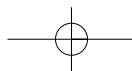
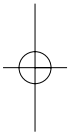


INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



**Introduction to the
Intergovernmental Panel on
Climate Change (IPCC)**



Why the IPCC was Created

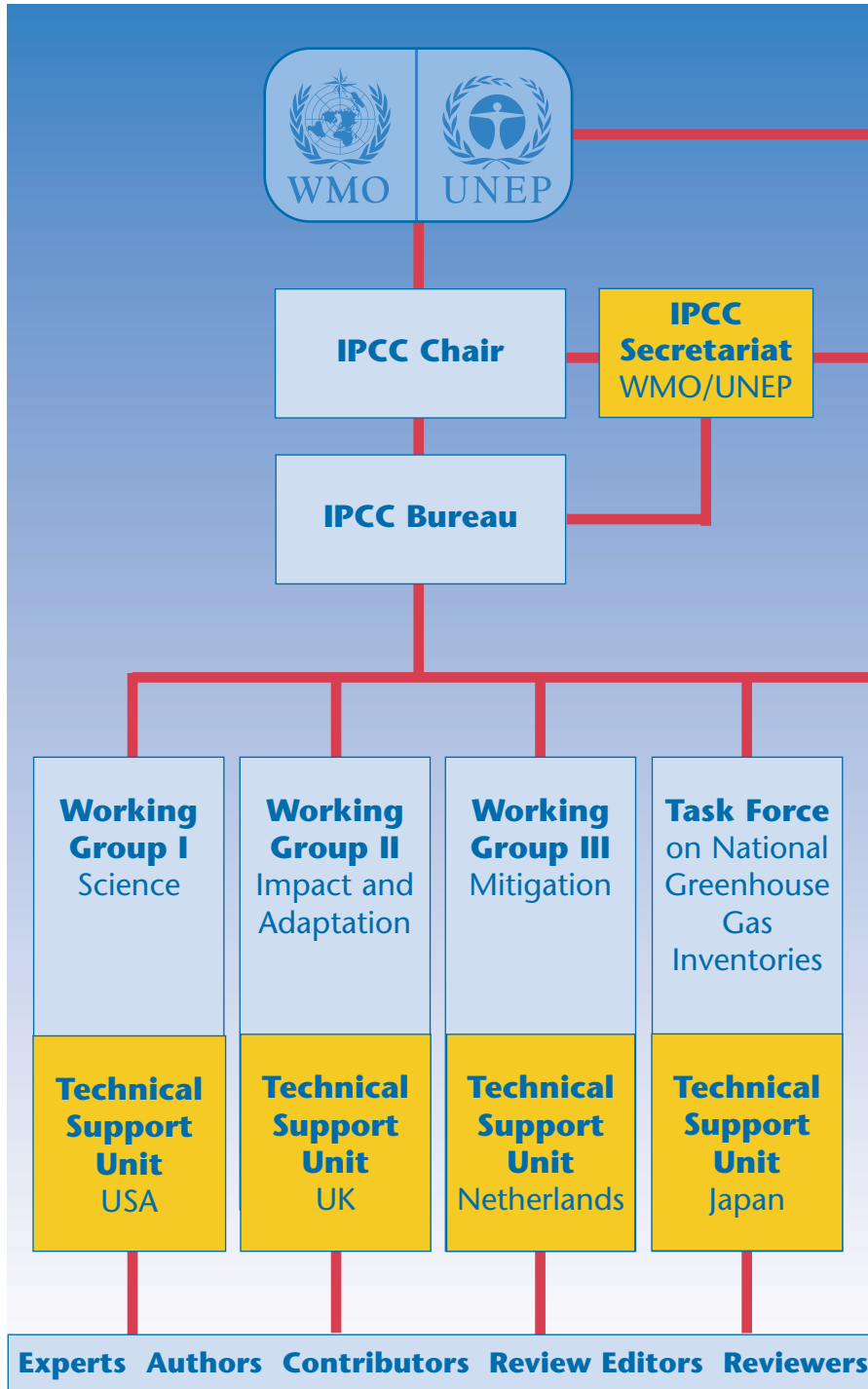
Human activities now occur on a scale that is starting to interfere with complex natural systems such as the global climate. Scientists have learned a great deal in recent decades about climate and how it responds to human activities, particularly the emissions of greenhouse gases such as carbon dioxide, methane, nitrous oxide, etc. Nevertheless, the climate system is so vast and complex that much uncertainty remains.

Climate change poses a serious challenge to policymakers. Many argue that climate change poses a risk of serious or irreversible damage and that the lack of full scientific certainty should not be used as an excuse to postpone action. Others believe that the risk is manageable and not worth a major shift in the investment of financial and human resources. Somehow, policymakers must sort through the evidence, weigh the costs and benefits, evaluate the risks, and decide on a course of action.

Because the stakes are so high and the system complex, policymakers cannot rely on popular interpretations of the evidence or on the views of an individual expert. They need an objective source of the most widely accepted scientific, technical and socio-economic information available about climate change, its environmental and socio-economic impacts including costs and benefits of action versus inaction, and possible response options.

Recognizing this, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The Panel does not conduct new research or monitor climate-related data. Its mandate is to assess, on a comprehensive, objective, open and transparent basis, the scientific, technical and socio-economic information on climate change that is available around the world in peer-reviewed literature, journals, books and, where appropriately documented, in industry literature and traditional practices. IPCC reports need to ensure a balanced reporting of viewpoints and be policy-relevant but not policy-prescriptive or policy-driven.





How the IPCC is Organized

The IPCC is an intergovernmental body that provides scientific, technical and socio-economic advice to the world community, and in particular to the 170-plus Parties to the United Nations Framework Convention on Climate Change (UNFCCC). It is open to all Members of UNEP and of WMO.

*The IPCC is organized into three working groups and a task force on national greenhouse gas inventories. Each working group has two co-chairs (one from the developed and one from the developing world) and a technical support unit. **Working Group I** assesses the scientific aspects of the climate system and of climate change. **Working Group II** addresses the vulnerability of human and natural systems to climate change, the negative and positive consequences of climate change, and options for adapting to them. **Working Group III** assesses options for limiting greenhouse gas emissions and otherwise mitigating climate change, and economic issues. Each working group holds plenary meetings, expert meetings, and workshops to discuss and guide the reports in progress.*

The Panel meets in plenary sessions about once a year. It decides on the IPCC structure, its principles and procedures, the work programme and budget, and it elects the IPCC Chair and the Bureau. It also agrees on the mandates and work plans of the working groups, the scope and outline of reports, and accepts/approves/adopts IPCC reports. The sessions are conducted in the six languages of the United Nations and are generally attended by hundreds of participants.

*The **IPCC Bureau** consists of the IPCC Chair, the three IPCC Vice-Chairs, the Co-Chairs and Vice-Chairs of the three working groups and the Co-Chairs of the Task Force on Inventories. The Bureau must have a balanced geographic representation of members with appropriate scientific and technical qualifications. The IPCC, the Bureau and the Chair are supported by a small IPCC Secretariat located in Geneva.*

IPCC activities, including travel costs for many experts from developing countries and from countries with economies in transition, are financed through voluntary contributions from governments as well as to a small degree from the UNFCCC. The IPCC's two parent organizations, WMO and UNEP, provide staff and financial support.

The IPCC Products

The IPCC has produced three multi-volume Assessment Reports, the first in 1990, the second in 1995 and the third in 2001. Each Assessment Report includes Summaries for Policymakers. These summaries reflect the state-of-the-art understanding of the subject matter and are written so that they are comprehensible to the non-specialist. They are published in all six UN languages. The IPCC also prepares Special Reports, Technical Papers and Methodology Guidelines.

The IPCC's 1990 **First Assessment Report** had a powerful effect on the general public. By confirming the scientific basis for concern about climate change, this four-volume report inspired governments to establish the Intergovernmental Negotiating Committee, which adopted the UN Framework Convention on Climate Change in 1992. The Convention was opened for signature at the Earth Summit in Rio de Janeiro in June 1992.

The **1992 Supplement** to the First Assessment Report provided more up-to-date information in order to assist the negotiating process.

The **1994 Special Report** was presented to the First Session of the Conference of the Parties (COP-1) of the UNFCCC (Berlin, 1995). It includes:

- a report on the radiative forcing of climate change;
- an evaluation of the updated IPCC emissions scenarios (IS92);
- the IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations; and
- the IPCC Guidelines for National Greenhouse Gas Inventories.

The **Second Assessment Report** was adopted in 1995 and published in April 1996. It consists of:

- A Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 (the objective) of the UNFCCC;
- Working Group I's report on the Science of Climate Change;
- Working Group II's report on the Scientific-Technical Analyses of Impacts, Adaptations and Mitigation of Climate Change; and
- Working Group III's report on the Economic and Social Dimensions of Climate Change.

The Second Assessment Report was made available to the Second Session of the Conference of the Parties (Geneva, 1996). It contributed to the negotiations that lead to the adoption of the Convention's Kyoto Protocol one year later at COP-3 (Kyoto, 1997).

The **Third Assessment Report**, like its predecessors, is a comprehensive and up-to-date assessment of the policy-relevant scientific, technical and socio-economic dimensions of climate change. It concentrates on new findings since 1995, pays greater attention to the regional (in addition to the global) scale, and includes non-English literature to the extent possible.

The Third Assessment Report was adopted and published in 2001. It consists of:

- Climate Change 2001: The Scientific Basis
Contribution of Working Group I to the Third Assessment Report;
- Climate Change 2001: Impacts, Adaptation and Vulnerability
Contribution of Working Group II to the Third Assessment Report;
- Climate Change 2001: Mitigation
Contribution of Working Group III to the Third Assessment Report;
- Climate Change 2001: Synthesis Report of the Third Assessment Report.

The Synthesis Report addresses a range of policy-relevant scientific and technical questions based on submissions from governments and identified by the IPCC in consultation with the Subsidiary Bodies of the UNFCCC. It synthesizes and integrates information contained in the Third Assessment Report and draws upon all previously approved IPCC reports.

The IPCC also publishes **Special Reports** on specific topics. They are prepared in response to requests from the Parties to the United Nations Framework Convention on Climate Change or as decided by the IPCC itself. These reports are produced under the guidance of one or more working groups following the same procedures that are used for writing and reviewing the assessment reports.

In addition to the 1994 Special Report, the IPCC has completed the following Special Reports:

- The Regional Impacts of Climate Change: An Assessment of Vulnerability (1997);
- Aviation and the Global Atmosphere (1999);
- Methodological and Technological Aspects of Technology Transfer (2000);
- Emissions Scenarios (2000);
- Land Use, Land Use Change and Forestry (2000).

Technical Papers are prepared when the Parties to the United Nations Framework Convention on Climate Change need an international scientific or technical perspective on a specific topic. Technical Papers may also be prepared in response to a request from other environmental Conventions. They are based on material contained in IPCC Assessment Reports and Special Reports, and they should reflect the same balance and objectivity of these reports. The expert and government reviews are conducted simultaneously to ensure that the information is as timely as possible. They are not accepted/approved by the IPCC, but remain the responsibility of the IPCC Bureau. The IPCC has thus far published five Technical Papers:

- Technologies, Policies and Measures for Mitigating Climate Change (November 1996);
- An Introduction to Simple Climate Models used in the IPCC Second Assessment Report (February 1997);
- Stabilization of Atmospheric Greenhouse Gases: Physical, Biological and Socio-Economic Implications (February 1997);
- Implications of Proposed CO₂ Emissions Limitations (October 1997);
- Climate Change and Biodiversity (June 2002).

Finally, the IPCC carries out the work on greenhouse gas inventory-related methodologies and practices. **IPCC Guidelines for National Greenhouse Gas Inventories** were prepared so that the Parties to the United Nations Framework Convention on Climate Change can use comparable methodologies when calculating their greenhouse gas emissions and removals. The first Guidelines were prepared in close collaboration with the Organization for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA) in 1994 and adopted by the Conference of the Parties in 1995 as guidelines for the preparation of national communications by developed country (Annex I) Parties. Since then, the following inventory-related methodologies and guidance papers were published:

- Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (1996);
- Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (2000).

The Writing and Review Process

Approximately 1 000 experts from all over the world have been directly involved in drafting, revising and finalizing IPCC reports. In addition, about 2 500 experts participate in the review process. IPCC authors have been nominated by governments and by international organizations. They come from universities, research centres, business and environmental associations, and other organizations in approximately 120 countries. Through this worldwide network the IPCC seeks to represent all geographic regions and to reflect a diverse range of scientific, technical and socio-economic views and expertise.

Writing Process

The IPCC usually starts a new assessment by developing a general outline, often during a “scoping” meeting of experts.

Policymakers and other users of IPCC reports are consulted in order to identify the key policy-relevant issues. Each working group elaborates and approves the outline for the chapters that it will contribute and teams of lead authors are assembled for each chapter by the working group bureaux. Every chapter team must represent a range of prevailing scientific-technical viewpoints and expertise, and ensure appropriate representation of experts from developing and developed countries, and countries with economies in transition.

The lead authors write a first draft based mostly on peer-reviewed literature, making sure to include literature published in languages other than English. They also consider the most recent scientific findings and reports from national academies of sciences, industry and United Nations bodies, carefully weighing any lack of previous peer review. Expert meetings and workshops are held to gather more information in areas where peer-reviewed literature is sparse or unavailable. Diverging viewpoints that are scientifically sound are clearly identified in the draft text. The authors work closely together as a team. The lead authors may enlist contributing authors to assist with the work.

Review Process

To ensure that they are credible, transparent and objective, the IPCC reports must pass through a rigorous two-stage review process.

During the first review, the drafts of each chapter are circulated to specialists with significant expertise and publications in the field. The reviewers comment on the completeness and objectivity of the scientific and technical content. Lead authors in collaboration with contributors then produce revised drafts. These drafts are distributed to governments for government technical review, and to all authors and expert reviewers.

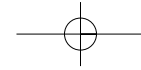
The final drafts, taking into account expert and government comments, go back to the appropriate working group for final acceptance of their content.

Summaries for Policymakers

Concurrently with preparation of the main report a Summary for Policymakers is prepared for each working group Assessment Report and Special Report. It is drafted under the responsibility of the co-chairs of the respective working group. It has to be consistent with the full scientific and technical assessment. The Summaries for Policymakers undergo a simultaneous expert and government review. They are then approved by the working group line-by-line, with the concurrence of the lead authors, to ensure that they are consistent with the underlying scientific-technical report. Review editors help to ensure that the report provides a balanced assessment. Finally, the Summaries for Policymakers are formally accepted by the entire IPCC.

Synthesis Report

The Synthesis Report of the Third Assessment Report was drafted by a writing team under the responsibility of the IPCC Chair and adopted by the Panel in plenary session. It provides a policy-relevant synthesis of the working group assessments and addresses policy-relevant scientific-technical questions identified by the IPCC in consultation with governments and the Subsidiary Bodies of the UNFCCC.

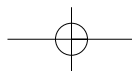
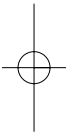


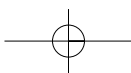
For More Information

More information about the IPCC can be found on the IPCC website at <http://www.ipcc.ch>.

How to Obtain IPCC Reports

IPCC reports are published commercially and are widely available. Most recent IPCC reports are also available on CD-ROM. The Summaries for Policymakers and some Technical Summaries of IPCC Reports and the Synthesis Report are translated into all official UN languages. The Technical Papers are available in English, French and Spanish. A number of full IPCC reports, summary reports in various languages as well as detailed ordering information for all IPCC reports can be viewed and obtained via the Internet at <http://www.ipcc.ch> or directly from the IPCC Secretariat.





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