealing with technology transfer today, and the experience from these projects;
- a study on how to treat technology transfer in view of existing and coming international environmental agreements.

14.6 Compliance

1. The Parties' compliance with the provisions of the Climate Convention will be crucial in determining the efficiency of the Convention in achieving its objectives.
2. The complexity of the Climate issue may require diversified compliance mechanisms in the Convention and its related Protocols in order to deal adequately with the compliance issues which are likely to emerge. The compliance system could be structured functionally, taking into account the possibilities of integrating or building upon existing mechanisms or institutions.
3. As the Climate Convention will be a first generation climate agreement, its compliance mechanisms should be flexible and adaptable, in order not prejudice the Convention's possibilities to be process oriented. To some extent, parts of the compliance provisions in a first generation climate agreement are likely to be of an interim nature. The Convention's compliance mechanisms should therefore at the outset aim at utilizing the existing institutions to the extent practicable.
4. An adequate compliance system for the Climate Convention and its related Protocols will have to be considered with due regard to inter alia the following main questions:

4.1. Monitoring, verification.

The Climate Convention will have to contain provisions regarding monitoring and verification of the Parties' obligations under the Convention. Parts of the basis for this control may already exist in fora like UNEP and WMO. It should be examined whether one or both of the two said institutions, possibly in conjunction with other existing institutions, could undertake the task of monitoring and verification.

A system for country reporting of climate data will have to be established. Today, only partial climate information is available country-wise. The IEA, IMF, World Bank, UNDPs ESMAP, OECD, UNEP and WMO will have elements of a country information base available. It should be clarified whether one or several institutions could contribute to, or be responsible for, the establishment of a country climate data base.

The data resulting from the monitoring and verification activities will have to be reviewed. One possibility could be to establish a system of "country climate examinations", for instance along the lines of country examinations in the OECD, and Article IV examinations in the IMF.

The results of the country reviews will have to be examined with regard to each Party's implementation of its obligations under the Convention.

4.2. Compliance decisions.

When the facts regarding a Party's compliance with the provisions of the Convention have been established, as a result of monitoring and verification mechanisms, the review procedure or otherwise, decisions will have to be

taken with respect to matters of non-compliance. Institutional authority will be needed under the Convention in order to handle compliance cases. The handling of compliance matters, at least on a day to day basis, can clearly not be undertaken by Meetings of the Parties. A likely possibility would be to leave all or parts of the handling of implementation matters to the Executive Body under the Convention. The mandate of the Executive Body will have to contain provisions clarifying its role in such matters, in particular:

- should the Executive Body have executive and judicial powers in compliance matters
- should its role be limited to making decisions with regard to measures in response to non-compliance (including but not limited to sanctions), or should the Executive Body have wider powers in the field of implementing the Parties' obligations under the Convention.

4.3. Implementation of response measures.

Among the questions that need clarification with regard to implementation of response measures are:

- Should the Convention itself and its related Protocols contain provisions regarding implementation measures
- How should disputes between Parties, or between one or more Parties and the Executive Body, with regard to compliance be handled:
 - should the Convention establish a settlement of disputes mechanism
 - for the Convention in general or limited to

compliance matters

- Can already existing settlement of dispute mechanisms be utilized, in particular mechanisms within the U.N. system.

- What should be the relationship between compliance mechanisms established under or in the Convention and its Protocols on one side, and general conflict resolution mechanisms on the other side.

- Should the International Court of Justice play a role

- Is a specialized international court or mechanism needed

- Should Parties to the Convention be able to "opt out" of the compliance provisions in the Convention by transferring the compliance matter at hand to other institutions, like the ICJ, thereby avoiding the implementation of response measures.

14.7 COUNTRY STUDIES

In order to clarify the costs and the distributional effects of a climate strategy, country studies need to be carried out, on a comparable basis. Special emphasis should be given to the effects of possible climate regimes on international trade. OECD has an important role to play here as regards industrial countries.

Country studies on developing countries should put emphasis on the concept of incremental costs resulting from greenhouse gas reductions that are not economically viable from a national point of view. This was the approach chosen in the Montreal Protocol. The experiences gained through GEF operations could also serve to gauge the size and nature of financing needs.

We are of the opinion that the World Bank, in cooperation with UNDP - through the ESMAP program - as well as UNEP, is particularly well placed to conduct country studies on developing countries. The Bank's present country "Environmental Profiles" as well as the broader "Country Environment Studies" could serve as natural points of departure - to be expanded to also encompass climate issues.

Although not presently part of the planned work program of GEF, we are inclined to propose country studies as a priority task for the GEF at its first meeting in May 1991 in order for the GEF to support on-going negotiations on global environmental issues.

In addition bilateral donors could finance country studies of developing countries, as was done in the Montreal Protocol process with great success. We understand that proposals to this effect will be made in the context of IPCC, and this should be supported.

Norway has already financed a study on Indian and Chinese energy options to be started shortly by the World Bank and we are looking at a similar proposal for a study on the use of economic instruments in environmental policy in major developing countries.

It is important to see country studies as part of the broader process that eventually lead to the establishment of national climate policy strategies in all countries as part and parcel of the future climate regime. The strategies/national programs should be reviewed in a constant effort to adapt to the deepening of our scientific knowledge and to be improved in the light of up-dated experience, i.a. through a process-oriented climate regime where examinations form an integral part.

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

19 June 1991
ENGLISH ONLY

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 5

This addendum contains material received on 19 June 1991

List of informal papers

18. NEW ZEALAND: informal paper - Proposal for chapters IX-XIII of the framework convention on climate change (submitted on 19 June 1991).

Informal Paper Submitted by the Delegation of New Zealand

Experience with the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer has demonstrated that instruments which relate to emerging environmental problems, and which attempt to address these problems inter alia by targetting outputs of certain substances, should deal with monitoring, assessment, compliance, amendment and extension issues in a transparent and innovative manner. In New Zealand's view the Framework Convention on Climate Change should:

- spell out procedures for the monitoring and assessment of the Convention and protocols and for the review of their operation;
- provide for an effective mechanism to monitor compliance by Parties with their obligations and for a procedure to address possible cases of non-compliance;
- establish appropriate institutions to carry out these and other necessary functions;
- provide a compulsory dispute settlement procedure; and
- lay down flexible procedures for the adoption of new protocols and annexes or of amendments to these or to the Convention itself, which will facilitate the early entry into force of such instruments or amendments.

New Zealand offers the following draft articles as a suggested means by which these objectives might be met. The articles are designed to conform with the Secretariat's "Possible Structure of a Framework Convention on Climate Change" (A/AC.237/7), in particular its Chapters IX to XIII, and are numbered accordingly. The draft articles draw heavily from the provisions of the Vienna Convention and the Montreal Protocol, as well as the suggestions already made by various delegations contained in A/AC.237/Misc.1/Add.1 and other precedents.

In summary, New Zealand proposes the establishment of an Assessment Committee (Chapter IX), comprising 15 member states, to carry out monitoring, assessment and review functions. An International Implementation Committee (Chapter X), comprising 15 experts, would be established to

receive reports on compliance from national monitoring bodies nominated by each Party and to receive and investigate complaints relating to possible non-compliance. Reports from both Committees would be submitted to the Conference of the Parties (Chapter XI) which may act upon those reports. A compulsory dispute settlement procedure is proposed (Chapter XII, and the Arbitration Annex). The Conference of the Parties may in addition (Chapter XIII) adopt protocols, amendments and additional annexes to the Convention. Provisions allowing for their expeditious adoption and entry into force are proposed, which extend also to amendments to the protocols and annexes.

NEW ZEALAND PROPOSAL FOR CHAPTERS IX-XIII OF THE FRAMEWORK
CONVENTION ON CLIMATE CHANGE

CHAPTER IX: MONITORING, ASSESSMENT AND REVIEW

ARTICLE 9A: ASSESSMENT COMMITTEE

1 The Assessment Committee is hereby established.

2 The membership of the Assessment Committee shall consist of 15 Parties, elected by ballot of the Parties with due regard to the principle of equitable geographical representation. Each member shall be elected for an initial term of four years, and may seek re-election. All other Parties and signatories may participate as observers in the work of the Assessment Committee. Each participating Party and signatory shall be represented by a person or persons having appropriate scientific, environmental, economic, technical, legal or other expertise relevant to the purposes of this Convention, one of whom shall be designated as its representative.

3 Unless the Conference of the Parties decides otherwise, the Assessment Committee shall be convened within six months after the first meeting of the Conferences of the Parties. Thereafter, unless it or the Conferences of the Parties otherwise decide, the Assessment Committee shall meet at least annually. The first meeting of the Assessment Committee shall be convened by the Executive Director of the United Nations Environment Programme. The Assessment Committee shall elect from among its members a chair and a vice chair, each to serve (subject to re-election) for a term of one year.

4 The Assessment Committee shall by consensus agree upon and adopt its rules of procedure. The rules of procedure and any amendments thereto shall be subject to approval by the Conference of the Parties.

5 The functions of the Assessment Committee shall be to provide advice and assessments to the Conference of the Parties on all scientific, environmental, economic, technical and other aspects relevant to the purposes of this Convention. In addition, the Assessment Committee may:

- a review the extent and nature of the research and scientific assessment being conducted by the Parties in accordance under Chapter VIII of this Convention and make recommendations thereon to the Conference of the Parties;
- b review the extent and nature of the cooperation between Parties to facilitate and encourage the exchange of scientific, technical, socio-economic, commercial and legal information and to establish programmes for systematic observation under Chapter VIII of this Convention and make recommendations thereon to the Conference of the Parties;
- c review research or assessments of relevance to the purposes of this Convention being conducted by non-parties and by other bodies or agencies, whether national or international, governmental or non-governmental and report thereon as necessary to the Conference of the Parties;

- d receive reports from the Parties under Chapter III of this Convention on measures adopted by them in implementation of this Convention and forward these to the Conference of the Parties with any comments or recommendations thereon as may be appropriate;
- e seek, as appropriate, the services of competent international bodies and scientific committees in scientific research, systematic observations and other activities pertinent to the objectives of this Convention;
- f establish such subsidiary ad hoc bodies as it may deem necessary to assist it in the performance of its functions.

6 Reports of the Assessment Committee to the Conference of the Parties covering the matters provided for in paragraph 5 above and any other matters considered by the Assessment Committee at its meetings shall reflect the conclusions reached and all the views expressed by the members and its observers.

CHAPTER X: COMPLIANCE CONTROL

ARTICLE 10A: NATIONAL MONITORING

1 Each Party shall nominate a body in its territory, hereinafter referred to as the "national monitoring body", which shall be responsible for monitoring compliance by the Party with this Convention and any protocol to which it is also party.

2 In addition to fulfilling its responsibility under paragraph 1 above, the national monitoring body shall:

- a report annually to the International Implementation Committee on
 - i measures taken by the Party to implement and to ensure compliance with this Convention and any protocol including the adoption of laws and regulations or administrative actions and enforcement measures, and
 - ii problems encountered by the Party in the implementation of this Convention and any protocol;
- b assist the International Implementation Committee in carrying out its functions, including by supplying any relevant information requested by the International Implementation Committee and by facilitating visits by International Implementation Committee missions as provided for in article 10C.

ARTICLE 10B: INTERNATIONAL IMPLEMENTATION COMMITTEE

1 The International Implementation Committee is hereby established.

2 The International Implementation Committee shall have 15 members, who shall be experts who are nationals of Parties to this Convention but who shall otherwise be elected in their personal capacity by ballot of the Parties, with due regard to the principle of equitable geographical distribution. Each member shall be elected for an initial term of four years, and may seek re-election.

3 Unless the Conference of the Parties decides otherwise, the International Implementation Committee shall be convened within six months after the first meeting of the Conference of the Parties. Thereafter unless it or the Conference of the Parties decides otherwise, the International Implementation Committee shall meet twice annually. The first meeting of the International Implementation Committee shall be convened by the Executive Director. The International Implementation Committee shall elect from among its members a chair and a vice chair, each to serve (subject to re-election) for a term of one year.

4 The International Implementation Committee shall by consensus agree upon and adopt its rules of procedure, including rules requiring any of its members who are nationals of a Party which is involved in a complaint under this Chapter to stand down on a temporary basis. The rules of procedure and any amendments thereto shall be subject to approval by the Conference of the Parties.

ARTICLE 10C: COMPLIANCE CONTROL

1 The International Implementation Committee shall assist compliance with this Convention and protocols by Parties thereto. It shall do so by:

- a receiving and assessing the annual reports of national monitoring bodies submitted under article 10C;
- b requesting any further information or clarification it requires from any national monitoring body or, if necessary, from any Party;
- c requesting any information or assessment it requires from competent international bodies and scientific committees;

- d receiving and assessing information provided by accredited non-governmental organisations;
- e reporting to each ordinary meeting of the Conference of the Parties on its activities under this paragraph.

2 In addition, the International Implementation Committee shall receive and investigate any complaint relating to a Party's compliance lodged by another Party. The International Implementation Committee shall deal with such complaints by:

- a arranging for notification forthwith to the Party which is the object of the complaint that the complaint has been lodged and requesting that it respond to the complaint within ninety days of the date of notification;
- b requesting further clarification or information from the complainant Party or the complained-of Party concerning the complaint or the response;
- c sending, if it deems it necessary and with the consent of the complained-of Party, a visiting mission to investigate the complaint either within the territory of the complained-of Party or elsewhere;
- d encouraging an amicable resolution of the matter on the basis of respect for the provisions of this Convention or protocol as the case may be;

e reporting its conclusion to the complainant and complained-of Parties and to the next ordinary meeting of the Conference of the Parties, along with any recommendations thereon. Such recommendations may include measures to assist or to bring about compliance by a Party.

3 In dealing with complaints under paragraph (2) of this article the International Implementation Committee shall fix such time limits as it deems necessary for the expeditious determination of such complaints. The International Implementation Committee may seek or receive the views of other Parties, agencies and experts if necessary to help it carry out its functions.

4 The Conference of the Parties may, after consideration of a report submitted by the International Implementation Committee under paragraph (2)(e) of this article, and taking into consideration any further submission from the Parties concerned, decide to call for further steps to assist or to bring about compliance by a Party. Such steps may include but shall not be limited to the provision of technical assistance to the Party, the determination of provisional data for the Party, revocation of the Party's voting rights under this Convention and any protocols, suspension of the Party's right to receive benefits, whether financial or otherwise, under this Convention and any Protocol, and treating the Party as a non-party for the purposes of any provision of this Convention and any protocol.

CHAPTER XI: INSTITUTIONAL ARRANGEMENTS

11.1 Conference of the Parties

ARTICLE 11.1.A: CONFERENCE OF THE PARTIES

1 The Conference of the Parties is hereby established. The first meeting of the Conference of the Parties shall be convened by the Executive Director of the United Nations Environment Programme not later than one year after entry into force of this Convention. Thereafter, ordinary meetings of the Conference of the Parties shall be held at regular intervals to be determined by the Conference at its first meeting.

2 Extraordinary meetings of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the written request of any Party, provided that, within three months of the request being communicated to them by the Secretariat, it is supported by at least one third of the Parties.

3 The Conference of the Parties shall by consensus agree upon and adopt rules of procedure and financial rules for itself and for any subsidiary bodies it may establish, as well as financial provisions governing the functioning of the Secretariat. It shall also approve the rules of procedure and agree upon and adopt the financial rules of the Assessment Committee established by article 9A and of the International Implementation Committee established by article 10A.

4 The Conference of the Parties shall keep under continuous review the implementation of this Convention, and take the decisions necessary to ensure its effective operation. To this end, it shall:

- a establish the form and the intervals for the reports to be submitted by Parties under Chapter III of this Convention on measures adopted by them in implementation of this Convention and consider such reports as well as any comments or recommendations thereon forwarded by the Assessment Committee;
- b review the scientific information concerning adverse effects on the global climate and on the possible consequences of such adverse effects;
- c promote, in accordance with Chapter III, the harmonisation of appropriate policies, strategies and measures for controlling human activities that cause or may cause adverse effects on the global climate, and make recommendations on any other measures necessary for the efficient operation of this Convention;
- d adopt, in accordance with Chapter VIII, programmes for research, systematic observations, scientific and technological cooperation, the exchange of information and the transfer of technology and knowledge;
- e consider and adopt, as required, in accordance with articles 13.3.A and 13.4.A, amendments to this Convention and its annexes;

- f consider and adopt, as required, in accordance with article 13.4.A, additional annexes to this Convention;
- g consider and adopt, as required, in accordance with article 13.1.A, protocols to this Convention;
- h establish such subsidiary bodies as are deemed necessary for the implementation of this Convention;
- i seek, where appropriate, the services of competent international bodies and scientific committees, in particular the World Meteorological Organisation and the World Health Organisation, in scientific research, systematic observations and other activities pertinent to the objectives of this Convention, and make use as appropriate of information from those bodies and committees;
- j receive reports from the International Implementation Committee under article 10C(2)(e) and take action on such reports, if appropriate, in accordance with article 10C(4);
- k consider and undertake any additional action that may be required for the achievement of the purposes of this Convention.

5 The United Nations, its specialised agencies and the International Atomic Energy Agency, as well as any State not party to this Convention, may be represented at meetings of the Conference of the Parties by observers. Any other body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to changes to the global climate which has informed the Secretariat of its wish to be represented

at a meeting of the Conference of the Parties as an observer may be admitted unless at least one-third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Conference of the Parties.

11.2 Executive Committee

ARTICLE 11.2: EXECUTIVE COMMITTEE

(To be considered further.)

11.3 Secretariat

ARTICLE 11.3.A: SECRETARIAT

- 1 The functions of the Secretariat shall be:
 - a to arrange for and service meetings provided for in Chapters IX, X, XI and XIII;
 - b to transmit reports received from Parties in accordance with Chapters III and VIII, from meetings of any subsidiary bodies established under article 11.1.A, and from meetings of the Assessment Committee and International Implementation Committee;
 - c to perform the functions assigned to it by any protocol;
 - d to prepare reports on its activities carried out in implementation of its functions under this Convention and present them to the Conference of the Parties;

e to ensure the necessary coordination with other relevant international bodies, and in particular to enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions;

f to perform such other functions relevant to the purposes of this Convention as may be determined by the Conference of the Parties.

2 The Secretariat functions will be carried out on an interim basis by the United Nations Environment Programme until the completion of the first ordinary meeting of the Conference of the Parties held pursuant to article 11.1.A. At its first ordinary meeting, the Conference of the Parties shall designate the Secretariat from amongst those existing competent international organisations which have signified their willingness to carry out the secretariat functions under this Convention.

CHAPTER XII: SETTLEMENT OF DISPUTES

ARTICLE 12A: CHOICE OF DISPUTE SETTLEMENT PROCEDURE

1 When ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a Party may choose, by written declaration, one or both of the following means for the settlement of disputes concerning the interpretation or application of this Convention and any protocol thereto:

a submission of the dispute to the International Court of Justice; and/or

b arbitration by the Arbitral Tribunal established in accordance with the procedure set out in the Arbitration Annex to this Convention.

A declaration made under this paragraph shall remain in force until it expires in accordance with its terms or until three months after written notice of its revocation has been deposited with the Depositary.

2 A declaration made under paragraph 1 above shall not affect the operation of article 12B(1) of this Convention.

3 A Party that has not made a declaration under paragraph 1 above or in respect of which a declaration is no longer in force shall be deemed to have accepted the competence of the Arbitral Tribunal.

4 If the parties to any dispute have accepted the same means for the settlement of a dispute, the dispute may be submitted only to that procedure, unless the parties otherwise agree. If, however, the parties have not accepted the same means for the settlement of the dispute, or if they have accepted both means, the dispute may be submitted only to the Arbitral Tribunal, unless the parties otherwise agree.

5 A new declaration, a notice of revocation or the expiry of a declaration shall not in any way affect proceedings pending before the International Court of Justice or the Arbitral Tribunal, unless the parties to the dispute otherwise agree.

6 Declarations and notices referred to in this Article shall be deposited with the Depositary who shall transmit copies thereof to all Parties.

ARTICLE 12B: SETTLEMENT OF DISPUTES

- 1 In case of a dispute between Parties as to the interpretation or application of this Convention or any protocol thereto, the Parties concerned shall, at the request of any one of them, seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.

- 2 If, after the expiry of twelve months of a request made under paragraph 1 above, the Parties concerned have not been able to settle their dispute through the means mentioned in that paragraph, the dispute may be submitted at the request of any of the parties to the dispute for settlement in accordance with the procedure determined by the operation of article 12A(3) or (4) of this Convention.

- 3 The rights of any Party provided for in this article are in addition to the rights provided for in article 10C(2) of this Convention. If, however, a Party has lodged a complaint with the International Implementation Committee in accordance with that article, no dispute relating essentially to the same matter that is the subject of that complaint may be submitted for settlement in accordance with paragraph 2 of this article until that complaint has been dealt with by the International Implementation Committee and its report on the complaint has been considered by the next ordinary meeting of the Conference of the Parties referred to in article 10C(2)(e).

CHAPTER XIII: ARRANGEMENTS WITH REGARD TO PROTOCOLS,
ANNEXES AND AMENDMENTS

13.1 Adoption of Protocols

ARTICLE 13.1.A: ADOPTION OF PROTOCOLS

1 The Conference of the Parties may at a meeting adopt protocols pursuant to this Convention.

2 The text of any proposed protocol shall be communicated to the Parties by the Secretariat at least three months before such a meeting.

3 The requirements for the entry into force of any protocol will be established by that instrument, and may include provisions regarding accelerated procedures for entry into force.

13.2 Relationship between Convention and its Protocols

ARTICLE 13.2.A RELATIONSHIP BETWEEN THE CONVENTION AND ITS PROTOCOLS

1 Except as otherwise provided in a protocol for the purposes of that instrument, the provisions of this Convention relating to its protocols shall apply to any protocol to this Convention.

2 Decisions concerning any protocol shall be taken only by the Parties to the protocol concerned.

3 A State or regional economic integration organisation may not become a Party to a protocol unless it is, or becomes at the same time, a Party to the Convention.

13.3

Amendment of the Convention or Protocols

ARTICLE 13.3.A: AMENDMENT OF THE CONVENTION OR PROTOCOLS

1 Any Party may propose amendments to this Convention and any Party to a protocol may propose amendments to that protocol. Such amendments shall take due account, inter alia, of the present state of scientific and technical knowledge.

2 Amendments to this Convention shall be adopted at a meeting of the Conference of the Parties. Amendments to any protocol shall be adopted at a meeting of the Parties to that protocol. The text of any proposed amendment to this Convention or to any protocol, except as may otherwise be provided in such protocol, shall be communicated to the Parties to the instrument in question by the Secretariat at least three months before such a meeting, unless the Conference of the Parties, or the meeting of the Parties to that protocol, agrees to waive this requirement. The Secretariat shall also communicate proposed amendments to the signatories to the Convention for information.

3 The Parties to the instrument in question shall make every effort to reach agreement on any proposed amendment by consensus. If all efforts at consensus have been exhausted, and no agreement reached, an amendment to this Convention shall as a last resort be adopted by a two-thirds majority vote of Parties to this Convention present and voting at the meeting. An amendment to any protocol shall be adopted in accordance with the provisions of that protocol.

4 Instruments of ratification, acceptance or approval of an amendment of this Convention shall be deposited with the

Depository. Amendments of this Convention adopted in accordance with paragraph 3 above shall enter into force between Parties having accepted them on the ninetieth day after the receipt by the Depository of notification of their ratification, acceptance or approval by at least one half of the Parties to this Convention. Amendments to any protocol shall enter into force in accordance with the provisions of that protocol, which may include provisions regarding accelerated procedures for their entry into force.

5 For the purposes of this article, "Parties present and voting" means Parties present and casting an affirmative or negative vote.

13.4 Adoption and Amendment of Annexes

ARTICLE 13.4.A: ADOPTION AND AMENDMENT OF ANNEXES

1 The annexes to this Convention or to any protocol shall form an integral part of this Convention or of such protocol, as the case may be, and, unless expressly provided otherwise, a reference to this Convention or its protocols constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to scientific, technical and administrative matters.

2 Except as may be otherwise provided in any protocol with respect to its annexes, the following procedure shall apply to the proposal, adoption and entry into force of additional annexes to this Convention or of annexes to any protocol:

a annexes to this Convention or any protocol shall be proposed and adopted according to the procedure laid down in article 13.3.A(2) and (3), including the provision for waiver of the requirement for three months advance circulation of proposals, as if the proposed annex were a proposed amendment to this Convention or to any protocol;

b annexes which has been adopted in accordance with sub-paragraph (a) above shall enter into force for all Parties to the Convention or to the protocol of which the annex is to form an integral part twelve months after the date on which the Depositary issued notices to such Parties of the adoption of the annex, except for those Parties which have notified the Depositary in writing within that period of their non-acceptance of the annex. The annex shall enter into force for Parties which have withdrawn their notification of non-acceptance on the ninetieth day after the date of withdrawal of such notification has been received by the Depositary.

3 The proposal, adoption and entry into force of amendments to annexes to this Convention or to any protocol shall be subject to the same procedure as for the proposal, adoption and entry into force of annexes to the Convention or annexes to any protocol. Annexes and amendments thereto shall take due account, inter alia, of relevant scientific and technical considerations.

4 If an additional annex or an amendment to an annex involves an amendment to this Convention or to any protocol, the additional annex or amended annex shall not enter into force until such time as the amendment to this Convention or to the protocol concerned enters into force.

ARBITRATION ANNEX

ARTICLE 1

Unless the Parties to a dispute otherwise agree, the arbitration referred to in article 12A of the Convention shall be conducted in accordance with the procedure set out in articles 2 to 17 below.

ARTICLE 2

The claimant party shall notify the Secretariat of the reference of a dispute to arbitration pursuant to article 10B (2) of the Convention. The notification shall state the subject matter of the arbitration and include, in particular, the articles of the Convention or the protocol, the interpretation or application of which is at issue. The Secretariat shall forward the information thus received to all Parties to the Convention or to the protocol concerned.

ARTICLE 3

1 In disputes between two parties, the arbitral tribunal shall consist of three members. Each of the parties to the dispute shall appoint an arbitrator within two months of the notification referred to in article 2 of this Annex and the two arbitrators so appointed shall designate by common agreement the third arbitrator who shall be the chair of

the tribunal. The latter shall not be a national of one of the parties to the dispute, nor have his or her usual place of residence in the territory of one of these parties, nor be employed by any of them, nor have dealt with the case in any other capacity.

2 In disputes between more than two parties, parties in the same interest shall appoint one member of the tribunal jointly by agreement.

3 Any vacancy shall be filled in the manner prescribed for the initial appointment.

ARTICLE 4

1 If the chair of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the Secretary General of the United Nations shall, at the request of either party, designate the chair within a further two months' period.

2 If one of the parties to the dispute does not appoint an arbitrator within two months of receipt of the notification referred to in article 2 of this Annex the other party may inform the Secretary-General of the United Nations, who shall designate the other arbitrator within a further two months' period.

ARTICLE 5

The arbitral tribunal shall render its decision in accordance with international law, as well as the provisions of this Convention and any protocols concerned.

ARTICLE 6

Unless the parties to the dispute otherwise agree, the arbitral tribunal shall determine its own procedure, assuring that each Party has a full opportunity to be heard and to present its case.

ARTICLE 7

The parties to the dispute shall facilitate the work of the arbitral tribunal and, in particular, using all means at their disposal, shall:

- a provide it with all relevant documents, facilities and information; and
- b enable it when necessary to call witnesses or experts and receive their evidence.

ARTICLE 8

The parties and the arbitrators are under an obligation to protect the confidentiality of any information they receive in confidence during the proceedings of the arbitral tribunal.

ARTICLE 9

Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the costs of the tribunal shall be borne by the parties to the dispute in equal shares. The tribunal shall keep a record of all the costs, and shall furnish a final statement thereof to the parties.

ARTICLE 10

Any Party to the Convention or, as the case may be, to a protocol thereto, that has an interest of a legal nature in the subject matter of the dispute that may be affected by the decision in the case, may intervene in the proceedings with the consent of the tribunal.

ARTICLE 11

The tribunal may hear and determine counterclaims arising directly out of the subject matter of the dispute.

ARTICLE 12

Decisions both on procedure and substance of the arbitral tribunal shall be taken by a majority vote of its members.

ARTICLE 13

If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to render its final decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings. Before rendering its final decision, the arbitral tribunal must satisfy itself that the claim is well founded in fact and law.

ARTICLE 14

The tribunal shall render its final decision within five months of the date on which it is fully constituted unless it finds it necessary to extend the time limit for a period which shall not exceed a further five months.

ARTICLE 15

The final decision of the arbitral tribunal shall be confined to the subject matter of the dispute and shall state the reasons on which it is based. It shall contain the names of the members who have participated and the date of the final decision. Any members of the tribunal may attach a separate or dissenting opinion to the final decision.

ARTICLE 16

The final decision shall be binding on the parties to the dispute and without appeal unless the parties to the dispute have agreed in advance to an appellate procedure. It shall be complied with by the parties to the dispute.

ARTICLE 17

Any controversy that may arise between the parties to the dispute as regards the interpretation or manner of implementation of the final decision may be submitted by either party for decision to the arbitral tribunal which rendered it.

21 June 1991

ENGLISH ONLY

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the agenda

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 8

This addendum contains material received on 21 June 1991

List of informal papers

22. KENYA: Non-paper - Elements for a framework convention
(submitted on 21 June 1991)

PAPER NO. 22: KENYA
non-paper

This paper is presented by the delegation of the Republic of Kenya in accordance with the guidelines on negotiations contained in Decision 1/1 of the Committee which, inter alia, recognise the differential responsibility of states and, in the hope that it will stimulate discussions on issues of major concern to developing countries. The paper contains elements for an International framework convention which it is hoped will find their way into the convention.

- a) Differentiated time frames for the stabilization of Greenhouse gases be set up in accordance with different levels of emissions and providing a transitional period for developing countries.
- b) The research capabilities of developing countries be improved and commitments to that effect be made.
- c) A financial mechanism be established and be administered by members-party to the framework convention

- d) The transfer of environmentally safe technology be guaranteed and provided on a preferential and non-commercial basis. Furthermore, negotiations and commitments on finance and technology should not under any circumstances be separated from those on other commitments.
- e) Effective mechanisms for compliance and the settlement of disputes be considered, and finally,
- f) The envisaged interim secretariat be established under UNEP which currently manages the world climate studies programme.

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ENGLISH ONLY

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 7

This addendum contains material received on 20 June 1991

A/AC.237/Misc.1/Add.7

GE.91-70435

List of informal papers

20. JAPAN: informal paper. Pledge and review process as a possible mechanism to implement commitments defined on the basis of the convention (submitted on 20 June 1991).

21. SINGAPORE: non-paper. Chapter IV specific commitments on emissions, sinks and counter measures (submitted on 20 June 1991).

This paper is intended to describe Pledge and Review process as a possible mechanism to implement commitments defined on the basis of the convention.

1. Pledge

Each country (or regional group) makes public a pledge, consisting of its past performance strategies to limit greenhouse gas emissions and targets or estimates for such emissions as the result of the strategies.

(1) Participating countries (or regional groups) must make pledges as soon as possible (within three months) after the ratification (entry into forces) of the Convention. The pledges will be made public as soon as possible.

(2) The pledges should include concrete response measures to be taken in each sector, e.g. energy, industry, agriculture, forestry, etc.

(3) Regional pledges by regional groups must, in principle, be accompanied by subpledges of each country.

(4) Necessary technical and procedural matters, etc., for the pledging should be spelled out in the Convention or an annex of the Convention.

2. Review

A review will be conducted periodically for each country/regional group by a team of experts from different countries/regional groups and the report will be submitted to the permanent review committee.

Note : Each country/regional group will submit an interim progress report during the interval.

- (1) The review team will send questionnaires and carry out on-site surveys.
- (2) Based on answers to questionnaires, on-site surveys and consultations with the government, the review team will draft a report, including evaluations of the current state of the implementation and appropriateness of the pledge.
- (3) The results of the review, i.e. the report, will be made public through appropriate procedures by the review committee and the Conference of the Contracting Parties. (By making public the report, it is hoped that international opinion will encourage positive action by participating countries.)
- (4) The report may include recommendations on the measures to be taken by the country/regional group. In the case of a developing country/regional group, it may include recommendations to the international community for assistance.
- (5) Necessary institutional and procedural matters, etc., for the implementation of the review should be spelled out in the Convention or an annex of the Convention.
- (6) Guidelines for the review will be established by the Conference of the Contracting Parties or the review committee.

3. Considerations for Developing Countries

(1) Developing countries will be entitled to delay its pledge by 1 year.

(2) Developing countries may request assistance for their country studies.

(3) The need for external financing and technology transfer should be adequately considered in reviewing pledges made by developing countries.

CHAPTER IV
SPECIFIC COMMITMENTS ON EMISSIONS,
SINKS AND COUNTER MEASURES

57. In the examination of remedial measures, special consideration should be given to countries which are not in a position to use substitutes for fossil fuel, or do not possess the flexibility to switch to non-fossil fuels such as hydroelectric, geothermal, nuclear and wind power, taking into account the prevailing state of technology and levels of attainable efficiency in fossil fuel usage.

24 June 1991
ENGLISH ONLY

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Agenda Item 2

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 9

This addendum contains material received on 21 June 1991 from Kuwait/Saudi Arabia/USSR and Yugoslavia; and material received on 22 June 1991 from Kuwait.

A/AC.237/Misc.1/Add.9
GE.91-70444

List of informal papers

23. KUWAIT, SAUDI ARABIA, UNION OF SOVIET SOCIALIST REPUBLICS
(Paragraphs 7, 14 and 16 of the Ministerial Declaration of
the Second World Climate Conference (SWCC) 1990).
24. KUWAIT
25. YUGOSLAVIA: Basic elements that should be incorporated into the
International Convention on Climatic Changes.

PAPER NO 23: KUWAIT, SAUDI ARABIA, USSR

In order to achieve sustainable development in all countries and to meet the needs of present and future generations, precautionary measures to meet the climate challenge must anticipate, prevent, attack, or minimize the causes of, and mitigate the adverse consequences of, environmental degradation that might result from climate change. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent such environmental degradation. The measures adopted should take into account different socio-economic contexts.

We recommend that in the elaboration of response strategies, over time, all greenhouse gases, sources and sinks be considered in the most comprehensive manner possible and also that limitation and adaptation measures be addressed.

The specific difficulties of those countries, particularly developing countries, whose economies are highly dependent on fossil fuel production and exportation, as a consequence of action taken on limiting greenhouse gas emissions, should be taken into account.

(The above are paragraphs 7, 14 and 16 of the Ministerial Declaration of the Second World Climate Conference (SWCC) 1990)

PAPER NO. 24: KUWAIT

In respect to the world community's effort to protect the atmosphere and climate change, we would like to stress the adoption of a balanced and parallel method in dealing with the different aspects of concluding an international convention to control GHG through a global approach, which would take into consideration all GHGs and activities that lead to these phenomena. In so doing, we should be careful that the solutions we are adopting do not encourage new ecological, economic or social problems, which would place increased burdens on LDCs.

The control of GHG emissions should not be limited to the gas and energy sector alone; and there should be equivalent and parallel consideration of other GHGs, specifically methane and NO_x, and of other industrial sectors, agriculture, and domestic activities (for example, solid waste disposal methods).

It is also essential to work with equal zeal in enhancing existing sinks and the creation of new ones. This means working actively on protecting forests and wet areas, as well as development and transfer of technology related to salt-tolerant plants in arid and semi-arid areas. The transfer of technology should also include increasing combustion efficiency to reduce NO_x, and the development of agricultural and solid waste disposal techniques that generate less GHG.

PAPER NO.25: YUGOSLAVIA

Basic elements that should be incorporated into the International Convention on Climatic Changes:

I. The preamble should include, among other things the following:

1. Climate protection as a common good for today's and future generations.
2. The effect of anthropogenic factors on climatic change and the undertaking of precautionary measures to alleviate and eliminate negative effects.
3. Actions of States on national and international fields with full respect for the sovereignty of States.
4. Peaceful exploitation and implementation of climate and the principle of good neighbourly relations as concerns climate issues.
5. The principle of sustainable development.
6. The responsibility of developed countries and their obligations as regards GHG stabilization measures and support to developing countries.
7. Obligations in respect to the development of an environmentally safe technology.
8. The needs of developing countries for new financial sources and technology transfer under favourable conditions.
9. The need for further research and systematic observation in order to gain knowledge on the climate/man cause and effect relations.

II. The Convention's operational part should contain the following elements:

1. Definitions
2. The obligation of States signatories to undertake, as a precaution on the basis of best available technologies, the following measures:
 - to decrease GHG, in particular CO₂, by using the best available technology;
 - to conserve and develop CO₂ sources and reservoirs;
 - to develop strategies for climate change adaptation and for neutralizing negative effects.
3. The obligation of States, the developed countries in particular, to stabilize SO₂ emission in a given time frame and to draw out measures for decreasing the other GHG.
4. Measures for limiting emissions in certain sectors of the economy (power generating industry, industry, wood industry, agriculture...).
5. Together with the defining of obligations of States signatories there should be protocols on:
 - GHG decrease;
 - ways for securing and investing new and additional financial resources

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

20 June 1991
ENGLISH ONLY

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 6

This addendum contains material received on 19 June 1991

List of informal papers

19. SWEDEN: non-paper. Commitments in chapter IV.1 (submitted on 19 June 1991).

NON-PAPER ON COMMITMENTS IN CHAPTER IV.1

The framework convention must in one or the other form contain commitments on limitation of emissions, in particular of CO₂. A practical approach to this issue has to integrate two principles:

- early action of a concrete nature in limited but important areas.
- a phased approach, enabling countries to take on more and more demanding commitments gradually.

For the purpose of such an approach, countries can be divided into categories with mechanisms for the transfer from one category to another when countries are able to take on more demanding commitments. We believe that a number of categories are needed, perhaps 5-6, to take into account different circumstances in different groups of countries (e.g. OECD-countries, countries with economies in transition, developing countries with a substantial industrial sector, other developing countries, countries in special conditions such as small island states...). Countries can be divided into categories according to appropriate criteria which would be decided by the Parties and included in the Agreement.

We are aware that a number of points, such as the definition of criteria, should be further elaborated and would appreciate any comments from delegations.

This paper only deals with commitments on limitations of emissions, which does not exclude that other measures, such as those related to sinks, could also be incorporated in this kind of approach.

In the convention, such commitments in different categories might be expressed as follows:

"For the purpose of the following paragraphs, the Parties are divided into categories ()-() according to the criteria set out in Annex... (to be developed):

1. The Parties in all categories shall, in accordance with Chapter IX, Article..., submit public national reports including an emission inventory and a national strategy to combat the greenhouse effect.

2. The parties in all categories shall use their best efforts in limiting emissions of greenhouse gases from, in particular, energy, transport, agriculture, industrial processes, landfills and from the extraction and transport of fossil fuels. They shall base their actions on best available technology and practices.

3. The Parties in category ()-() shall implement, inter alia, the following policy measures or similar measures with the same effect, not later than five years from the entry into force of this Agreement:

a. Mandatory fuel efficiency standards for fossil fueled motor vehicles. Such standards shall aim at reducing the average new vehicle's emission of CO₂ by the year (2000) compared to 1992 with at least 20% for passenger cars, 15% for light duty trucks and 10% for heavy duty vehicles. They shall as a minimum correspond to the values set out in Annex... (to be developed).

b. Measures to encourage the introduction and widespread use of non-fossil fuels in the road transportation sector.

c. Mandatory energy efficiency standards for space heating boilers, electric and gas water heaters, stoves, cookers, refrigerators, freezers and air conditioning devices. Such standards shall as a minimum correspond to the values set out in Annex...(to be developed).

Other Parties shall implement these measures not later than five years after entering category ()-().

4. The Parties in category ()-() shall also implement the following policy measures, or similar measures with the same effect, not later than five years from the entry into force of this Agreement:

a. Taxation of fossil fuels according to their carbon content. These taxes or other economic instruments with the same effect shall by the year (2000) as a minimum corresponding to \$xx per ton of CO₂ emitted. Bunker oils and aircraft fuels shall be included in this taxation.

b. Reduction of subsidies for the production and use of fossil fuels with a view to abolish such subsidies at the latest by the year (2000).

Other Parties shall implement these measures not later than five years after entering category ()-().

(5. Quantitative commitments on stabilization/reduction of CO2-emissions by countries in certain categories could also be included in a phased approach, with mechanisms for phasing-in of new countries as they enter into these categories).

6. The Parties shall, not later than three years from the entry into force of this Agreement and in accordance with the procedures set out in Chapter X, report on their national implementation of the commitments in the preceding paragraphs.

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Second session
Geneva, 19-28 June 1991
Item 2 of the provisional agenda

19 June 1991
ENGLISH ONLY

PREPARATION OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

Set of informal papers
provided by delegations, related to the preparation
of a framework convention on climate change

Note by the secretariat

Addendum 4

This addendum contains material received on 19 June 1991

List of informal papers

17. CHINA: non-paper. Possible structure and some draft articles of a framework convention on climate change (submitted on 19 June 1991).

PAPER NO. 17: CHINA
Non-paper

POSSIBLE STRUCTURE AND SOME DRAFT ARTICLES
OF A FRAMEWORK CONVENTION ON CLIMATE CHANGE

PREAMBLE

THE PARTIES TO THIS CONVENTION,

Being aware of the significant potential impact of climate change upon the human environment and economic development,

Recalling that the United Nations General Assembly Resolution 43/53 which states that Climate Change is a common concern of mankind,

Noting the Ministerial Declaration adopted at the Second World Climate Conference in 1990,

Noting the First Assessment Report of the Inter-governmental Panel on Climate Change,

Recognizing the need to improve further the scientific knowledge of climate change and to research further into its socio-economic impact and related response strategies,

Being aware of the need to take, in light of the best available scientific knowledge on climate change, realistic and feasible measures which are beneficial to the environment without prejudicing opportunities for economic development, and stressing that measures which are likely to have negative impacts upon or to cause damage to economic and other social activities of mankind should of necessity be taken on a sound and scientific basis.

Recognizing that the international community has a common but differentiated responsibility in respect of climate change and bearing in mind that the emission of greenhouse gases affecting the atmosphere has hitherto originated mainly from developed countries, which should therefore have the main responsibility in addressing the problem,

Recognizing also the need for sincere and effective international co-operation based on the principle of equity amongst all the nations in the international community to address climate change,

environment and economic development should be co-ordinated harmoniously and be viewed in an integrated manner, taking into full account that developing countries have as their main priority alleviating poverty and achieving social and economic development.

Stressing that improvement of the international economic environment for the developing countries and promotion of their sustained economic development are prerequisites for enabling developing countries to participate effectively in the international efforts to protect the global environment,

Fully aware of the special circumstances of the developing countries, particularly their need for financial resources and the requisite technologies,

Reaffirming the principles enshrined in the Stockholm Declaration on Human Environment of 1972, particularly its Principle 21 which provides that "States have, in accordance with the Charter of the United Nations and the Principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction",

Reaffirming that the principles of sovereignty of States and of non-interference in the internal affairs of other countries, shall be adhered to in all international affairs, including those relating to the protection of global environment,

Determined to protect global climate for present and future generations,

HAVE AGREED AS FOLLOWS:

ARTICLE 1 DEFINITIONS

... ..

ARTICLE 2 GENERAL PRINCIPLES

1. Climate change is a common concern of mankind, and countries have common but differentiated responsibilities in addressing the Climate Change issue.

2. The Parties shall conduct effective international co-operation based on the principle of equity to deal Jointly with the climate change issue without prejudice to sovereignty of states.

developed and developing countries in accordance with their responsibility and capabilities, and different timeframes be set out for implementation, noting that the largest part of the current emission of greenhouse gases originates in developed countries and that those countries have the main responsibility for combating the adverse effects thereof.

4. Environmental protection and economic development shall proceed in an integrated manner in light of country-specific conditions.

5. An appropriate level of economic development is the prerequisite for adopting concrete control measures to address climate change, and all the peoples in the world are entitled to an appropriate standard of living. Therefore, the energy consumption of developing countries must grow. Any limitation or control measures shall take full account of the per capita emission levels of various countries and the developmental needs of developing countries.

6. The special circumstances and needs of the parties that are developing countries shall be taken into full consideration, and the Parties shall exert all efforts to ensure that the developing countries are provided with the necessary financial resources and the requisite technologies and means in order to adequately address the problem of climate change.

ARTICLE 3 GENERAL OBLIGATIONS

1. The Parties shall, in accordance with the means at their disposal and their capabilities:

(a) Co-operate by means of systematic observations, research and information exchange in order to better understand and assess the effects of human activities on climate and the environmental and socioeconomic impact of climate change;

(b) Adopt appropriate legislative and administrative measures, and cooperate in harmonizing appropriate policies to address climate change;

(c) Co-operate effectively with competent international organizations to meet the objectives of the Convention;

(d) Encourage the promotion of public education and awareness of the environmental and socio-economic impacts of greenhouse gas emissions and of climate change and co-operate therein;

(e) Co-operate in development and application of relevant technologies.

2. The Parties undertake to ensure, through appropriate mechanism, that Parties which are developing countries have access to the funds and relevant technologies and equipment necessary to combat the adverse effects of global climate change.

ARTICLE 4 FUNDING MECHANISM

1. The Parties shall establish, pursuant to paragraph 2 of Article 3, a mechanism for the purposes of providing financial and technical co-operation, including the transfer of technologies, to the Parties that are developing countries.

2. The mechanism established under paragraph 1 shall include a Multilateral Fund composed of adequate, additional and timely financial resources. Such a Multilateral Fund shall not exclude any other means or arrangements of multilateral, regional and bilateral co-operation.

3. The Parties shall agree at a meeting of the Conference of the Parties, through appropriate procedures, upon the specific measures to implement the obligations set out in paragraphs 1 and 2 of this Article. Such measures shall be included, as appropriate, in the relevant protocols to the Convention.

ARTICLE 5 TRANSFER OF TECHNOLOGY

1. The Parties shall take every practicable step to ensure that requisite environmentally-sound technologies are expeditiously transferred so as to meet the technological needs of the Parties that are developing countries in implementing the obligations set out in Article 3 above.

2. The Parties shall have the obligations to ensure that the transfer referred to in paragraph 1 be made to the Parties that are developing countries under fair and most favorable conditions.

3. The Parties shall agree at a meeting of the Conference of the Parties, through appropriate procedures, upon the specific measures to implement the obligations set out in paragraphs 1 and 2 of this Article. Such measures shall be included, as appropriate, in the relevant protocols to the Convention.

4. The Parties shall ensure the effective implementation of the provisions of this Article by adopting appropriate measures.

ARTICLE 6 FURTHER RESEARCH AND ASSESSMENT

1. The Parties shall initiate, directly or through competent international bodies, further research and scientific assessment on:

- (a) Scientific knowledge regarding climate change;
- (b) Environmental and socio-economic impacts resulting or likely to result from climate change;
- (c) Optional response strategies and measures, including their costs and benefits and environmental, social and economic

consequences;

(d) Other matters deemed by the Parties as necessary for further research and assessment.

2. The Parties shall co-operate, directly or through competent international bodies, in ensuring the collection, validation and transmission of research and observational data through appropriate world data centers in a regular and timely fashion.

ARTICLE 7 EXCHANGE OF INFORMATION AND EXCHANGE AND TRAINING OF PERSONNEL

1. The Parties shall encourage and facilitate the exchange of scientific, technical, socioeconomic, commercial and legal information relevant to this Convention and its protocols. Such information shall be supplied to international bodies agreed upon by the Parties. Any such body receiving information regarded as confidential by the supplying Party shall ensure that such information is not disclosed.

2. The Parties shall co-operate, taking into account in particular the circumstances and needs of the developing countries, in promoting the development and dissemination of the relevant scientific and technical knowledge. Such co-operation shall be carried out particularly through:

- (a) Exchange of scientific and technical personnel;
- (b) Appropriate training of scientific and technical personnel;
- (c) Facilitation of the acquisition of relevant technological knowledge by other Parties;
- (d) Provision of information on relevant technologies and related equipment including supply of special manuals or guides to them;
- (e) Supply of necessary equipment and facilities for research and systematic observations;
- (f) Holding appropriate seminars and training courses.

ARTICLE 8 TRANSMISSION OF INFORMATION

The Parties shall transmit, through the Secretariat under Article 10, to the Conference of the Parties established under Article 9 information on the measures adopted by them in implementation of this Convention and its protocols to which they are party in such form and at such intervals as agreed by the Parties.

ARTICLE 9 CONFERENCE OF THE PARTIES

ARTICLE 10 SECRETARIAT

ARTICLE 11 ADOPTION OF PROTOCOLS

ARTICLE 12	RELATIONSHIP BETWEEN THE CONVENTION AND ITS PROTOCOLS
ARTICLE 13	AMENDMENT OF THE CONVENTION AND ITS PROTOCOLS
ARTICLE 14	ADOPTION AND AMENDMENT OF ANNEXES
ARTICLE 15	SETTLEMENT OF DISPUTES
ARTICLE 16	RELATION TO OTHER INTERNATIONAL TREATIES
ARTICLE 17	SIGNATURE
ARTICLE 18	RATIFICATION, APPROVAL, ACCEPTANCE OR CONFIRMATION
ARTICLE 19	ACCESSION
ARTICLE 20	ENTRY INTO FORCE
ARTICLE 21	REGIONAL ECONOMIC INTEGRATION ORGANIZATION
ARTICLE 22	RIGHT TO VOTE
ARTICLE 23	RESERVATIONS
ARTICLE 24	WITHDRAWAL
ARTICLE 25	DEPOSITORY
ARTICLE 26	AUTHENTIC TEXTS
POSSIBLE ANNEXE(S)	

INTRODUCTION

1. Recognising the early interest in the use of the CO₂-equivalence concept in Article 10 of the Noordwijk Declaration, and the subsequent reference to comprehensive strategies in the Ministerial Declaration of the Second World Climate Conference, it is surprising that the interpretation of the 'comprehensive approach' should have been such a source of difference between developed countries, and a problem in their taking a lead in action to reduce the rate of climate change. This paper seeks to develop an incremental comprehensive approach, consistent with existing Community positions, which may form the basis of possible developed world consensus.

target of
emissions

2. Ministerial declarations on climate change have tended thus far to reflect two strands of thought. First, the political impetus for nations to commit themselves to quantified targets for stabilising or reducing emissions of CO₂. This reflects the significant contribution which CO₂ makes to the problem (estimated by IPCC as 55%) its long atmospheric lifetime, and the available means to control CO₂ emissions through "no regrets measures" such as energy efficiency. However, the second thread reflects a widespread appreciation, dating from the Noordwijk Declaration, that the problem of global climate change could not be tackled solely through controls on CO₂, nor tackled most efficiently if measures were taken to abate only one of the greenhouse gases.

3. This second thread has been expressed in several ways. The IPCC First Assessment report overview called for -

"a comprehensive strategy addressing all aspects of the problem and reflecting environmental, economic and social costs and benefits."

The Ministerial Declaration at the Second World Climate

Conference recommended that -

" in the elaboration of response strategies, over time, all greenhouse gases, sources and sinks be considered in the most comprehensive manner possible."

4. In the past, the use of the term "comprehensive approach" has been perceived in some quarters as adding unnecessary complexity to the negotiations. As our understanding of the sources, behaviour and means to control different greenhouse gases is at very different stages of development, it was felt that those pressing for a comprehensive approach, particularly to emissions targets, were seeking to delay action until knowledge advanced on all fronts. This perception has begun to dissipate however as a clearer common understanding is reached of the definition of the "comprehensive approach" and its context.

THE THEORY OF THE COMPREHENSIVE APPROACH

5. There are sound theoretical arguments for approaching climate change "in the most comprehensive manner possible." Although dominant in the magnitude of emissions, CO₂ is the weakest of the greenhouse gases in terms of its warming potential per molecule. The Report of Working Group I of the IPCC set out an analysis of Global Warming Potentials (GWP) of the principal greenhouse gases over different time intervals.

Table 1: Extract from IPCC Working Group 1

Time interval	20 years	100 years	500 years
carbon dioxide	1	1	1
methane	63	21	9
nitrous oxide	270	290	190
CFC-11	45	3500	1500
CFC-12	7100	7300	4500
HCFC-22	4100	1500	510

In addition, indirect greenhouse gases eg NOx and VOCs contributing to tropospheric ozone may also have high GWPs.

6. If action on ozone depleting substances was not already in hand, their very high global warming potentials make it likely that the international debate on climate change would initially have focused on actions to reduce or phase out their production and consumption. The revision of the Montreal Protocol in London in June 1990, and the subsequent tighter rules adopted by the European Community, will make a very significant contribution to abating anthropogenic additions to the greenhouse effect. Any assessment of the global action needed to achieve the ultimate global objective agreed at the Second World Climate Conference (SWCC) "to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with climate" must clearly take account of all actions already in hand. Neither the world as a whole, nor individual nations, should be expected to reduce CO₂ emissions as a goal in itself.

7. In its conclusions from Luxembourg, October 1990, the Community recognised that it is in the interest of the international community to reach an international agreement on the policy approach to climate change. It also noted that countries have a common but differentiated responsibility for dealing with problem. This position was broadly reflected in the SWCC Ministerial Declaration which also noted that industrialised countries should take the lead in reducing their major contribution to global net emissions of greenhouse gases ~~the~~ vehicle for implementing these principles, and agreeing on comparable efforts by all countries to tackle climate change will be the framework convention on climate change and its related protocols.

8. Nations have yet to agree on the principles which will determine their common but differentiated efforts for controlling greenhouse gas emissions. It must be recognised, however, that these principles cannot at this stage be expressed in a comprehensive fashion. To agree on comparability of effort will need exposure of the plans for each individual gas. Some of

these plans will reflect existing commitments contained in other international legal instruments. It is accepted in both the Noordwijk and Second World Climate Conference Declarations that these existing commitments cannot be claimed against any burden of reducing greenhouse gas emissions. However, even here some nations have shown the opportunity by greater effort to move faster than existing commitments and this is clearly worthy of encouragement.

9. However, if countries have to negotiate individual targets for maximum emissions, they will naturally have to negotiate some safety factor in these targets for each gas. In contrast if they are permitted to manage the attainment of their gas targets on a comprehensive basis, they will need far less safety room, and should be willing to accept more stringent targets. The comprehensive approach is then about the process of attaining the target, rather than the definition of some across the board target in fully comprehensive terms.

10. At least as important is the need to ensure that the most cost effective responses to climate change are adopted nationally and globally. This can take several forms, some applicable in the short term, others needing further assessment over the medium and long term.

11. The comprehensive approach would also allow the full range of policy instruments to control greenhouse gas emissions to be deployed nationally and globally. Each nation has a different economy, society and portfolio of greenhouse gas sources and sinks. The best set of response measures will be different for each nation, and flexibility in setting national commitments will encourage all nations to adopt the maximum spread of policy responses.

24
Overall
Target

PROBLEMS WITH THE COMPREHENSIVE APPROACH

12. As recognised in the IPCC report and Noordwijk Declaration, there remain considerable issues to be resolved in establishing a firm consensus on the relative Global Warming Potential of the

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for Marshall

different greenhouse gases. This needs to deal, for example, with -

- over what interval should the index of GWPs be measured;
- resolution of remaining issues on dissipation rates and residence time of CO₂ and methane;
- how to assess the role of indirect greenhouse gases such as carbon monoxide.

13. There is also as yet an incomplete understanding of the sources/sinks of all greenhouse gases, for example on nitrous oxide. Further scientific research in IPCC Working Group I and OECD will begin to answer these questions over the next few years. There is a need to improve the index based on radiative forcing, but other more elaborate indices might also usefully be investigated. Perhaps most significantly there is need for a consistent and accepted means of measuring the effect of sink enhancement in comparison with CO₂ emissions. It would clearly be impossible at this stage to construct national targets for greenhouse gas emissions on a totally comprehensive basis.

14. This argues for a comprehensive approach as a goal, rather than as an initial prescription. What is required is a "phased comprehensive approach."

THE PHASED COMPREHENSIVE APPROACH

15. There is a significant precedent for a comprehensive approach in international action to protect the atmosphere. Under the Montreal Protocol, parties are committed to limit and then reduce their production of various groups of substances listed in the Protocol. Each substance is assigned an Ozone Depletion Potential calculated to represent the average cumulative contribution of an additional increment of the substance to ozone depletion. Rather than requiring each party to achieve specific percentage reductions for each substance, the Protocol allows parties to adjust between substances in the same

group, provided they meet their overall commitment for that group. This approach naturally encourages the fastest action to be taken on the highest indexed substances using the most cost effective mix of policy instruments. The Protocol also allows for transfer of production quotas among parties for the purpose of industrial rationalisation.

16. It would not be practical, as has been shown, to envisage a fully comprehensive approach on greenhouse gases which allowed for full trading between gases at this stage of knowledge. However, it would be possible to differentiate between those gases for which there is good understanding of sources and levels of emissions, and those for which further work is needed. For the former category, a GWP comparison would have to be agreed, but this could be achieved as a basis for comparison rather than as part of a full scale methodology for measuring GWPs.

17. Nations would then be invited to make commitments on emissions which covered those greenhouse gases in what could be termed "Annex A". Scientific research would go forward on other greenhouse gases - "Annex B" - and these could be added to Annex A as and when knowledge and agreement permits. As a first step, Annex A could contain CO₂ and also methane emissions from the energy and waste sectors, for which there is a basis of understanding on sources and possible response strategies, to enable nations to be confident of achieving sufficient knowledge to allow for setting and achieving targets for emissions levels.

18. Annex A should also make allowance for actions taken by nations to limit emissions of substances controlled under the Montreal Protocol. Calculation of a national target to be met by a given year does not reflect the advantages of rapid abatement in long lived gases taken earlier. To encourage these, it may merit consideration to see how a GWP target could be modified to reflect such effort. It might be possible to give credit for actions taken to reduce emissions of ozone depleting substances when those actions result in faster or greater reductions than those which would result from the production and consumption controls under the revised Protocol. If a nation

greater than Montreal

...ed to take such actions, it would be right to devise a credit for this against their total commitment on greenhouse gases.

19. Consideration should also be given to devising an approach which takes account of the sinks of greenhouse gases. For CO₂, this means principally the role of forests. Significant re- and afforestation will reduce a country's net emissions of CO₂ and credit should be given for actions to enhance sinks.

Credit for sinks

20. A first step for the Community would be for the Commission to collect Member States' strategies for the abatement of all greenhouse gases analogous to the actions proposed under the Luxembourg conclusions for CO₂. The UK for example has recalculated its conditional CO₂ target and other actions being taken, in its recent White Paper as a 20% reduction at 2005 on 1990 levels.

This is of all greenhouse gases

? = going further than just simulation by 2005 ??

CONCLUSION

21. The main conclusions of this Paper are:

- there are strong arguments in favour of setting the comprehensive approach as a goal for controls on greenhouse gas emissions;
- in particular, a comprehensive approach is most likely to be cost effective nationally and globally, and so achieve the greatest reductions in anthropogenic emissions of greenhouse gases;
- the approach should be phased, to take account of the state of scientific understanding of each greenhouse gas;
- as a first step, national commitments could be framed in terms of CO₂, and of methane from the energy and waste sectors, for which the sources are well understood;
- the opportunity to credit reductions associated with existing international commitments should be investigated;

- relative GWPs should therefore be agreed initially between CO₂ and methane, and between ozone depleting substances and their substitutes:

- the Community should invite Member States to recalculate the actions and targets they have set for all greenhouse gases in this alternate form.

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