

## **Intergovernmental Panel on Climate Change – at a glance**

The Intergovernmental Panel on Climate Change (IPCC) was established in **1988** by the World Meteorological Organisation and the United Nations Environment Program.

Its role is to assess the best available peer-reviewed scientific, technical and socio-economic information on climate change from around the world.

The Assessments help governments and communities understand the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. They contribute to informing government in its decision-making.

The IPCC's next Assessment, its Fourth, will be released in 2007. From February to November, a number of documents will be published, covering different themes and levels of detail. The first document to be released will be the Summary for Policy Makers outlining the scientific basis of climate change, including observed changes, causes of these changes and projections for the future. It will be released in Paris on Friday, February 2 (7.30 pm Eastern Australian time).

*More information:*

About the IPCC: <http://www.ipcc.ch/about/about.htm>

### **From 1988 until now ...**

The First IPCC Assessment Report was completed in 1990. The Report played an important role in establishing the Intergovernmental Negotiating Committee for a UN Framework Convention on Climate Change by the UN General Assembly. The UN Framework Convention on Climate Change (UNFCCC) was adopted in 1992 and entered into force in 1994. It provides the overall policy framework for addressing the climate change issue.

Its Second Assessment Report, Climate Change 1995, provided key input to the negotiations, which led to the adoption of the Kyoto Protocol to the UNFCCC in 1997.

The Third Assessment Report (TAR), Climate Change 2001, was completed in 2001. It was submitted to the 7th Conference of the Parties to the UNFCCC and has been the primary reference since then of climate deliberations.

*More information:*

Assessments and Special Reports: <http://www.ipcc.ch/pub/reports.htm>

Frequently Asked Questions: <http://www.ipcc.ch/about/faq.htm>

### **Reporting in 2007**

The IPCC has three **Working Groups** –

- Working Group I assesses the scientific aspects of the climate system and of climate change
- Working Group II addresses the vulnerability of socio-economic and natural systems to climate change, the positive and negative 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.

There is also a Task Force on National Greenhouse Gas Inventories.

### **Public release of the Fourth Assessment Report (AR4)**

The first documents to be made public will be the Summaries for Policy Makers:

- Working Group 1 (Science) - Paris, February 2
- Working Group II (Impacts Adaptation and Vulnerability) – Brussels, April 6
- Working Group III (Mitigation) – Bangkok, May 3

In September, each of the three working group reports will release a detailed report of about 1000 pages and a Technical Summary.

In mid-November, a Synthesis Report will be released, linking issues covered in the three Working Groups.

*More information:*

Fourth Assessment and other IPCC activities:

<http://www.ipcc.ch/about/faq/IPCC%20Ongoing%20activities.pdf>

### **The Process**

Recognizing the problem of potential global climate change, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. It is open to all members of the UN and WMO.

The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. The IPCC does not carry out research nor does it monitor climate related data or other relevant parameters. It bases its assessment mainly on peer reviewed and published scientific/technical literature.

The Assessment is undertaken by teams of authors, who are nominated by governments and international organisations, and selected by the IPCC Bureau according to their expertise. The reports go through a rigorous scientific and government review process:

1. The first-order drafts are circulated for review to specialists with significant expertise evidenced by publications in the field.
2. Second-order drafts are then prepared, taking into account the expert review comments, and distributed for review to governments as well as again to the expert reviewers.
3. Final drafts are then prepared, distributed for review to governments and presented to plenary meetings for acceptance of their content.

*More information:*

IPCC process: <http://www.ipcc.ch/about/faq/IPCC%20Procedures.pdf>

Assessment basis: <http://www.ipcc.ch/about/faq/IPCC%20Introduction.pdf>

### **Who decides what goes into the Summaries for Policymakers?**

Summaries for Policymakers (SPMs) are generally written in more accessible language than the main reports. They are the documents most likely to be read by media, government, industry, non-government organisations and interested laypeople.

The SPMs are prepared concurrently with the main reports and undergo a simultaneous expert and government review. They are approved line-by-line in plenary sessions attended by government representatives. Lead author representatives from the chapters are present, and any changes must be made with their concurrence (to ensure an SPM is consistent with its underlying scientific-technical report).

### **Who's involved?**

About 2,500 scientists have been engaged in writing and reviewing the three Working Group reports.

More than 100 Australian experts, authors, contributors and reviewers have been involved in this process since 2001.

They are drawn from the nation's primary climate and environmental research and management agencies including CSIRO, the Bureau of Meteorology, Australian Government Antarctic Division, Antarctic Climate and Ecosystem CRC and leading universities.

### **Who's Involved in Working Group I**

The two international co-Chairs of Working Group I are Dr Susan Solomon (U.S. atmospheric physicist from the National Oceanic and Atmospheric Administration) and Dahe Qin (from the China Meteorological Administration). New Zealand's Dr David Wratt (from the National Institute of Water and Atmosphere) is a vice-Chair of this group.

There are 11 Chapters in the Working Group 1 Report –

1. Historical Overview of Climate Change Science
2. Changes in Atmospheric Constituents and in Radiative Forcing
3. Observations: Surface and Atmospheric Climate Change
4. Observations: Changes in Snow, Ice and Frozen Ground
5. Observations: Climate Change and Sea Level
6. Palaeoclimate
7. Couplings Between Changes and the Climate System and Biogeochemistry
8. Climate Models and their Evaluation
9. Understanding and Attributing Climate Change
10. Global Climate Projections
11. Regional Climate Projections

Australian Coordinating Lead Authors, Lead Authors and Review Editors are -

- **Dr Ian Allison, Antarctic Climate and Ecosystem CRC/Australian Government Antarctic Division** (Lead author – Ch. 4 Observations: Changes in Snow, Ice and Frozen Ground)
- **Dr Nathan Bindoff, University of Tasmania/CSIRO** (Coordinating Lead Author – Ch. 5 Observations: Climate Change and Sea Level)
- **Dr Rob Colman, Bureau of Meteorology** (Lead author – Ch. 8 Climate Models and their Evaluation)
- **Prof Andy Pitman, Macquarie University** (Lead author – Ch. 8 Climate Models and their Evaluation)
- **Dr Bryant MacAvaney** (Review editor – Ch. 8 Climate Models and their Evaluation)
- **Prof Neville Nicholls, Monash University** (Lead author – Ch. 9 Understanding and Attributing Climate Change)
- **Dr Ian Watterson, CSIRO** (Lead author – Ch. 10 Global Climate Projections)
- **Dr Penny Whetton, CSIRO** (Lead author – Ch. 11 Regional Climate Projections)

### **Who funds the IPCC?**

IPCC activities, including travel costs for experts from developing countries and countries with economies in transition, are financed through voluntary contributions from governments. The World Meteorological Organisation, United Nations Environment Programme, and the UN Framework Convention on Climate Change provide additional support.