

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY**

HEARING CHARTER

Examining the UN Intergovernmental Panel on Climate Change Process

Thursday, May 29, 2014
11:00 a.m. – 1:00 p.m.
2318 Rayburn House Office Building

PURPOSE

The Committee on Science, Space, and Technology will hold a hearing entitled *Examining the UN Intergovernmental Panel on Climate Change Process* on Thursday, May 29, 2014 in Room 2318 of the Rayburn House Office Building. The purpose of the hearing is to evaluate the process behind the United Nations (UN) Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment Report (AR5).

WITNESS LIST

- **Dr. Richard S.J. Tol**, Professor of Economics, University of Sussex
- **Dr. Michael Oppenheimer**, Albert G. Milbank Professor of Geosciences and International Affairs, Department of Geosciences, Princeton University
- **Dr. Daniel Botkin**, Professor Emeritus, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara
- **Dr. Roger Pielke Sr.**, Senior Research Scientist, Cooperative Institute for Research in Environmental Sciences, and Professor Emeritus of Atmospheric Science, Colorado State University

BACKGROUND

In order to examine the earth's changing atmosphere, the Intergovernmental Panel on Climate Change (IPCC) was created in 1988 by the World Meteorological Organization and the United Nation's Environment Program. The IPCC was tasked with preparing reports on all aspects of climate change and its impacts.¹ Today, the IPCC has evolved to "assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-

¹ United Nations, Intergovernmental Panel on Climate Change, History, As of May 2014, Available at: http://www.ipcc.ch/organization/organization_history.shtml#.UkXN6RBxPm4

economic information relevant to understanding the scientific basis of the risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.”²

IPCC Structure

The IPCC is an organization comprised of scientists from all over the world, who contribute as authors, contributors, and reviewers of its publications.³ The IPCC meets in Plenary Sessions of the U.N., which currently has 195 members. The Panel meets approximately once per year at the Plenary level. The IPCC Bureau is comprised of the IPCC Chair, the Vice-Chair, the Co-Chairs, and Vice-Chairs of the working Groups, as well as the Co-Chairs of the Task Force.⁴ The Bureau provides guidance to the Panel on scientific and technical aspects of its work, and advises on related management and strategic issues. Members of the Bureau are elected by the Panel for the duration of an assessment cycle. The members are also limited to one term in the same position.⁵ In response to recommendations from the InterAcademy Council (IAC), the IPCC established an Executive Committee to strengthen and facilitate implementation of IPCC work. The IPCC is then divided into 3 working groups.

- Working Group I: The Physical Science Basis
- Working Group II: Climate Change Impacts, Adaptation, and Vulnerability
- Working Group III: Mitigation of Climate Change

Within these working groups, experts serve as authors in preparation of the IPCC assessment reports. There are usually two Coordinating Lead Authors per chapter, working in teams to produce the content for their responsible chapter.⁶ Expert Reviewers are asked to comment on the accuracy and completeness of the scientific, technical, socio-economic contents of the assessments. According to the IPCC, the Fourth Assessment Report (AR4), released in 2007, involved over 3,500 experts from over 130 countries (450 Lead Authors, 800 Contributing Authors, 2,500 expert reviewers, and over 90,000 comments).⁷

IPCC Report Process

The IPCC writing and review process begins with a scoping meeting, which develops its outline. The IPCC then decides whether to prepare a report and agrees on the scope, outline, work plan, schedule, and budget. The Bureau of the relevant Working Group selects the authors from these lists. After selection, the first draft of the report is prepared by the authors based on

² United Nations, Intergovernmental Panel on Climate Change, Principles Governing IPCC Work, October 2013, Available at: <http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles.pdf>

³ United Nations, Intergovernmental Panel on Climate Change, Procedures for the Preparation, Review, Acceptance, Adoption, Approval, and Publication of IPCC Reports, 2013, Available at: <http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a-final.pdf>

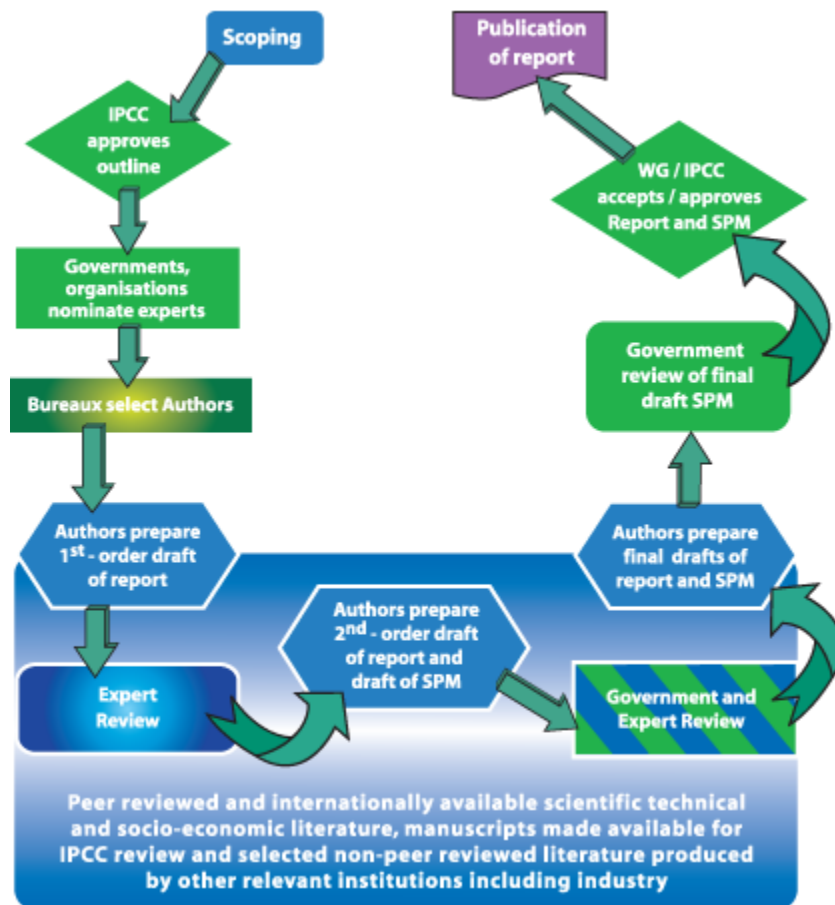
⁴ United Nations, Intergovernmental Panel on Climate Change, Structure, As of May 2014, Available at: http://www.ipcc.ch/organization/organization_structure.shtml

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

available scientific and technical information. Throughout the review process, expert reviewers and governments are invited to comment on the accuracy and completeness of the reports. Below is a depiction of the IPCC report process:⁸



IPCC Publications

In general, the reports of the IPCC are used globally to guide policy and provide support for climate change research. The assessment reports are released by each working group, with working group 1 starting, and a synthesis report concluding. All sections include a Summary for Policymakers, which compresses the large reports into smaller more concise documents for use by governments. The Summary for Policymakers is “subject to simultaneous review by both experts and governments, a government round of written comments of the revised draft before the approval Session and to a final line by line approval by a Session of the Working Group.”

⁹ Since 1990, the IPCC has released the following assessment reports:

⁸ United Nations, Intergovernmental Panel on Climate Change, Principles and Procedures, As of May 2014, Available At: http://www.ipcc.ch/organization/organization_procedures.shtml

⁹ United Nations, Intergovernmental Panel on Climate Change, Procedures for the Preparation, Review, Acceptance, Adoption, Approval, and Publication of IPCC Reports, 2013, Available at: <http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a-final.pdf>

- IPCC First Assessment Report 1990 (FAR)
- IPCC Second Assessment Report 1995 (SAR)
- IPCC Third Assessment Report 2001 (TAR)
- IPCC Fourth Assessment Report 2007 (AR4)
- IPCC Fifth Assessment Report 2013 (AR5)

Most recently in September 2013, the IPCC began the release of the Fifth Assessment Report (AR5) with the Working Group I report on the physical science basis of climate change.¹⁰

- **Working Group I Report** (September 2013) – The IPCC released its Working Group I report which focused on assessing the physical scientific aspects of the climate system and climate change. This report concluded that “Human influence on the climate system is clear.”¹¹
- **Working Group II Report** (March 2014) –Working Group II report focused on assessing “the scientific, technical, environmental, economic and social aspects of the vulnerability (sensitivity and adaptability) to climate change of, and the negative and positive consequences for, ecological systems, socio-economic sectors and human health, with an emphasis on regional sectoral and cross-sectoral issues.”¹²
- **Working Group III Report** (April 2014) –The goal of Working Group III was to review “all relevant options for mitigating climate change through limiting or preventing greenhouse gas emissions and enhancing activities that remove them from the atmosphere.”¹³

Independent Review of IPCC Process

In 2010, the IAC released an independent review of the processes and procedures of the IPCC. IAC is a multinational organization of science academies created to produce reports on scientific, technological, and health issues related to global challenges.¹⁴ IAC also provides scientific advice to national governments and international organizations.¹⁵ The report provided recommendations to the IPCC regarding its process and management:

- “The IPCC should establish an Executive Committee to act on its behalf between Plenary sessions.

¹⁰ United Nations, Intergovernmental Panel on Climate Change, Working Group I, Fifth Assessment Report, 2013, Available at: <http://www.climatechange2013.org/report/>

¹¹ United Nations, Intergovernmental Panel on Climate Change, Working Group I, Fifth Assessment Report, Summary for Policymakers, 2013, Available at: http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf

¹² United Nations, Intergovernmental Panel on Climate Change, Working Group II, Fifth Assessment Report, 2014, Available at: <http://www.ipcc-wg2.gov/>

¹³ United Nations, Intergovernmental Panel on Climate Change, Working Group III, Fifth Assessment Report, 2014, Available at: <http://www.ipcc-wg3.de/>

¹⁴ InterAcademy Council, Review of the IPCC, Overview, As of May 2014, Available at: <http://reviewipcc.interacademycouncil.net/about.html#About%20IAC>

¹⁵ InterAcademy Council, Review of the IPCC, Overview, As of May 2014 , Available at: <http://reviewipcc.interacademycouncil.net/about.html#About%20IAC>

- The IPCC should elect an Executive Director to lead the Secretariat and handle day-to-day operations of the organization.
- The IPCC should encourage Review Editors to fully exercise their authority to ensure that reviewers' comments are adequately considered by the authors and that genuine controversies are adequately reflected in the past.
- The IPCC should adopt a more targeted and effective process for responding to reviewer comments.
- Each working group should use the qualitative level-of-understanding scale in its Summary for Policymakers and Technical Summary, as suggested in IPCC's uncertainty guidelines for the Fourth Assessment Report.
- Quantitative probabilities should be used to describe the probability of well-defined outcomes only when there is sufficient evidence. Authors should indicate the basis for assigning a probability to an outcome or event.
- The IPCC should complete and implement a communications strategy that emphasizes transparency, rapid and thoughtful responses, and relevance to stakeholders, and that includes guidelines about who can speak on behalf of IPCC and how to represent the organization appropriately.¹⁶

In response to the recommendations from the IAC, the IPCC acknowledged the IAC review at its 32nd Panel Session in 2010. Four task groups were established to address the issues related to the procedures, governance and management, conflict of interest policy, and communications strategy.¹⁷ The IPCC has since taken steps to address the recommendations of the IAC, including: the adoption of protocols for addressing possible errors in IPCC Assessment Reports, the establishment of an Executive Committee, and the adoption of conflict of interest policy.¹⁸

ADDITIONAL READING

- U.N. Intergovernmental Panel on Climate Change, Fifth Assessment Report, 2013, available at: <https://www.ipcc.ch/report/ar5/wg1/>
- InterAcademy Council Report on the IPCC, 2010, available at: <http://reviewipcc.interacademycouncil.net/report.html>

¹⁶ InterAcademy Council, Review of the IPCC, Executive Summary, 2010, Available at: <http://reviewipcc.interacademycouncil.net/report/Executive%20Summary%20and%20Front%20Matter.pdf>

¹⁷ United Nations, Intergovernmental Panel on Climate Change, Organization Review, As of May 2014 , Available at: http://www.ipcc.ch/organization/organization_review.shtml

¹⁸ Ibid.