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SUMMARY OF THE 8TH SESSION OF WORKING GROUP III AND THE 24TH SESSION OF THE OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE: 22-28 SEPTEMBER 2005

The 8th session of Working Group III (WGIII-8) of the Intergovernmental Panel on Climate Change (IPCC) and the 24th session of the IPCC (IPCC-24) convened in Montreal, Canada, from 22-24 September and 26-28 September 2005, respectively. Over 220 participants representing governments and non-governmental organizations were in attendance at each of the meetings.

During WGIII-8, delegates completed work on the Special Report on Carbon Dioxide Capture and Storage, approving the text of the Summary for Policy Makers (SPM), accepting the scientific and technical assessments underlying this Special Report, and approved adjustments to this Special Report for consistency with the revised SPM.

The efforts of Working Group III were acknowledged at IPCC-24, with delegates approving their actions on the Special Report, thereby allowing the report to proceed to the copyediting and publication phase. Also at IPCC-24, delegates approved the draft report of IPCC-23, and the IPCC programme and budget for 2006-08, and discussed further work on aerosols, election procedures, emissions scenarios, outreach activities, and admittance of observer organizations. Delegates also heard progress reports on: the activities of the three IPCC Working Groups; management of the Synthesis Report of the Fourth Assessment Report; the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; and the work of the Task Group on Data and Scenario Support for Impact and Climate Analysis. While the failure of delegates to reach agreement on revised election procedures for the IPCC and Task Force Bureaus at IPCC-24 was perhaps disappointing, the progress otherwise made on substantive and procedural matters at both WGIII-8 and IPCC-24 reflects the now well-accepted competency and relevance of this intergovernmental body.

A BRIEF HISTORY OF THE IPCC

The IPCC was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). The purpose of the IPCC is to assess the scientific, technical and socioeconomic information relevant to understanding the risks associated with human-induced climate change. The IPCC does not undertake new research, nor does it monitor climate-related data, but bases its assessments on published and peer-reviewed scientific and technical literature. Its Secretariat is located in Geneva, Switzerland, and is staffed by WMO and UNEP.

Since its inception, the IPCC has prepared a series of comprehensive assessments, special reports and technical papers, providing scientific information on climate change to the international community, including policy makers and the public. This information has played an important role in the negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC, which provides an overall global policy framework for addressing climate change, was adopted in 1992 and entered into force in 1994.

The IPCC currently includes three working groups: Working Group I addresses the scientific aspects of the climate system and climate change; Working Group II addresses the vulnerability of socioeconomic and natural systems to climate

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change, negative and positive consequences of climate change, and options for adapting to it; and Working Group III addresses options for limiting greenhouse gas emissions and otherwise mitigating climate change.

The IPCC also has a Task Force on National Greenhouse Gas Inventories. This Task Force oversees the IPCC National Greenhouse Gas Inventories Programme (NGGIP), which aims to develop and refine an internationally-agreed methodology and software for the calculation and reporting of national greenhouse gas emissions and removals, and to encourage the use of this methodology by countries participating in the IPCC and by UNFCCC signatories. The IPCC Bureau is composed of 30 members elected by the Panel, assists the IPCC Chair in planning, coordinating and monitoring progress in the work of the IPCC.

KEY IPCC PRODUCTS: The IPCC completed its initial comprehensive assessments of climate change in the First Assessment Report in 1990 and the Second Assessment Report in 1995. The IPCC's Third Assessment Report (TAR) was completed in 2001. It addresses policy-relevant scientific, technical, and socioeconomic dimensions of climate change, and concentrates on findings since 1995 at both regional and global levels. The TAR, which was subject to extensive review from experts and governments, is composed of a comprehensive assessment from the three IPCC Working Groups, a Summary for Policy Makers and a Technical Summary of each Working Group report, and a Synthesis Report. The TAR Synthesis Report is written in a non-technical style aimed at policy makers and addresses nine policy-relevant questions identified by the IPCC based on submissions by governments. The IPCC's Fourth Assessment Report (AR4) is due to be released in 2007.

Since 1991, the IPCC has also worked on technical guidelines for assessing greenhouse gas inventories. The IPCC Guidelines for National Greenhouse Gas Inventories were first released in 1994, and a revised set was released in 1996. The UNFCCC's 1997 Kyoto Protocol reaffirmed the use of the IPCC's guidelines for preparing national greenhouse gas inventories by Parties to the UNFCCC and, in the future, by Parties to the Kyoto Protocol. In 2000 and 2003, the Panel approved additional good practice guidance reports that complement the Revised 1996 Guidelines and, also in 2003, approved a process for producing a further revised set of Guidelines in early 2006.

NINETEENTH SESSION: Beginning at its nineteenth session, held from 17-20 April 2002, in Geneva, Switzerland, the IPCC began work on the AR4. Participants made a number of decisions, including in relation to a draft work plan for developing definitions for forest degradation and devegetation, methodological options for recording and reporting on emissions from these activities, and aspects of the procedures for agreeing on NGGIP products. Participants also decided: on the timing of the AR4; to hold a workshop on geological and oceanic carbon dioxide separation, capture and storage; to draft a scoping paper on climate change and water; and to hold an expert meeting on climate change and development.

TWENTIETH SESSION: IPCC-20 was held from 19-21 February 2003, in Paris, France. Participants agreed on a work plan for two expert "scoping meetings" on how to structure the AR4. They also discussed a framework and a set of criteria for establishing priorities for special reports, methodology reports and technical papers for the period of the fourth assessment. They also decided to hold a high-level scientific meeting to survey the processes affecting terrestrial carbon stocks and human influences upon them, and to produce two special reports: one on safeguarding the ozone layer and the global climate system; and the other on carbon dioxide capture and storage.

TWENTY-FIRST SESSION: At IPCC-21, held from 3-7 November 2003, in Vienna, Austria, participants reviewed the outlines of the proposed Working Group contributions to the AR4 and the Chair's proposal for an AR4 Synthesis Report. Participants agreed that a technical paper on climate change and water should be completed in 2007, discussed terms of reference for a document on the AR4 product set, and reviewed the report of the IPCC expert meeting on processes affecting terrestrial carbon stocks and human influences upon them. The IPCC also approved the terms of reference for the revision of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, and agreed on a revised mandate, and changed the name of the Task Group on Scenarios for Climate and Impact Assessment to Task Group on Data and Scenarios Support for Impact and Climate Analysis (TGICA).

TWENTY-SECOND SESSION: IPCC-22 convened from 9-11 November 2004, in New Delhi, India. Participants discussed the scope, content and process for an AR4 Synthesis Report, AR4 products, outreach, the IPCC programme and budget for 2005-08; and election procedures. Participants also heard progress reports on: Working Group contributions to the AR4; the Special Report on Safeguarding the Ozone Layer and the Global Climate System; the Carbon Capture and Storage Special Report; the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; and the work of the TGICA. The Panel adopted a decision on the IPCC programme and budget for 2005-08 and agreed to work towards a 30-page AR4 Synthesis Report with a five-page SPM to be approved by the IPCC in late October 2007. The Panel also discussed activities for IPCC products.

TWENTY-THIRD SESSION: IPCC-23 was convened on 8 April 2005, in Addis Ababa, Ethiopia, to consider the joint activities of Working Groups I and II on the Special Report on Safeguarding the Ozone Layer and the Global Climate System. The Panel accepted this Special Report along with a SPM. In adopting the draft report of IPCC-22, participants also agreed that the IPCC Bureau would further consider arrangements for management of the AR4 Synthesis Report and report on its progress to the IPCC.

WGIII-8 REPORT

The eighth session of Working Group III of the IPCC (WGIII-8) opened on Thursday, 22 September 2005, co-chaired by WG III Co-Chairs, Bert Metz (the Netherlands) and Ogunlade Davidson (Sierra Leone). Delegates met in plenary, as well as in several informal contact groups, to consider the text of the draft SPM of the Special Report on Carbon Dioxide Capture and Storage (CCS Special Report), and to approve the scientific and technical assessments underlying the CCS Special Report and the adjustments to the CCS Special Report for consistency with the revised SPM. At the opening plenary on Thursday, IPCC Chair Rajendra Pachauri (India) noted the high expectations for the CCS Special Report, as this is the first time that a comprehensive assessment of CCS has been undertaken. He highlighted that

the drafting process included participation from industry and civil society, and emphasized the need to ensure outreach efforts on the CCS Special Report. This report outlines the key deliberations over the CCS Special Report at WGIII-8.

PRESENTATION ON THE DRAFT SUMMARY FOR POLICY MAKERS

Co-Chairs Davidson and Metz presented highlights of the draft SPM, focusing on issues that attracted comments from governments and organizations during the consultation period for the draft SPM. A document of collated comments was distributed (8th WG III/INF. 1). Co-Chair Davidson reminded delegates that the SPM aims to cover key issues relevant to decision makers but that it does not include policy recommendations. Discussing the current status of CCS technology, he noted the difficulty of defining the maturity of CCS system components, and explained that the SPM classifies CCS technologies into four "phases" of maturity: those in the research phase; those in the demonstration phase; those that are economically feasible under certain conditions; and those that have a mature market.

On CO_2 storage opportunities, Co-Chair Metz noted that the figure of 2,000 Gt of CO_2 for geological storage was derived from an expert judgment, and that technical estimates for ocean and mineral carbonation cannot be made yet. On the economic potential of CCS, he explained that, as practical experience with CCS remains limited, scenario studies were applied to consider economic potentialities. Discussing local health, safety and environmental risks associated with CCS, Co-Chair Metz noted that risks from transporting CO_2 via pipelines would be comparable to those associated with hydrocarbon pipelines, while the risks for CO_2 storage could be comparable with natural gas storage. He also said that ocean storage could have significant risks, but that there is insufficient information on ecosystem impacts. Co-Chair Metz explained that the risks of mineral carbonation would be those related to the environmental impacts of mining operations and that the figures provided in the SPM on the consequences of leakage from CO_2 storage are indicative only. On the implications of CCS for emissions inventories and accounting, he said the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 Guidelines) are expected to include guidance on the incorporation of CCS in national inventories.

CONSIDERATION OF THE DRAFT SUMMARY FOR POLICY MAKERS

The main agenda item at WGIII-8 was consideration of the draft SPM of the CCS Special Report (8th WG III/Doc. 2a). Delegates addressed this issue in plenary from Thursday to Saturday, including during late night sessions on Friday and Saturday. In introducing the draft text of the SPM, as revised based on comments from governments and organizations, Co-Chair Metz noted that nearly 800 comments were received on the draft SPM, the final version would include a glossary, and highly technical or policy prescriptive information should be avoided. He also said the WG III Co-Chairs would prepare a foreword clarifying the scope of the SPM.

Delegates then began consideration of the text, following a standard format throughout the meeting. The Co-Chairs first introduced each paragraph, explaining why comments by countries and organizations were or were not incorporated, and then delegates discussed and agreed to that paragraph on a line-by-line basis. This report discusses each section of the SPM, outlining the key issues debated at WGIII-8, and providing a brief summary of the final text of each section.

What is CO_2 capture and storage and how could it contribute to mitigating climate change? This section of the SPM was first addressed in plenary on Thursday and again on Saturday, following informal contact group consultations. Discussions centered on two key issues: whether CCS "is" or "could" be a mitigation option; and whether to include references to TAR on the need to avoid substantive amounts of CO_2.

France, Switzerland, Germany, Zambia, Austria and others supported stating that CCS "could be" a mitigation option, while Saudi Arabia, Australia, and the US expressed a preference for stating that CCS "is" a mitigation option. China questioned the necessity of including language from the TAR that notes that, depending on the assumed baseline emissions and stabilization of greenhouse gas concentrations over the 21st century, substantial amounts of CO_2 emissions would need to be avoided.

***Final Text*:** The final text notes that the SPM considers CCS to be an option in the portfolio of mitigation actions for stabilization of atmospheric greenhouse gas emissions, and that the TAR indicates that no single technology option will provide all of the emission reductions needed to achieve stabilization, but that a portfolio of mitigation measures will be needed.

What are the characteristics of CCS? Delegates considered this section of the SPM on Thursday. After initial discussions on whether to modify the title to specify that CCS is relevant to "large," "anthropogenic," or "suitable" sources of CO_2, delegates agreed to leave the title unchanged.

Discussions on the text in this section first centered on what can be categorized as "large point sources" and the potential for CO_2 storage in geothermal sites and aquifers. France noted that deep aquifers could be used for CO_2 storage and other purposes concurrently. Discussions then shifted to leakage from the transportation of CO_2 and a proposal by Denmark to include specific reference to biomass. The US, opposed by Germany and Austria, proposed deleting reference to leakage from the transport of CO_2 as a factor in the net reduction of emissions through CCS, saying that its impact is minor. Agreement was reached on text referring to "any leakage from transport."

***Final Text*:** The final text notes that capture of CO_2 can be applied to large point sources. The CO_2 would then be compressed and transported for storage in geological formations, the ocean, or mineral carbonates, or for use in industrial processes. It also states that the net reduction of emissions from CCS depends on the fraction of CO_2 captured, the increase in CO_2 production arising from any additional energy required for CCS, any leakage from transport, and the fraction of CO_2 retained in storage over the long term.

What is the current status of CCS technology? This question was addressed in plenary on Friday. The main issues under discussion were whether the potential for environmental risks from ocean storage should be noted in this section, and whether the early state of technological development on ocean storage is adequately reflected in the text. Belgium, Denmark, France and Germany supported some reference to risks, while Japan, Kenya and Saudi Arabia suggested this was not necessary since risks are addressed in another section of the

SPM. Delegates also discussed: the process and time scale of equilibration between CO_2 in the ocean and the atmosphere; whether and how to refer to Enhanced Oil Recovery in industrial uses of CO_2; and references to the maturity of CCS system components. Changes made to the draft SPM included: referring to contaminants rather than to hydrogen sulphide; emphasizing caprock as an essential mechanism for trapping CO_2; and including a footnote to explain that CO_2 contained in unminable coal, if subsequently mined, would be released.

***Final Text*:** The final text describes types of CO_2 capture systems; explains means of transporting CO_2 according to the distance and amount to be transported; and notes relevant technologies for CO_2 storage in both deep geological formations and in the ocean floor, noting that ocean storage and its ecological impacts are still in the research phase. The text also addresses the production of stable carbonates and certain applications in using waste stream; states that the abatement potential of industrial uses of captured CO_2 is small; and describes the various stages of development of CCS components, noting that the maturity of the overall system may be less than some of its components.

What is the geographical relationship between the sources and storage opportunities for CO_2? This question was addressed in plenary and in an informal contact group meeting on Friday. Main issues under discussion included whether to indicate that most of the increase in large point sources of emissions is expected to occur in developing countries, and the geographical relationship between CO_2 emission sources and sedimentary basins with potential for geological storage. Delegates also discussed: regional distribution, technology maturity and locations for deep ocean storage; percentages of global CO_2 emissions from fossil fuel suitable for storage and capture; and the proximity of large point sources of emissions to potential storage sites.

***Final Text*:** The final text states that large point sources of CO_2 are concentrated close to major industrial and urban areas, many of them within 300 km of potential geological storage sites, and that preliminary research suggests that, globally, a small proportion of large point sources are close to potential ocean storage locations. The SPM also notes that CCS enables the control of CO_2 emissions from the fossil fuel-based production of electricity or hydrogen, which in the longer term, could partially reduce CO_2 emissions from transport and distributed energy supply systems. Two figures are included: one representing the global distribution of large stationary sources of CO_2; and one representing prospective sedimentary basin areas with storage potential. The caption for the latter figure explains that the representation is based on partial and changing information that varies from region to region.

What are the costs for CCS and what is the technical and economic potential? This issue was taken up in plenary on Friday and Saturday. Discussions centered on: the minimum carbon prices necessary for a major CCS contribution to mitigation; worldwide storage capacity in geological formations; the contribution of CCS as part of a mitigation portfolio; the meaning of the word "cost;" and the economic potential of CCS under different stabilization scenarios and in a least-cost mitigation portfolio. After the US expressed concern about text being policy prescriptive, delegates agreed to amend the text to note that models indicate that the major contribution of CCS to climate change mitigation would come from deployment in the energy sector. China proposed deleting a figure that shows the contribution of CCS as part of a mitigation portfolio since it only referred to two scenario studies for stabilization at 550 ppmv CO_2, while Germany, Austria, and Kenya highlighted the relevance of the figure and supported keeping it. After informal consultations, delegates agreed to add text noting that analyses in this field are limited. They also agreed to modify the figure, and to note that results vary considerably on regional scales and that the example in the figure is based on a single stabilization scenario and does not show the full range of uncertainties associated with these matters. Several other changes were made to the text to note the lack of literature and need for further assessment.

***Final Text*:** The final text:

- describes and elaborates on cost increases in electricity generation associated with the use of CCS in electricity production;
- explains that retrofitting existing plants with CO_2 capture is expected to lead to higher costs and lower efficiencies than for newly built power plants with capture;
- states that in most CCS systems, the cost of capture is the largest cost component; and
- notes that energy and economic models indicate that the major contribution of CCS systems to climate change mitigation would come from deployment in the electricity sector, with most modeling suggesting that CCS systems start to deploy at a significant level when CO_2 prices begin to reach approximately US$25-30 per ton of CO_2.

The text further notes that: it is likely that, worldwide, there is a technical potential of at least about 2,000 Gt CO_2 of storage capacity in geological formations; the economic potential of CCS averaged over a range of baseline scenarios would mean that CCS contributes 15 to 55% to the cumulative mitigation effort worldwide until 2100, although uncertainties in these economic potential estimates are significant; and the role of CCS in mitigation portfolios increases and is found to reduce stabilization costs over the course of the century in most scenarios. The section title includes a footnote explaining that costs, as used in the SPM, refer only to market prices and do not include external costs such as environmental and societal costs that may be associated to the use of CCS.

What are the local health, safety and environment risks of CCS? Delegates took up this section of the SPM in plenary on Saturday. Discussions centered on the health and safety risks of the geological storage and transportation of CO_2, and on the environmental impacts of ocean storage. On risks to human health and safety, delegates considered comparisons between risks in the transportation and storage of CO_2 and risks in the natural gas industry. On the environmental risks of ocean storage, discussions focused on the availability of scientific knowledge and on the extent of ocean storage impacts.

***Final Text*:** The final text states, *inter alia*, that:

- the local risks associated with CO_2 pipelines could be similar or lower than those posed by existing hydrocarbon pipelines;
- the risks of geological storage would be comparable to those of natural gas storage with the appropriate measures;

- the effects of CO_2 on marine organisms will have ecosystem consequences;
- the chronic effects of CO_2 injection into oceans have not yet been studied over large ocean areas and long time scales; and
- the environmental impacts of large-scale mineral carbonation would be a consequence of the required mining and disposal of the resulting products.

Will physical leakage of stored CO_2 compromise CCS as a climate mitigation option? Delegates took up this section of the SPM, which was previously titled "What are the global risks of CCS?" in plenary and in an informal contact group on Saturday. Discussions centered on the differences between geological and ocean storage, particularly in relation to retention times, and on the extent of knowledge on leakage from storage sites.

***Final Text*:** The final text states, *inter alia*, that: the fraction of CO_2 retained in appropriately selected and managed geological reservoirs is likely to exceed 99% over 1,000 years; the release of CO_2 from ocean storage would be gradual over hundreds of years; and if continuous leakage of CO_2 occurs, it could, at least in part, offset the benefits of CCS for mitigating climate change.

What are the legal and regulatory issues for implementing CO_2 storage? Delegates took up this section of the SPM in plenary on Saturday. On regulations that may be applicable to geological storage, discussions centered on the need to indicate that the list of regulations provided is non-exhaustive, and on the inclusion of reference to pollution controls in the list. Regarding CO_2 injection into the ocean or sub-seabed, discussions focused on the interpretation, evolution and applicability of international law. Delegates also considered a proposal by the Netherlands to include reference to cross-border geological storage, deletion of a reference to the UN Convention on the Law of the Sea, as proposed by the US, and Japan's proposal to delete text elaborating on the OSPAR and London Conventions.

***Final Text*:** The final text:

- provides a non-exhaustive list of regulations for operations in the subsurface that may be applicable to geological storage;
- states that long-term liability issues associated with CO_2 leakage and local environmental impacts are unresolved;
- notes that no formal interpretations exist on the compatibility of CO_2 injection into the sub-seabed or ocean with certain provisions of international law; and
- states that several treaties, notably the London and OSPAR Conventions, are potentially applicable.

What are the implications of CCS for emission inventories and accounting? Delegates took up this section of the SPM in plenary on Saturday. Discussions centered on the inclusion of CCS accounting under the IPCC Guidelines and on whether to include reference to the uncertain role of CCS under the Kyoto Protocol. Delegates agreed to remove reference to the Kyoto Protocol from the final text.

***Final Text*:** The final text states that the current IPCC Guidelines do not provide specific methods for estimating emissions associated with CCS, and that such methods are expected to be provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. It states that specific methods may be needed for net capture and storage, negative emissions associated with biomass, physical leakage, and fugitive emissions. The text also makes reference to the limited experience of leakage monitoring and reporting, and the need to account for future and cross-border storage.

What about public perception of CCS? Delegates took up this section of the SPM in plenary on Saturday. The US, with support from New Zealand, Australia, and many others, proposed to delete this section, since it contrasts with the other sections of the SPM, which are based on more technical data. Delegates agreed to delete the section.

What are the gaps in knowledge? Delegates considered this issue in plenary on Saturday. Austria, with support from Germany, Belgium, and several others, proposed the addition of a section that would indicate to policy makers that there are gaps in knowledge about CCS.

***Final Text*:** The final text notes that there are gaps in knowledge on some aspects of CCS. It also states that increasing knowledge and experience would reduce uncertainties and facilitate decision making on the deployment of CCS for climate change mitigation.

CLOSING PLENARY

At the final plenary session, which ran into the early hours of Sunday, 25 September, delegates approved the revised draft SPM (8th WG III/Doc. 2a, Rev. 1), the Adjustments to the Technical Summary and Chapters for consistency with the approved SPM (8th WG III/Doc. 2c), and the Underlying Scientific and Technical Assessment in the Special Report (8th WG III/Doc. 2b). WG III agreed to pass on its best wishes to the family of the late Dr. David Pearce. Co-Chair Metz closed the meeting at 1:15 am.

IPCC-24 REPORT

IPCC-24 opened on Monday, 26 September 2005. During the three-day meeting, delegates met in plenary and in contact groups to make progress on the agenda items, including: adoption of the IPCC-23 draft report; approval of the CCS Special Report, and the IPCC programme and budget for 2006-08; and discussions of other issues, such as aerosols, emission scenarios, election procedures, admission of observer organizations to the IPCC, outreach, and progress on other IPCC activities.

IPCC Chair Rajendra Pachauri (India) welcomed delegates. Stéphane Dion, Minister of the Environment, Canada, remarked on the importance and influence of the IPCC's work and suggested the Panel turn its attention to adaptation. He noted the relevance of the CCS Special Report given Canada's current and planned use of CCS, and stressed the importance of issues such as adaptation, carbon markets, and technology to a successful outcome at the Climate Change Conference in Montreal in November 2005.

Referring to the IPCC-24 agenda, Chair Pachauri noted that work on the AR4 is at a critical juncture, and highlighted the policy relevance of cross-cutting themes in the AR4. He emphasized outreach and financial support as key to the work of the IPCC in the future. UNEP Executive Director Klaus Töpfer stressed the importance of the CCS Special Report, given its importance in addressing climate change. He referred to UNEP's commitment to the IPCC, and said that, in cooperation with the WMO, UNEP could help to disseminate the findings of the AR4.

WMO Deputy Secretary-General Hong Yan highlighted the importance of the recent Special Report on Safeguarding the Ozone Layer and the Global Climate System, and encouraged the IPCC to work with WMO members to distribute it. He also noted that work on future emission scenarios should include consideration of broader socioeconomic conditions, and that different approaches might be required when addressing short and long-term scenarios. Halldor Thorgeirsson, UNFCCC Secretariat, noted the relevance of IPCC special reports and the AR4 to policy making, and the importance of effective and balanced outreach activities by the IPCC. He also told delegates that the UNFCCC Subsidiary Body on Implementation had forwarded a proposal to COP-11 for a three-week postponement of COP-13, to allow further time for preparation of the AR4 Synthesis Report.

Delegates approved the provisional agenda for IPCC-24 (IPCC-XXIV/Doc. 1, Rev. 1). IPCC Secretary Renate Christ then introduced the draft report of IPCC-23, noting that only minor, editorial comments were received (IPCC-XXIV/Doc. 3). The report was then approved by delegates without comment.

APPROVAL OF WGIII-8 ACTIONS

WG III Co-Chair Ogunlade Davidson (Sierra Leone) introduced the SPM of the CCS Special Report (IPCC-XXIV/Doc. 2a) and the Underlying Scientific and Technical Assessment in the Special Report (IPCC-XXIV/Doc. 2b). WG III Co-Chair Bert Metz (the Netherlands) noted that constructive contributions during WGIII-8 had improved the SPM. Delegates then approved the actions of WGIII-8. The following discussions centered on the importance of outreach regarding the CCS Special Report and IPCC Secretary Christ informed delegates of outreach activities already underway.

Germany, with support from many countries and Greenpeace, and opposed by Saudi Arabia, suggested the IPCC consider preparing a special report on renewable energy and energy efficiency. Some countries said that given the timing and substance of the AR4, the IPCC guidelines for the commencement of special reports, and resource constraints, it was not appropriate to consider such a special report at this time. Chair Pachauri agreed that due to timing and capacity constraints relating to the AR4, consideration of such a special report should wait until the release of the AR4. No further action was taken.

IPCC PROGRAMME AND BUDGET FOR 2006-08

This issue was first addressed in plenary on Monday. IPCC Secretary Christ presented the programme and budget for 2006-08 (IPCC-XXIV/Doc. 4), noting that the annual rate of contributions for recent years was around, or slightly above, annual expenditures, but below the annual budget approved by the Panel. Chair Pachauri urged delegations to step up revenue flows.

Marc Gillet (France) and Zhenlin Chen (China) co-chaired meetings of the Financial Task Team, which met twice on Monday, and once on Tuesday. Discussions centered on: reasons for the budgetary carry over, which include cancellation, postponement, and back-to-back scheduling of some meetings, and contributions to meeting costs by host countries; incorporating plenary decisions in the 2006 budget, including increased funding for outreach, subject to approval at IPCC-25; and requests for budgetary adjustments from Technical Support Units (TSU) and other IPCC groups based on their revised meeting plans. Switzerland, Germany, and several others requested additional information on specific budgetary items, while the UK, Germany, and others noted that governments need guidance on required contributions.

***Final Decision*:** In addition to approving the programme and budget for 2006-08, the Panel also: took into account the carry over from 2004, noting that CHF5.5 million is estimated as the averaged yearly total of contributions needed for sufficient carry over to ensure transition to the next assessment period; adopted the revised budget for 2006; took note of the forecast budget for 2007 and of the indicative budgets for 2008; and invited governments that may be in a position to do so to contribute to the IPCC Trust Fund.

PROGRESS REPORTS

Progress reports were considered in plenary on Monday on: the activities of Working Groups I, II and III; management of the AR4 Synthesis Report; and the work of the Task Group on Data and Scenario Support for Impact and Climate Assessment (TGICA)

WG I: Susan Solomon (US), WG I Co-Chair, presented the WG I Progress Report (IPCC-XXIV/Doc. 8), noting that the Second Lead Author meeting took place in Beijing, China, from 10-12 May 2005, and that the first order drafts of all chapters of the WG I report had been received. She explained that an extensive list of potential expert reviewers had been compiled from various sources, including a publicly available web page to allow for open registration, and that initial contact had been made with more than 1,000 potential reviewers, with over 400 now confirmed. Co-Chair Solomon further announced that that the Uncertainty Guidance Note for authors is available on the IPCC website, and that the Ozone Special Report is being printed.

WG II: WG II Co-Chair Osvaldo Canziani (Argentina) presented the WG II Progress Report (IPCC-XXIV/Doc. 14), noting the submission of the WG II first order draft and the commencement of its expert review, and the initial drafting of the Technical Summary and the SPM. He highlighted the development of a regional database on source material used in the WG II fourth assessment, and plans for a joint meeting at COP-11 of WG II and WG III on the cross-cutting issue of adaptation, mitigation and sustainable development. Given time constraints related to preparation of the AR4 and the importance of the subject matter, Co-Chair Canziani requested, and delegates agreed, to postpone delivery of the IPCC Technical Paper on Water for six months.

WG III: WG III Co-Chair Metz presented the WG III Progress Report (IPCC-XXIV/Doc. 12), noting that the author team is preparing the first order draft of WG III's portion of the AR4 for expert review from 28 November 2005 to 20 January 2006, and that comments received during the expert review will be discussed during the Third Lead Author meeting, in Beijing, China, in February 2006. Co-Chair Metz highlighted an expert meeting in Washington, D.C., US, in January 2005, on emission scenarios used in the AR4, and a workshop in Laxenburg, Austria, in June 2005, on new emission scenarios. Co-Chair Metz also explained that, to further ensure discussions and coordination between WG II and WG III on the cross-cutting issue of adaptation, mitigation and sustainable development, a

web-based Virtual Coordination Group had been created, and expressed hope that the CCS Special Report will be released by the end of 2005.

AR4 Synthesis Report: Chair Pachauri informed delegates of the arrangements for management of the AR4 Synthesis Report, which include a draft timetable, roles and responsibilities of IPCC members and units, and organization of the AR4 Synthesis Report TSU; and of the budgetary impacts of the AR4 Synthesis Report, which are estimated to be CHF634,000 (IPCC-XXIV/INF. 2).

On a question from Slovenia about the content and form of the AR4 Synthesis Report, Chair Pachauri noted that a clear management plan was agreed to at IPCC-22. Austria requested that the IPCC-24 minutes explicitly reference the need to postpone COP-13 by three weeks.

TGICA: TGICA Co-Chair Richard Moss (US) outlined the problems posed by inadequate data in specific regions or sectors, and by the need for training and capacity building in developing countries. He outlined TGICA's proposal to enhance capacity in developing nations, as contained in the TGICA Progress Report (IPCC-XXIV/Doc. 5). Delegates approved the proposal on the understanding that the TGICA will act as a facilitator but will not provide training.

NATIONAL GREENHOUSE GAS INVENTORIES PROGRAMME

This agenda item was taken up in plenary on Monday and Tuesday.

Progress reports on 2006 Guidelines and Emission Factor Database: Taka Hiraishi (Japan), Co-Chair of the National Greenhouse Gas Inventories Programme (NGGIP) Task Force, presented Progress Reports on the 2006 Guidelines and the Emission Factor Database, noting that progress on the 2006 Guidelines is on schedule, and that the importance of the Emission Factor Database should increase as progress is made on the 2006 Guidelines (IPCC-XXIV/Doc. 13).

Further work on aerosols: The remaining discussions under this agenda item concerned further IPCC work on aerosols. NGGIP Task Force Co-Chair Hiraishi presented the report of the expert meeting on Emission Estimation of Aerosols Relevant to Climate Change, held from 2-4 May 2005, in Geneva, Switzerland (IPCC-XXIV/INF. 4), noting that participants concluded that a number of uncertainties remain regarding global inventories of aerosol emissions relevant to climate change, including in the estimation of carbonaceous measurement methods. He proposed that a follow-up meeting be held in 2007, and that a substantive agenda be finalized after completion of the AR4 reports of the working groups, to ensure synergies in the IPCC (IPCC-XXIV/Doc. 9).

WG I Co-Chair Solomon noted some concerns with the proposal, including: the need to avoid overlap with the work of WG I; the need to ensure that the NGGIP works within the IPCC's mandate; and that insufficient scientific knowledge exists for developing methodologies on aerosols. New Zealand, with Austria and Hungary, and opposed by the Russian Federation, said the IPCC should defer consideration of further work on aerosols until the AR4 is completed. France, Germany and China questioned whether work on aerosols is sufficiently advanced to give rise to work on inventories.

In response to comments from delegates, Co-Chair Hiraishi noted aerosols would not be included in the 2006 Guidelines, and that the NGGIP simply wished to consider how its expertise could assist others with research. Given uncertainties however, he said that the proposal could be postponed. Delegates agreed to postpone consideration of further work until after completion of the AR4.

CONSIDERATION OF FURTHER IPCC WORK ON EMISSION SCENARIOS

This agenda item was addressed in plenary on Tuesday. Chair Pachauri introduced the outcomes of the Laxenburg workshop on New Emission Scenarios (IPCC-XXIV/INF. 1), in particular that the IPCC should play a facilitating and coordinating role in the development of new emission scenarios. He introduced a proposal to establish a Task Group on New Emission Scenarios that would work until IPCC-25 (IPCC-XXIV/Doc. 11), which was approved by delegates after discussions.

Hungary underlined the importance of emission scenarios beyond their use by the IPCC, and stressed that the IPCC's responsibility cannot be reduced to facilitation of the scenario development process. The Russian Federation underscored the extent to which the IPCC's work depends upon scenarios. Austria, New Zealand and many others highlighted the need for new emission scenarios prior to a fifth assessment report (AR5). Supported by many, the US proposed explicit reference to the Laxenburg workshop in the Task Group mandate. Belgium, Greenpeace and many others emphasized the need for coherent assumptions and storylines, comparable scenarios, and a wide range of scenarios including economic, demographic and other social factors. The UK underscored continuity with past emission scenarios, in order not to undermine the work upon which the AR4 is based. Egypt and others noted the need to engage developing countries. Chile proposed that the IPCC develop methodology guidelines for the development of national emission scenarios, which would help developing countries. Spain emphasized the need for temporal and spatial disaggregation of scenarios, and Chile emphasized the relevance of regional scenarios for decision makers. Kenya expressed concern about the ownership of scenarios developed by other institutions, and associated budgetary implications. Morocco, noting the risk of scenario proliferation, proposed a work group to clarify a procedure for preparing scenarios that would serve to differentiate between IPCC and non-IPCC scenarios. Chair Pachauri said comments from the discussions would be reflected in the IPCC-24 report.

***Final Decision*:** The approved document (IPCC-XXIV/Doc. 11) acknowledges the results from the Laxenburg workshop and notes that there is a need for new emission scenarios, to be available well before the completion of a possible AR5. The document further proposes to establish a Task Group, with a lifetime up to IPCC-25, for the purpose of further defining, *inter alia*:

- the facilitation or coordination role to be provided by the IPCC;
- deliverables of the emission scenarios development process;
- the process and timeline for development of new emission scenarios; and
- the organizational arrangements of the IPCC's activities on coordinating, assessing and using scenarios.

ELECTION PROCEDURES

This agenda item was taken up in plenary each day and in contact group sessions on Tuesday and Wednesday. In plenary, Chair Pachauri introduced the Revised Draft Rules and Procedures for the Election of the IPCC Bureau and Task Force Bureau (IPCC-XXIV/Doc. 6), submitted by the Co-Chairs of the Open-ended Task Group on Election Procedures, David Warrilow (UK) and Richard Odingo (Kenya).

On Tuesday, Chair Pachauri reminded delegates that the text had undergone extensive government scrutiny, that the language is consistent with other IPCC documents, and that the text should not be considered "*ab initio.*" On definitions, discussions centered on whether IPCC Bureau members are countries or persons, with Switzerland and the Russian Federation favoring reference to countries, while Hungary, Canada, Belgium, the Netherlands and Slovenia supported reference to persons. Austria and the US suggested attending to this in the rules of procedure rather than in the definitions. Switzerland, with Canada, New Zealand and others stressed the need for flexibility in organizing the IPCC Bureau and, opposed by China, wished to exclude reference to Annex C, which lists the composition of the IPCC Bureau and any Task Force Bureau, in the definition of the IPCC Bureau. The Russian Federation stressed the need for members to have government support given the intergovernmental nature of the IPCC. The US, with Hungary, noted the importance of clearly defining the functions of a nominations committee.

During contact group discussions on Tuesday afternoon and evening, delegates discussed terms of appointment and re-election procedures, in particular a rule on cases where a member of the IPCC Bureau or a Task Force Bureau resigns or is unable to complete the assigned term of office. Co-Chair Warrilow explained that the rule includes a "security check" insofar as the new member would have to be elected by the Panel. On nominations, delegates supported deletion of a reference to a candidate's nationality. On election procedures, many delegates supported the use of some WMO formulations for a nominations committee to facilitate voting procedures, and stressed the importance of regions choosing their candidates. Delegates also agreed to rules on the size and composition of the IPCC Bureau, the definition of the IPCC Bureau, and other outstanding issues.

In plenary on Wednesday, Co-Chair Warrilow presented the revised draft rules agreed to in the contact group (IPCC-XXIV/Doc. 6, Rev. 1). China expressed reservations on Rule 20, regarding nomination of candidates, saying that if a country wishes to nominate a candidate from a different country, the nomination should be reconfirmed by the country of which the candidate is a national. The Russian Federation, with Moldova, said that a country member could not propose someone from another country. Saudi Arabia stressed the need for specific rules. New Zealand, Belgium, Canada and others expressed concern that text that had been agreed in the contact group after many hours of discussion was being reopened, and called for agreement of the text as a package. Chair Pachauri proposed temporarily suspending plenary to allow for informal discussions on this issue.

Upon resumption of the plenary, Co-Chair Warrilow read new language noting that "Should a member of the IPCC nominate a person who is not national of that member's country, the endorsement of the nominee's government shall be sought." China agreed to the new language. The Russian Federation, opposed by New Zealand, preferred "to obtain the approval." Saudi Arabia proposed additional language that would require regional endorsement. Contact group discussions continued during the lunch break. In the afternoon plenary session, Chair Pachauri proposed, and delegates agreed, to the content of all provisions except Rule 20, to discuss Rule 20 at IPCC-25, and to adopt the election rules and procedures only when Rule 20 is agreed.

OUTREACH

This issue was first addressed in plenary on Tuesday, at which time IPCC Secretary Christ presented a Progress Report on outreach activities (IPCC-XXIV/Doc. 7) and a consultancy report entitled Framework Communications Strategy for Release and Dissemination of the IPCC Fourth Assessment Report (IPCC-XXIV/INF. 3).

Many delegates highlighted the importance of disseminating IPCC information to a broad audience. Many others, including the Netherlands, Uganda and Nigeria, emphasized the need to ensure the appropriate dissemination of IPCC materials in developing countries, including paper copies of documents. IPCC Secretary Christ urged countries that have translated IPCC documents into non-UN languages to share the translations with the Secretariat. Canada, Argentina, France and others stressed that the IPCC should use international meetings as outreach vehicles, and that individual governments should disseminate information nationally. The US, Switzerland and Argentina cautioned that outreach activities should not evolve into marketing mechanisms.

An Outreach Task Group, co-chaired by John Stone (Canada) and Lucka Kajfez-Bogataj (Slovenia), met on Wednesday, at which time discussions focused on the establishment and functioning of the Outreach Task Group; the need for feedback from the consultancy report; whether it was better to hire staff or to engage external expertise; the preparation of a communications strategy, the need for regional and national outreach partners; and preserving the IPCC's reputation in carrying out communications activities.

Outreach Task Group Co-Chair Stone reported back to the plenary later that day, underscoring that the outreach process should seek to engage focal points in countries, recognize past and present practice on outreach, and the need to complete an outreach strategy to be presented at IPCC-25. The US suggested using the TSUs in addition to any focal points. Many countries discussed the necessity and timing of hiring a Secretariat staff member on outreach activities. Moldova and others reiterated the importance of distributing printed materials in developing countries. Noting a sense of *dejà vu* from discussions in previous years, and underscoring that an important part of science is communication, Chair Pachauri proposed, and the Panel agreed, to hire one person full time for one year, with the possibility of extending the contract, and to keep budgetary provisions for two years.

PROCEDURAL MATTERS

This item was discussed in plenary on Tuesday and Wednesday. IPCC Secretary Christ introduced a proposal for a Policy and Process for Admitting Observer Organizations to the IPCC (IPCC-XXIV/Doc. 10). Discussions centered

on: additional criteria for the admittance of organizations, as suggested by the Netherlands, the need for any admission policy to be consistent with the principles of the IPCC, as noted by China, and the role of observer organizations in facilitating transparency and confidence in organizations, as noted by Hungary, the US and others. The Russian Federation stated that observer organizations should only be allowed to attend plenary discussions and not other IPCC meetings. Chair Pachauri noted that the proposal only calls for observers to attend plenary discussions. Switzerland said that attendance by observers is an aspect of outreach.

The US, with support from Switzerland, suggested that this issue be revisited at IPCC-25, to allow time for members to consider the policy and to provide the Secretariat with any suggested amendments. Delegates agreed to this suggestion and that, in the interim, the Secretariat will provide delegates with a list of existing observers and those who have asked to become observers, revise the proposal based on input from governments, and present it at the next IPCC Bureau meeting before consideration at IPCC-25.

CLOSING PLENARY

IPCC Secretary Christ said that IPCC-25 would be held either from 26-28 April 2006, in Mauritius, or, one week later in Nairobi, Kenya, and that confirmation of the venue would be posted on the IPCC web site. Chair Pachauri thanked the IPCC Secretariat, all delegates and participants, and closed the meeting at 4:09 pm.

A BRIEF ANALYSIS OF WGIII-8 AND IPCC-24

The climate change regime is being constructed around the world, at full throttle. Be it in the UN context, through adaptation plans, climate partnerships, awareness campaigns, or carbon markets, players at all levels, from municipalities, countries, regions, and international organizations, to civil society institutions, industry groups, and rock stars, are taking action on climate change. Such intensive construction requires large quantities of concrete: a very special type of concrete that the IPCC is in a unique position to deliver. Since its origin, the IPCC has been characterized by a special blend of scientific and intergovernmental features, akin to the sand, gravel and cement used in concrete. The science, like sand and gravel, gives body and strength to the concrete. Intergovernmental approval, like cement, glues everything together, providing resistance and rendering the final product usable. The specific qualities of the outcome depend on the particular mix, as well as on the quality of each component.

Over the years since the IPCC's inception, the degree and sophistication of scientific understanding and modeling of climate change and its effects has grown. Likewise, the political, legal and diplomatic arena has expanded and become more complex. The addition of more materials to the mix just serves to complicate the already difficult process of finding the appropriate composition. But as a reward, when the right composition is found, the resulting product has more desirable qualities.

THE PREPARATION PROCESS – IPCC AT WORK

Just as the preparation of concrete involves different steps, the eighth meeting of Working Group III (WGIII-8) to address the Special Report on Carbon Capture and Storage (CCS Special Report), and the 24th session of the IPCC (IPCC-24), are different steps of the IPCC process. The main task at WGIII-8 was to reach consensus on a Summary for Policy Makers (SPM) of the CCS Special Report. Reaching consensus on how to best summarize the Special Report was lengthy and meticulous. Topics involving considerable discussions included the relevance of CCS to mitigation, which largely depends on assumptions on future scenarios, the maturity (or immaturity) of CCS technology, problems associated with CO_2 leakage, the costs of CCS, and most aspects related to ocean storage of CO_2. While discussions on these issues consumed all of the time scheduled for the meeting and more, most delegates showed great flexibility to reach consensus, and the result was a remarkable example of the IPCC process. Contrary to what some (particularly in the scientific community) might expect, there was a general view that government input seemed to result in an improved document that was more measured, realistic and cautious than the draft text first presented at WGIII-8 for consideration.

IPCC-24 had a different agenda to that of WGIII-8. Items addressed included, on the one hand, organizational issues such as rules of procedure for the election of the IPCC Bureau and Task Force Bureau and the IPCC programme and budget, and on the other hand, substantive issues, such as work on emission scenarios, the 2006 IPCC Guidelines, and the possibility of an IPCC special report on renewable energy and energy efficiency. The closure of the meeting left a slightly sour taste, because, after agreement seemed at hand, the adoption of election procedures was again postponed until the next IPCC session. The text under debate has been under revision and discussion for years. Agreement was reached on all the rules but one, and many delegates hoped to be able to approve the new rules at IPCC-24.

Disagreement on a procedural point should not tarnish the success of the IPCC's work, which is better described with some numbers: in the elaboration of the CCS Special Report alone, more than 5,000 comments from more than 100 reviewers in 35 countries were considered; in preparing the Fourth Assessment Report (AR4), IPCC Working Group I expects to consider over 20,000 comments, with participation by over 1,000 experts. And still the IPCC is able to achieve consensus documents. Putting together the views and comments of so many experts from around the globe is a formidable endeavor. The fact that governments, with widely divergent experiences and interests, can actually agree and partially co-author the IPCC's outputs can only be described as a phenomenal achievement – one that stands to provide good quality concrete for the global climate change architecture.

Nevertheless, an excellent product can be rendered useless if no one knows about it or uses it. This fact was acknowledged by delegates when discussing IPCC outreach needs and possibilities. While it did not appear that great progress was made on this issue, it did seem that a greater sense of urgency for ensuring appropriate outreach activities was catching on.

As any good quality control officer knows, continuous testing and adjustment is needed to ensure quality. Either an excess or shortage of elements can damage the product. The low participation of developing country experts in IPCC processes continues to be a problem, as noted by many observers both formally and informally during the meeting. All agree on the need to address this issue.

NEW CONSTRUCTION MATERIALS – THE FUTURE OF THE IPCC

In the same way that the "paperless office" did not eliminate paper, it is unlikely that new construction materials will make concrete obsolete. However, they might cause it to be used in a different way.

As the oldest international body dealing specifically with climate change, the IPCC was created at a time when climate change science and awareness were scarce. Today, 17 years later, the scientific and policy landscape is different. As one delegate expressed in plenary, the IPCC runs the risk of being overwhelmed by the quantity of future emission scenarios and general scientific knowledge on climate change. Some of its past "blockbuster" products, such as the Assessment Reports or the Special Report on Emission Scenarios – generally seen as benchmarks for climate change science – might not be replicable some years from now, when the impact of IPCC reports may be diminished given the large volume of climate change science and modeling available. Some commentators have envisaged future roles for the IPCC other than "providing periodic assessments of the current scientific understanding of climate change." Some opinions on the roles that the IPCC should play in the future, such as a science "manager," or "compiler," can be inferred already from interventions during IPCC-24. However, this remains mere speculation. AR4 is currently drawing most of the energy of the IPCC Working Groups, and discussion on the future of the IPCC is in neutral until AR4 nears its end. The spark that lights this discussion might very well be the nature of the IPCC´s involvement in future emission scenarios. Then, expect the issue of the IPCC's role in the future to take over the agenda.

UPCOMING MEETINGS

WORKSHOP ON INTERNATIONAL POLICY APPROACHES TO ADDRESS THE CLIMATE CHANGE CHALLENGE: Organized by the International Petroleum Industry Environmental Conservation Organization (IPIECA) and China's Office of Global Environmental Affairs, this workshop will take place from 25-26 October 2005, in Beijing, China. Participants will consider key elements of climate change risk management and future policy architectures to address climate change. For more information, contact: IPEICA; tel: +44-020-7633-2388; fax: +44-020-7633-2389; e-mail: paula.lynch@ipieca.org; internet: http://www.ipieca.org/downloads/climate_change/beijing2005/beijing_email/ccwg_beijing.html

CREATING THE CLIMATE FOR CHANGE – THE SECOND SUSTAINABLE ENERGY FINANCE ROUNDTABLE: This roundtable will take place on 27 October 2005, in New York, US. Participants will explore successful approaches to renewable energy and energy efficiency financing and investment. This event will follow the UNEP Finance Initiative Global Roundtable. For more information, contact: Eric Usher, UNEP Energy Branch; tel: +33 (0)1-44-37-76-14; e-mail: eric.usher(at)unep.fr; or Paul Clements-Hunt, UNEP Finance Initiative; tel: +41 (0)22-917-8116; e-mail; pch@unep.ch; internet: http://www.sefi-roundtable.org/

BEIJING INTERNATIONAL RENEWABLE ENERGY CONFERENCE 2005: Following up on the Renewables 2004 event held in Germany, China is holding this Conference on 7-8 November 2005, in Beijing. For more information, contact: Qin Haiyan; tel: +86-10-6422-8218; e-mail: birec2005@birec2005.cn; internet: http://www.birec2005.cn

FIRST MEETING OF PARTIES TO THE KYOTO PROTOCOL AND ELEVENTH CONFERENCE OF PARTIES TO THE UNFCCC: The first Meeting of Parties to the Kyoto Protocol (MOP-1) is taking place in conjunction with COP-11 of the UNFCCC from 28 November to 9 December 2005, in Montreal, Canada. For more information, contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: http://unfccc.int/meetings/cop_11/items/3394.php

SEVENTEENTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL: This meeting will be held from 12-16 December 2005, in Dakar, Senegal. For more information, contact: Ozone Secretariat; tel: +254-20-62-38-51; fax: +254-20-62-46-91/92/93; e-mail: ozoneinfo@unep.org; internet: http://www.unep.org/ozone

25TH MEETING OF THE IPCC: IPCC-25 will be held either from 26-28 April 2006, in Mauritius, or, one week later in Nairobi, Kenya. Confirmation of the venue will be posted on the IPCC web site. For more information, contact Renate Christ, IPCC Secretary; tel: +41-22-730-8208; fax: +41-22-730-8025; e-mail: IPCC-Sec@wmo.int; internet: http://www.ipcc.ch.

GLOSSARY

2006 Guidelines	2006 IPCC Guidelines for National Greenhouse Gas Inventories
AR4	Fourth Assessment Report
AR5	Proposed fifth assessment report
CCS	Carbon dioxide capture and storage
CCS Special Report	IPCC Special Report on Carbon Dioxide Capture and Storage
CO_2	Carbon dioxide
EFDB	Emission Factor Database
Gt	Gigaton (1,000 million tons)
London Convention	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
NGGIP	IPCC National Greenhouse Gas Inventories Programme
NGGIP Task Force	Task Force on National Greenhouse Gas Inventories
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
ppmv	Parts per million by volume
SPM	Summary for Policy Makers
TAR	Third Assessment Report
TGICA	Task Group on Data and Scenario Support for Impact and Climate Analysis
TSU	Technical Support Units
UNFCCC	United Nations Framework Convention on Climate Change
WMO	World Meteorological Organization