BACKGROUNDER

The Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). The IPCC's mandate is to assess scientific, technical and socio-economic information relevant for the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The Panel is open to government representatives from all Members of the United Nations and of WMO.

The IPCC Bureau is composed of 30 experts elected by the Panel, and assists the IPCC Chair in planning, coordinating and monitoring the progress of the work of the IPCC.

The IPCC Bureau has three Working Groups and a Task Force:

- Working Group I assesses the understanding of the climate system and climate change.
- Working Group II assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it.
- Working Group III assesses options for limiting greenhouse gas emissions and otherwise mitigating climate change.
- The <u>Task Force on National Greenhouse Gas Inventories</u> is responsible for the IPCC National Greenhouse Gas Inventories Programme.

Main Activities and Products

A main activity of the IPCC is to provide regular assessments of the state of knowledge on climate change. The IPCC also prepares Special Reports and Technical Papers on topics where independent scientific information and advice is deemed necessary and it supports the UN Framework Convention on Climate Change (UNFCCC) through its work on methodologies for National Greenhouse Gas Inventories. These reports reflect the state-of-the-art understanding on the subject matter and are written so that they are comprehensible to the non-specialist.

The First IPCC Assessment Report was completed in 1990. The Report played an important role in advising the Intergovernmental Negotiating Committee for a UN Framework Convention on Climate Change by the UN General Assembly. Subsequently, the Second Assessment Report was published in 1995 and the

Third Assessment Report in 2001. The IPCC will complete its Fourth Assessment Report in 2007. Each of the three Working Group contributions to the Fourth Assessment Report include a Summary for Policymakers (about 15 pages), a Technical Summary (about 50 pages) and the full technical report (about 500 pages). The final product of the Fourth Assessment is a Synthesis Report (comprised of a Summary for Policymakers and a technical report) that is intended to provide a policy-relevant synthesis of the working group assessments under the following topics: observed changes in climate; causes of change; climate change and its impacts; adaptation and mitigation options and responses and the interrelationship with sustainable development; the long term perspective of adaptation and mitigation; and robust findings and key uncertainties.

Preparation of IPCC Reports

IPCC reports are written by teams of authors who are nominated by governments and international organizations and selected for a specific task according to their expertise. They come from universities, government and private research centers, business and environmental associations and other organizations from more than 100 countries. Hundreds of experts from all over the world are normally involved in drafting IPCC reports. In addition, hundreds of other experts participate in the review process. The preparation of all reports follows well-defined procedures agreed by the Panel.

The 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. After the outline is approved by the IPCC Plenary, teams of lead authors are assembled for each chapter. Each chapter in the report is prepared by an international team of authors to cover a range of topics; these authors are selected based on their expertise and background on the basis of their published work. The written report is based on experts assessing the state of science through a critical evaluation of the published literature.

Review and acceptance

To ensure that they are credible, transparent and objective, the IPCC reports must pass through a rigorous two-stage scientific and technical review process. For the first review, the drafts are circulated to specialists with significant expertise and publications in the field. Revised drafts are distributed for the second review to governments and to all authors and expert reviewers. Authors are required to take careful account of comments from the review and how the comments are treated is monitored by independent Review Editors. The breadth of the author teams and the fact that drafts are typically reviewed by hundreds of experts provides a broad and thorough examination of the science that is not achieved by any other process. The contents of individual chapters are 'accepted' and the technical summary 'adopted' (not 'approved') by the IPCC Plenary. However, the Summary for Policymakers is approved, line-by-line, by

governments at an IPCC Session. Thus, assessed findings in a final IPCC report are not the views of any individual scientist; rather the findings reflect a far broader process.

One of the key values of the IPCC Assessments is the pulling together of vast and complex technical literature that reaches across many scientific and social disciplines and summarizing the current state of what is known and not known about the science of climate change, its impacts and opportunities for adaptation and mitigation. Another is the process of consensus-building that occurs during the preparation of IPCC reports. This is a fundamental component of any scientific assessment process; to establish, based on existing knowledge, what can be agreed upon, how confident scientists are in these conclusions, and what areas of uncertainty remain. This "consensus" does not necessarily mean that there is unanimity among IPCC authors or the underlying research, but rather that the authors agree that their report and its conclusions fairly represent the state of scientific understanding at that point in time.

Canadian Involvement in the Fourth Assessment Report

Canadian research findings by government and university scientists are prominent in Intergovernmental Panel on Climate Change (IPCC) assessments. Canadians comprise a relatively high number of lead authors for the size of our research community and overall population. In the Fourth Assessment Report, 31 Canadians play lead roles including that of chapter leads, authors and review editors. Many more have contributed to the report as both contributing authors and reviewers. Furthermore, the Government of Canada is an active participant in the IPCC through interdepartmental delegations participating in IPCC Plenary meetings.