



COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

Intergovernmental Panel on Climate Change (IPCC)

SUBJECT CATEGORY:

Climate Change

TYPE OF AGREEMENT / INSTRUMENT:

Voluntary international initiative

FORM:

Cooperative Forum

STATUS:

Canada has been a member of the IPCC since its establishment by the United Nations Environment Programme and the World Meteorological Organization in 1988.

LEAD & PARTNER DEPARTMENTS:

Lead: *Environment and Climate Change Canada*

Partners: *Agriculture and Agri-Food Canada, Fisheries and Oceans Canada, Crown-Indigenous Relations and Northern Affairs Canada, Global Affairs Canada, Health Canada and Natural Resources Canada*

FOR FURTHER INFORMATION:**Web Links:**

- [IPCC web site](#)
- [Government of Canada's IPCC website](#)

Contacts:

[Canadian IPCC Secretariat](#)

COMPENDIUM EDITION:

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PLAIN LANGUAGE SUMMARY

Climate change is one of the major challenges of our time adding considerable stress to societies and the environment. In addition, the impacts of climate change are global in scope and unprecedented in scale. Such impacts will affect many aspects of our lives in Canada and around the world. Tackling climate change is a complex challenge requiring sound science to inform government decisions, policies and activities. The IPCC is the leading international body for the scientific assessment of climate change. Through its various reports, the IPCC provides the scientific evidence needed to help policy makers and others make decisions on how to adapt to and reduce the impacts of climate change. Canada has been an active participant in the IPCC since 1988.

OBJECTIVE

The IPCC is the leading international body for the assessment of climate change. Its objective is to conduct policy-relevant assessments of the scientific basis of climate change; climate change impacts and risks; and options for adaptation and mitigation. IPCC assessments provide decision-makers with scientific information that is policy-relevant yet policy-neutral. They inform national climate policy and negotiations under the United Nations Framework Convention on Climate Change (UNFCCC).

KEY ELEMENTS

The IPCC is comprised of 195 member countries. Government representatives from each country convene at Plenary Sessions of the IPCC to take decisions on the governance and scientific work of the organization. Decisions on the scientific and technical aspects of the IPCC are supported by guidance from the IPCC Bureau, the scientific advisory body of the IPCC.

The work of the IPCC is organized in three Working Groups, which respectively focus on "the Physical Science Basis of Climate Change", "Climate Change Impacts, Adaptation and Vulnerability" and "Mitigation of Climate Change". In addition, the

IPCC has a Task Force on National Greenhouse Gas Inventories that develops and refines methodology for calculating and reporting greenhouse gas emissions and removals. Thousands of scientists from around the world, including many from Canada, contribute to the work of the IPCC on a voluntary basis as authors, contributors and reviewers.

EXPECTED RESULTS

The IPCC will continue to produce the most comprehensive and authoritative scientific assessments of climate change during the Sixth Assessment Report cycle (2015-2022). The IPCC has released the first part of the Sixth Assessment Report, [Climate Change 2021: The Physical Science Basis](#) (released on August 9, 2021). This report informed the 26th Conference of the Parties of the United Nations Framework Convention on Climate Change in November 2021. In addition to the core Sixth Assessment Report, the IPCC has released three Special Reports to advance understanding on specific climate change issues. They include the Special Reports on: (1) [Global Warming of 1.5°C](#) (SR1.5) (released on October 6, 2018); (2) [Ocean and Cryosphere in a Changing Climate](#) (SROCC) (released on September 25, 2019)) and (3) [Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas Fluxes in Terrestrial ecosystems](#) (SRCCL) (released on August 7, 2019). SR1.5 informed a facilitative dialogue among Parties of the UNFCCC in 2018 to take stock of progress towards the long-term goal to keep global warming below 2°C. The IPCC has also completed a Methodology Report for quantifying annual emissions and removals reported in national greenhouse gas inventories, which will provide UNFCCC Parties with updated guidance to ensure consistent, science-based approaches to meet inventory-reporting requirements.

More than 50 Canadians are contributing to the drafting of the AR6 products as, Coordinating Lead Authors, Lead Authors, Contributing Authors, Chapter Scientists, and Review Editors.

CANADA'S INVOLVEMENT

Canada has been an active member of the IPCC since its inception, holding leadership positions on the IPCC Bureau and the Task Force Bureau on Greenhouse Gas Inventories and making significant scientific contributions to the IPCC's assessment reports. Canada sees the IPCC's scientifically

robust, comprehensive and policy-relevant information as essential to facilitating sound global action on climate change mitigation and adaptation.

Canada also provides consistent financial support to the IPCC (\$300,000/year) and ranks among the top 10 contributors to the IPCC's Trust Fund. This funding is directed towards supporting the participation of developing country scientists in the work of the IPCC, as well as outreach, communications and other costs associated with the day-to-day operations of the IPCC. Environment and Climate Change Canada's Assistant Deputy Minister of Science and Technology is the Canada's Focal Point and head of delegation for the IPCC.

RESULTS / PROGRESS

Activities

At the launch of the IPCC's Sixth Assessment Report cycle in October 2015, two Environment and Climate Change Canada scientists were elected to serve in leadership roles: Dr. Gregory Flato as member of the IPCC Bureau and Dr. Dominique Blain as member of the Task Force Bureau on National Greenhouse Gas Inventories.

The IPCC has finalized the first part of the Sixth Assessment Report (AR6), [Climate Change 2021: The Physical Science Basis](#), which was published on August 9th, 2021. The IPCC is currently preparing the remaining parts of the Sixth Assessment Report, which are all anticipated to be released in 2022. Many Canadian experts are contributing significantly to the Reports as authors and as part of the Canadian Delegation at the IPCC sessions where line-by-line approval of the Summary for Policymakers for IPCC assessment reports is undertaken. This involvement strengthens representation of Canadian interests and will enhance the policy-relevance of IPCC products for Canadian decision-makers.

Reports

The Working Group I (WGI) Contribution to AR6, [The Physical Science Basis](#), was released on August 9, 2021. The WGI report assesses the current state of the climate and how the climate has changed over time, the role of human influence in observed changes, and possible future climates based on a range of emission scenarios corresponding to different levels of climate change mitigation. This report also covers what is needed to limit human-induced global warming based on an understanding of how the climate system responds

to emissions of carbon dioxide and other emissions from human activity.

The SROCC was released on September 25, 2019. The SROCC assesses new knowledge since the IPCC 5th Assessment Report (AR5) and the Special Report on Global Warming of 1.5°C (SR1.5) on how: the ocean and cryosphere have and are expected to change with ongoing global warming; the risks and opportunities these changes bring to the ecosystems and people; and mitigation, adaptation and governance options for reducing future risks.

The SRCCL was released on August 7, 2019. The SRCCL provides a focused assessment of greenhouse gas fluxes in terrestrial ecosystems and sustainable land management in relation to climate adaptation and mitigation, desertification, land degradation and food security. Specific attention is given to the interlinkages between desertification, land degradation, food security and GHG fluxes along with synergies and trade-offs of integrated response options.

The SR1.5 was released on October 6, 2018. It is a significant document for the world and for Canada. It assesses the impacts of global warming of 1.5°C above pre-industrial levels and global greenhouse gas emission pathways to limit warming to 1.5°C, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. The report stresses the need for ambitious action on climate change in order to meet global targets.

The IPCC's Fifth Assessment Report was completed in November 2014. The process involved over 800 scientific authors (including 28 Canadian scientists) and drew upon more than 30,000 scientific publications. During the Fifth Assessment Report cycle, the IPCC also produced two special reports on 1) Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation and 2) Renewable Energy Sources and Climate Mitigation.

Results

In the summer of 2021, Canada participated in the virtual plenary meeting of the Intergovernmental Panel on Climate Change (IPCC) for the approval of the Summary for Policymakers (SPM) of the Working Group I (WGI) Contribution to the Sixth Assessment Report (AR6).

Canada also participated in three plenary meetings of the IPCC throughout 2019 and contributed to the

approval of a new Methodology Report and the Special Reports on Climate Change and Land and Ocean and Cryosphere in a Changing Climate. Canada played an important role at each of these meetings to help reach consensus on the Overview Chapter and the SPMs, ensure consistency with the underlying report and maintain the scientific integrity of the SPM approval process.

As the most comprehensive and authoritative scientific assessment of climate change to date the IPCC's Sixth Assessment Reports have and will continue to play an important role in informing national and international climate change policy, including negotiations and policy formulation in support of the UNFCCC's Paris Agreement, which was ratified by Canada in October 2016.