

# IPCC Expert Meeting on Potential Studies of the IPCC Process

World Meteorological Organization, Geneva, Switzerland 28–29 January 2015

# **Meeting Report**

Edited by: Youba Sokona, Eduardo Calvo, Renate Christ, Cathy Johnson, Naomi Oreskes, Jongikhaya Witi, David Wratt



This meeting was agreed in advance as part of the IPCC workplan, but this does not imply working group or panel endorsement or approval of the proceedings or any recommendations or conclusions contained herein.

Supporting material prepared for consideration by the Intergovernmental Panel on Climate Change. This material has not been subjected to formal IPCC review processes.



# IPCC Expert Meeting on Potential Studies of the IPCC Process

World Meteorological Organization, Geneva, Switzerland 28-29 January 2015

# **Meeting Report**

Edited by: Youba Sokona, Eduardo Calvo, Renate Christ, Cathy Johnson, Naomi Oreskes, Jongikhaya Witi, David Wratt

This meeting was agreed in advance as part of the IPCC workplan, but this does not imply working group or panel endorsement or approval of the proceedings or any recommendations or conclusions contained herein.

Supporting material prepared for consideration by the Intergovernmental Panel on Climate Change.

This material has not been subjected to formal IPCC review processes.



ISBN 978-92-9169-144-9

Published June 2015 by the IPCC Secretariat, Geneva, Switzerland. Electronic copies of this report are available from the IPCC website (http://www.ipcc.ch/).

© 2015 Intergovernmental Panel on Climate Change

## **IPCC Expert Meeting on Potential Studies of the IPCC Process**

WMO Headquarters, Geneva, Switzerland 28-29 January 2015

#### **Scientific Steering Committee**

Youba Sokona, Co-Chair WGIII (Mali), Chair of the Scientific Steering Committee Shardul Agrawala, CLA WGIII (India) Eduardo Calvo, Vice-Chair WGII (Peru) Renate Christ, Secretary of the IPCC (IPCC) Cathy Johnson, United Kingdom Government representative, Co-Chair of the contact group at IPCC-37 (United Kingdom) Naomi Oreskes, Harvard University (representing social scientists interested in conducting studies) (United States of America) Jongikhaya Witi, South Africa Government representative, Co-Chair of the contact group at IPCC-37 (South Africa) David Wratt, Vice-Chair WGI (New Zealand)

#### Local Organizer

**IPCC** Secretariat

#### This Expert Meeting Report should be cited as:

IPCC, 2015: Expert Meeting Report of the Intergovernmental Panel on Climate Change on Potential Studies of the IPCC Process [Sokona, Y.; Calvo, E.; Christ, R.; Johnson, C.; Oreskes, N.; Witi, J. and Wratt, D. (eds.)]. IPCC Secretariat c/o WMO, Geneva, Switzerland, pp. 41.

### Preface

To raise awareness within the scientific community and the general public about the manner in which the IPCC carries out its activities and to promote greater transparency for the IPCC processes, the Panel at its 40th Session decided to hold an expert meeting on Potential Studies of the IPCC Process. The meeting, which brought together key stakeholders to discuss relevant topics, was held in Geneva, Switzerland, from 28 to 29 January 2015. The main discussion focused on potential studies and assessment of the IPCC process by credible scientific groups and producing a report that recommends principles to guide the IPCC's engagement with such research.

This report summarizes discussions of the Expert Meeting on Potential Studies of the IPCC Process. At its core is a set of recommendations and main outcomes of the meeting. It also contains summaries of meeting discussions of potential studies, as well as abstracts for the meeting's key note presentations. It is expected that this report will be of value to the Panel and the wider scientific community.

I thank the IPCC Secretariat for hosting the meeting in Geneva. The meeting could not have succeeded without the guidance of the members of the Scientific Steering Group. Special thanks are expressed to all the participants, who contributed to the constructive and fruitful dialogue. Special thanks are also expressed for the excellent work of the Technical Support Units (TSUs) of the three Working Groups who provided important service during the preparation.

) show a har har

Youba Sokona Chair of the Expert Meeting

### Table of Contents

Preface	V
Opening Session	1
Session Summaries and Recommendations	
Session 1: Why Study Science Processes, and How?	
Session 2: Legal and Administrative Aspects	
Session 3: The IPCC Process and Information	5
Session 4: Concerns, Challenges, and Opportunities	6
Sessions 5 and 6: Guidelines and Recommendations	7
Annexes	
Annex 1: Agenda	
Annex 2: Abstracts	15
Annex 3: Breakout Group Guidance	
Annex 4: Expert Meeting Proposal and Scoping Paper	
Annex 5: List of Participants	

### **Opening Session**

The meeting was officially opened by the welcome and introductory remarks of the chair of the meeting Mr Youba Sokona. He recalled the scope and the envisioned output of the meeting. He gave an overview of the two days and indicated that the meeting should produce recommended principles to the Panel to guide the IPCC's engagement in potential studies of the IPCC process. Following this opening address, Ms Renate Christ, Secretary of the IPCC, in her welcoming remarks explained that the meeting was requested by the Panel following the expression of interest of social science research teams to study the IPCC process. She mentioned that the objective and expected outcome of the meeting should be a report that recommends principles to guide the Panel's engagement in potential studies of the IPCC process.

She recalled that IPCC assessments build on the scientific work of researchers from an ever expanding range of disciplines and benefit from different approaches and a range of views. Research on the IPCC should not be restricted; rather, efforts should be made to attract researchers of high standing to work on relevant matters. She highlighted that good scientific analysis is necessary to enhance an understanding of how IPCC works and its relevance, and may lead to improvements of the IPCC process or help others who want to establish a similar assessment process.

The Secretary added that the IPCC's mandate is to provide information for decision-makers, adhering to openness and transparency. The IPCC has a long tradition of making information about its work, procedures and contributors publicly available after the completion of each assessment cycle, including draft reports, expert, government and observer organizations' review comments and corresponding responses by authors.

She emphasized however that researchers studying the IPCC must not interfere with the assessment process and respect anonymity, non-attribution, objectivity, but also confidentiality and legal requirements. She noted that social scientists have probably a very comprehensive toolbox to protect subjects of studies and personal information and are sensitive to development processes. She urged meeting participants to focus on essentials when developing their recommendations and not become too prescriptive or narrow the freedom of science.

Finally, she listed a few questions she would ask about the IPCC such as: What are the essential elements of the IPCC process which lead to its credibility and acceptance by policy-makers; why do so many scientists offer their expertise and time free of charge to the IPCC; what is the optimum balance between strict rules and oversight, and freedom of expression and approaches; and how does the dialogue between different disciplines evolve and which process of expert judgment is used?

### **Session Summaries and Recommendations**

#### Session 1: Why Study Science Processes, and How?

The first session of the meeting featured four presentations, which were followed by a panel discussion. The session focused on the perspective of the social scientists who seek to study the IPCC process.

The first presentation titled, 'Why and how do social scientists study science (-policy) processes?' was given by Yulia Yamineva. The presentation introduced a number of processes within the science and the science-policy interface that are of interest to researchers and provided an overview of the research methodologies used to study these processes. It was shown that science influences policy by shaping the framing and discussion. Some researchers are interested in how to make the science-policy interactions more effective. IPCC is an authoritative voice in climate science relevant for policy. Certain researchers are interested in understanding the reasons for this and what features can be replicated in other bodies while others have interest in studying the social aspects of the science process. There are those who seek to better understand what makes an expert an 'expert'. The research methodologies used to study the science-policy processes were described as generally including i) desk research, ii) semi-structured interviews, and iii) personal observations.

Martin Mahony's presentation, which was second during the session, focused on addressing the potential risk of harm to research participants and the legal, ethical and institutional structures through which social scientists seek to minimize these risks and protect their subjects. Issues such as informed consent, privacy, anonymity, confidentiality, and data management and protection were discussed in detail to better understand the challenges and obligations. The overarching priority of 'do no harm' was emphasized as was the need for establishing a trusting relationship between researcher and researched that was reinforced by accountability to the established professional—and often legal—requirements of ethical conduct and data protection.

The presentation on 'Why study the IPCC?' was given by Naomi Oreskes. This presentation first introduced the more general question of why study science at all and provided a historical context from the late 19th and early 20th centuries. The presentation also discussed the changes in the approach to the study of science arising from the advent of new tools—models and simulations. Participant observation has become a standard form of scholarly practice with the goal to understand how scientific work is conducted under particular cultural, political and social conditions. Scientific assessments represent a new venue of scientific knowledge production, with the mandate not to produce basic research, but to assess existing scientific knowledge. The scientific assessment provides a stable basis for decision-making. Scientific assessments have a unique socially and politically sanctioned role and are therefore also worthy of study in order to understand how scientists produce reliable knowledge in support of crucial public issues.

Michael Oppenheimer presented on the kind of studies and research questions on the IPCC, which might be expected. This presentation focused on the types of questions that could be posed and why. The insights given on possible questions of the IPCC were drawn from: i) studies on similar institutions; ii) earlier requests to study the IPCC; and iii) current literature on IPCC. From this, three types of questions were posed as likely: 1) how does IPCC decide the structure of its reports and the composition of chapter author teams; 2) how do deliberations of IPCC authors lead to the specific statements in assessments; and 3) do the Working Groups differ in their approaches?

The panel discussion provided an opportunity for the presenters to react to the other presentations given and to respond to questions from the broader group. The discussions reinforced the information presented in the presentations—that the IPCC is a unique body and there are a wide variety of research questions on its operations that might be of great interest to look into. These range from basic intellectual questions, about the establishment of scientific knowledge in assessments and the science-policy interface, to applied questions. While many researchers interested in studies of the IPCC process will have well-established protocols for protecting its integrity and the privacy of the individuals they study, these protocols may vary across academic disciplines or national institutions, and thus it is essential to strive to meet the best practices available.

#### **Session 2: Legal and Administrative Aspects**

The Secretary of the IPCC, Renate Christ, explained the key documents that govern IPCC work, which are all publicly available on the IPCC web site, including the "Principles Governing IPCC Work" and their appendices. The timings of adoption and amendments of IPCC reports show the evolution of the process and the flexibility of the IPCC to accommodate and address issues raised by experts and governments. It is an organization that takes note of lessons learned and evolves. In so doing, the institution endeavors to remain relevant. Continually refining the IPCC approach/methodology ensures that the information needs of stakeholders are taken into consideration and attempts are made to meet them. The core principle of IPCC remains 'policy-relevant but not policy-prescriptive.' The Principles lay down the IPCC role and membership, which is open to all members of the United Nations (UN) and the World Meteorological Organization (WMO), and cover primary rules about how to run meetings and to ensure transparency. Appendix A is most used by writing teams and those individuals tasked with implementing the process. It deals with preparation, review, and acceptance of assessment products-that is, scoping meetings, approval of outlines by the Panel, nominations (via Governments and Observer Organizations) and selection of authors (by the Bureaux) seeking balance of expertise and viewpoints as well as regional/gender/youth balance while securing experts with IPCC experience to facilitate work flow, drafting, review by experts and governments, summary products development, and conducting approval sessions. Hallmarks of the approval sessions are the word-by-word, line-by-line approval of the Summary for Policymakers (SPM) and acceptance of the underlying report, with selected authors in attendance to ensure scientific integrity and a rigorous and credible product. The Synthesis Report follows a similar procedure as Working Group contributions, although the longer report is adopted section by section. Upon publication of IPCC assessments, the drafts, review comments and author responses are made publicly available via the web. The latest amendment to Appendix A dealt with introduction of an Error Protocol during the 34th session of the Panel held in Kampala, Uganda, 18-19 November 2011. Appendix B covers the Financial Procedures (Trust Fund, expenditure parameters), spelling out from whom resources are accepted (WMO/UNEP/UNFCCC) and the mechanism for voluntary contributions by member states. The IPCC does not accept funds from companies or foundations. Appendix C provides explicit detail on election procedures. Further guidance documents include the conflict of interest policy, the policy and process for admitting observer organizations and a decision framework for establishing priorities for Special Reports, Methodology Reports and Technical Papers.

The Secretary of the Aarhus Convention, Ella Behlyarova, explained that IPCC is a relevant process and expressed the opinion that IPCC should incorporate principles of the Convention, which has two legally binding instruments: environmental protection and human rights. The Convention empowers people by reinforcing the rights of access to information, public participation, and access to justice. There are 47 Parties to the Convention (almost entirely Europe and Eastern Europe countries). A working group of the Convention oversees implementation of the instruments and comprises an independent board (experts acting in personal capacity) to adjudicate complaints and make recommendations to member states. It is an ambitious mechanism, with approximately 450 individuals attending annual meetings. Access to environmental information (instrument 1) seeks to prevent/mitigate harm, to ensure that the public is prepared (facilitated by timely information and accelerated decision-making), to enhance trust (public ownership of decisions), to enforce environmental laws, and to offer incentives for green business. The Convention has a very broad mandate, from activities and measures to legislation. Party obligations regarding access to information can be passive (upon request) or active (preemptive dissemination). Decision-making requires information provision in stages, once material is deemed mature enough to affect policy outcomes. Parties are expected to promote the governing principles in all international decision-making. Governments need to provide data in the format requested (paper, digital) within 1 month and free of charge. Obviously, electronic tools are the least cost- and labor-intensive. Disclosure can be restricted if there are legitimate confidentiality, proprietary business, or intellectual property rights issues, though emissions information must always be disclosed. Staff of the Arhus Convention are willing to provide independent expert nominations and advise on means to improve IPCC review procedures, as well as to provide opinion on release of documentation (pre-decisional vs. mature).

The IPCC Secretariat's Legal and Liaison Officer, Sophie Schlingemann, described the IPCC products and the scale of its endeavors. The main products of the IPCC are the full assessment reports (released every 6-7 years), Special Reports,

and Technical Papers, all generated by seeking the best scientific and technical input that undergoes a wide circulation for open/transparent review. Other IPCC products include Methodology reports, Expert Meeting and Workshop reports and other Supporting Materials. All IPCC-member countries can participate in assessment development through IPCC Focal Points (author nominations, comments, etc.). In the AR5, there were over 830 authors and 3000 contributing authors, who assessed over 30,000 articles relevant to climate change science, impacts/adaptation/vulnerability, and mitigation. The review processes for all Working Group contributions to the AR5 resulted in over 150,000 expert comments. The IPCC has been under heightened scrutiny after a few errors were identified in the Fourth Assessment Report (AR4). The Inter-Academy Council (IAC) carried out an independent review of the IPCC process and procedures in 2010. Taking into account one of the IAC recommendations, an IPCC Error Protocol was adopted as an amendment to the Policies and Procedures during the 34th Session of the IPCC, which was held in Kampala, Uganda, from 18 to 19 November 2011. Also, the IPCC Communications Strategy was developed and communications strengthened within the IPCC Secretariat. It is noted that the IPCC considers all drafts pre-decisional and provided in confidence to registered expert reviewers, who agree to adhere to the condition that they do not cite, guote, or distribute the drafts. A similar provision is included in the Aarhus Convention. Correspondence also is considered confidential, to ensure the necessary freedom of open, frank exchanges amongst writing team members. The IPCC ensures full public accountability through documentation on the selection process, posting of drafts, comments annotations, and the adopted Error Protocol. However, there is still some tension between openness, and privacy and confidentiality. It is noted that Technical Support Units (TSUs) and authors are subject to respective national laws and have no contractual relationship with the IPCC Secretariat (hence WMO/UNEP). The IPCC strives to comply with but is not bound by the Aarhus Convention.

During the subsequent discussions, there were some questions seeking clarity of the Aarhus Convention's applicability to individuals, depending on their employment status, nationality and "maturity" of the material in question. It was acknowledged that the distributed nature of management of IPCC data complicates the situation, and clear rules and guidance for TSUs were suggested. Whilst an adverse effect on international relations is a legitimate reason not to release data, the effect needs to be proven, and procedures need to be in place for classification of individual documents.

A vigorous discussion took place amongst the Expert Meeting participants regarding relevance of the Aarhus Convention to already rigorous IPCC procedures and on the utility of releasing drafts earlier than after final publication. IPCC already strives to be inclusive by a broad definition of 'expert'. Any person can apply to become an expert reviewer through a self-registration process with a self-declaration of expertise. Once the application is complete and the reviewer agrees to a non-disclosure agreement, he/she would then be granted access during review periods of the first-and second-order drafts.

#### **Session 3: The IPCC Process and Information**

On behalf of all Technical Support Units, the Working Group I TSU Head, Gian-Kasper Plattner, provided an overview of the function of a TSU within the IPCC. A TSU assists the Co-Chairs and Bureau of a Working Group or the Task Force, or the IPCC Chair for the Synthesis Report, by providing operational, administrative, technical, logistical, editorial, and scientific support. Part of this support role involves managing the flow of information across stages of the report development and across interactions among the broader community of expert reviewers, the Co-Chairs, Bureau, authors, and governments. The IPCC procedures require several forms of information to be made public for finalized reports: approved and accepted IPCC reports, drafts submitted for formal expert and government review, the submitted review comments, and author team responses to the comments. Other publicly available information includes supplementary material for reports, errata, report summary volumes, translations, communication and outreach materials, graphics files, background information, customized resources and tools, expert meeting and workshop reports, and guidance materials used by authors. Other digital information stored or hosted by the TSU includes nominations packages, author portals, author meeting resources, review editor contact databases and reports, and working group-specific resources. TSUs coordinate activities and meetings of the working groups, task force, or Synthesis Report. Materials and information passing through or hosted by the TSU range from required IPCC documentation to resources provided solely to authors for their report development process.

The Head of Communications and Media Relations of the IPCC Secretariat, Jonathan Lynn, provided an overview of information available on the IPCC website: www.ipcc.ch. The presentation was structured as a website tour. The following website components were highlighted: the structure of the IPCC; its principles and procedures; ongoing review of process and procedure as well as future work; IPCC publications, including assessment, special, and methodology reports, associated resources for the Fifth Assessment Report, technical papers, and supporting materials; IPCC and working group session documents and reports; reports of the Bureau and executive committee; presentations and speeches; and media resources including press releases and advisories and outreach events.

The ensuing discussion touched upon many themes raised in the presentations, as relevant to the goals of the expert meeting. The role of the Technical Support Units as outlined in principles and procedures was revisited. Several features of the websites were discussed, including the listings of geographical distributions for author teams. Additional topics discussed included challenges of downloading files given bandwidth constraints, the relevance of printed reports made available free of charge for developing-country institutions, and the provision of reports and databases on memory sticks or DVDs. Beyond IPCC materials, the relevance of the Earth Negotiations Bulletin as a social science resource was emphasized.

#### Session 4: Concerns, Challenges, and Opportunities

A Coordinating Lead Author of Chapter 13 (Sea Level Change) of the Working Group I contribution to the Fifth Assessment Report (AR5), John Church, described the steps that are undertaken to prepare a chapter, including issues like: cross-chapter consultations, working under strict deadlines, ways of internal communication, group atmosphere, building trust, dealing with contentious issues, and achieving consensus. Based on feedback he received from an email message he sent to AR5 WGI Coordinating Lead Authors, he expressed concern that the presence of an observer could disturb the group process and hamper candid debates among the authors. He suggested that alternatives approaches that would not require access to author meetings or other privileged information could be useful first steps to study the IPCC process, including exploration of experience of past authors and specific studies of the final SPM Approval Plenaries as the real science/policy interface.

An author and Review Editor in Working Group II since the Second Assessment Report, Ohpa Pauline Dube, addressed the need for change in the IPCC while striving for resilience. She mentioned that the IPCC should work towards a co-assessment with the public—that would lead to more transparency and moving away from being perceived as an elite club. Better representation of developing countries is required, and infrastructure and travel barriers should be addressed. Teachers and students should be consulted on what should go into a report. Information should be provided to the media when they need it—not just at the end of the process. The influence of governments on the content should be reduced.

A Coordinating Lead Author of Chapter 7 (Energy Systems) of the Working Group III contribution to the AR5 and a Core Writing Team member of the Synthesis Report, Yacob Mulugetta, described issues that could be addressed by social scientists, such as author team dynamics. Some authors do not speak up due to cultural differences and may then not be heard. Other issues include dominance of disciplines (engineers and economists) and difficulties to reach consensus when authors cling too much to their own text. He raised questions about the presence of observers of a writing process such as assurance of neutrality. Observing the process and communicating its results to the authors could improve the work of the IPCC.

The IPCC Focal Point from Switzerland, Jose Romero, addressed opportunities, challenges and concerns from the policy perspective. Interest of social scientists studying the IPCC would be an opportunity to further raise awareness on climate change and promote the IPCC findings in the science-policy interface. Both internal self-reflection studies would be possible as well as external studies. In the case of external studies, the intentions and the requests for material should be carefully judged in advance. He mentioned that there should be neither discrimination nor providing more privileges to certain scientific communities. A balance between openness and privacy protection is required.

The IPCC Focal Point from Saudi Arabia, Khalid Mohamed Abuleif, presented views from a developing country perspective. He noted that IPCC has difficulties in including social scientists. Developing countries are under-represented in the IPCC yet there is enough regional information available to assess, some of it in different languages. It is important to recognize the need for sustainable development, treatment of equity, and empathy to poverty eradication. More could be done regarding outreach, translation of materials, and regional workshops with material targeting regional concerns.

The Chair of the Expert Meeting, Youba Sokona, reinforced the need to arrive at concrete recommendations for consideration by the Panel. The discussion touched upon improvements in the IPCC and more specifically the need for guidelines for studying the IPCC, protecting confidentiality and work load and avoiding malicious practices. Rulings would be needed for studies in cooperation with IPCC and studies with privileged access to the IPCC.

#### Sessions 5 and 6: Guidelines and Recommendations

#### Breakout Group 1: Guidelines Covering Author and Studier Requirements in Studies of IPCC Assessment and Consensus-Building Processes

Breakout Group 1 was mandated by the Scientific Steering Committee of the Expert Meeting to discuss possible guidelines that might need to be developed by the IPCC in order to ensure both IPCC author and studier requirements in studies of IPCC assessment and consensus-building processes would be appropriately taken into account if IPCC were to receive requests for studies of the IPCC assessment and consensus-building process.

The Breakout Group discussions covered mainly four areas: 1) the IPCC decision pathway for consideration of requests from researchers for access to non-public IPCC materials and meetings; 2) information that would need to be included when submitting a request; 3) evaluation criteria that could be applied by the IPCC when considering requests; and 4) requirements for researchers interested in conducting studies of the IPCC process. The expected outcome of the Breakout Group discussions was a set of suggested guidelines for the IPCC, for further discussion in the plenary session of the Expert Meeting.

Participants of the breakout group expressed many, and at times differing views on issues such as: i) the level of access to IPCC author team discussions or correspondence that might be needed/desired/useful; ii) how to ensure efficient and non-bureaucratic pursuit of the informed consent of those being studied; iii) possible requirements for researchers that would like to study (parts of) the IPCC process, including the geographical, gender and career stage diversity of possible research teams, etc. The group worked constructively towards the common goal of preparing a set of recommendations, which were further discussed and developed, and finally adopted by all Expert Meeting participants during the final plenary session of the meeting. The final set of recommendations by the Expert Meeting, based on the initial conversations in Breakout Group 1, is enumerated below:

- The IPCC should develop a decision pathway for consideration of requests from researchers for access to nonpublic IPCC materials or meetings. The pathway should ensure that the information requirements outlined below are met, while acknowledging the needs of IPCC authors and the need of researchers for an efficient and timely decision process;
- 2) Information required when submitting a request should include:
  - a) Proposal of planned research;
  - b) Letter of support from supervisor or institution, credentials of supervisor and institution (where applicable);
  - c) Information about composition of research team;
  - d) Credentials of researchers/research team, including CVs and publication lists;
  - e) Description of type, timing and duration of access required;
  - f) Justification of enhanced value from requested access to non-public materials or meetings;

- g) Consideration of ethical issues and data management;
- h) Description of the process by which the proposal has been or is being evaluated and mechanisms for quality assurance;
- i) Information about funding sources;
- j) Declaration of any potential conflict of interest; and
- k) Anticipated benefit to the broader public interest
- 3) On the evaluation criteria for requests, the IPCC may consider the information outlined in (2) in its decision pathway, along with:
  - benefit to broader public;
  - overall geographic balance and diversity of the research portfolio;
  - gender balance; and
  - career stage balance;
- 4) Regarding the requirements for researchers conducting studies of the IPCC process, taking note that researchers should minimize demands on IPCC Authors, it was recommended that:
  - a) Researchers must obtain appropriate informed consent from all subjects in the study;
  - b) All identifying information will be kept confidential;
  - c) The researchers may not intervene in IPCC deliberations;
  - d) The researchers will only observe activities for which they have informed consent;
  - e) IPCC will be provided draft publication ahead of submission, for prompt comment;
  - f) IPCC will be provided any draft public relations documents (e.g., press releases) for prompt comment prior to their public dissemination;
  - g) Researchers will not disclose their findings to the public, including the news media, prior to the publication of their study;
  - h) Publication of studies will be embargoed until after the end of the assessment cycle, unless otherwise agreed to by the IPCC;
  - i) Confidentiality of information and data to which researchers are granted access will be agreed during informed consent. Confidential information and data will be held in accordance with data protection requirements; and
  - j) 5 years after the completion of the assessment cycle, collected information will be shared with the IPCC for long term archiving.

# Breakout Group 2: Guidelines Regarding Studies Requiring Access to Information and Data held by the IPCC, including the Secretariat, the Technical Support Units, Author Home Institutions, and National Focal Points

Technical Support Unit and Secretariat staff described the different types of information and data held and who may access it. For the TSUs in particular, this is very diverse and includes, e.g., a grey literature database, background material and scenario databases, as well as personal data (such as author nominations forms) and sensitive information (e.g., WG Bureau deliberations regarding said nominations). This discussion led to recognition that IPCC needs to develop a document retention policy.

The meeting sought clarity from the social scientists who were present on what kind of information they may wish to access. Specifying the information needs upfront appeared difficult as this is highly dependent on the nature of study and the underlying objectives. The general principle is that the more access, the better—and the lower the risk of researchers arriving at wrong conclusions. The social scientists believed that a document retention policy would have several further advantages such as: scholars being less likely to seek information from third parties, which increases the likelihood of getting only a partial and hence misleading picture; the history of IPCC would be available for future studies; and such a policy would engender trust. On the basis of the aforementioned considerations, the participants in Breakout Group 2 recommended that the Panel should consider producing such a policy.

There were two further concerns raised. The first related to grey literature. There was a suggestion that some author groups do not discover existing grey literature that could be useful for filling information gaps. The second was that the application of the author selection process is not adequately transparent. In response, the Bureau members who attended the meeting summarized the process. It was recognized that the issue is quite sensitive, and that protection of nominated individuals is paramount. These two concerns led to the recommendation that the IPCC could explore those areas that may be insufficiently documented and consider ways to improve them.

The Breakout Group 2 recommended that the IPCC considers the development of a document and information management and conservation policy, which would apply to IPCC bodies and TSUs, taking into account:

- a) organizational structure and institutional arrangements;
- b) materials such as document archives and data sets to be held by IPCC Secretariat and TSUs;
- c) limits of disclosure; and
- d) time limits to confidentiality

In developing this policy, the IPCC could explore those areas that may be insufficiently documented and consider ways to improve documentation. The establishment of an appropriate policy would allow the IPCC to respond to potential requests for studies in a consistent and timely manner.

### Annex 1: Agenda

#### Agenda of the IPCC Expert Meeting on Potential Studies of the IPCC Process

Venue: World Meteorological Organization, Geneva, Switzerland 28-29 January 2015

#### DAY 1 (28 January)

08h30 Registration

09h00 Welcome Youba Sokona, IPCC WGIII Co-Chair, The South Centre, Geneva, Switzerland (Chair of the Expert Meeting)

09h05 Introduction -The purpose and scope of the Expert Meeting Renate Christ, Secretary of the IPCC, IPCC Secretariat

#### SESSION 1 - Panel discussion - Why study science processes, and how?

Moderator: Eduardo Calvo, IPCC WGII Vice-Chair, Universidad Nacional Mayor de San Marcos, Peru

09h20 Why and how social scientists study science processes? YuliaYamineva, University of Eastern Finland, Finland

09h35 *How social scientific researchers protect their subjects?* Martin Mahony, University of East Anglia, UK

09h50 *Why study the IPCC?* Naomi Oreskes, Harvard University, USA

10h05 *What kind of studies and research questions on the IPCC might be expected?* Michael Oppenheimer, IPCC WGII CLA, Princeton University, USA

10h20 *Panel discussion (also taking questions from the floor)* 

11h00 Break

#### **SESSION 2** - Legal and administrative aspects

11h30 *IPCC rules and procedures* Renate Christ, Secretary of the IPCC, IPCC Secretariat

11h45

The Aarhus Convention: National and international obligations on public access to information Ella Behlyarova, Secretary of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, UNECE 12h00

Implementing Principle 10 of the Rio Declaration, in particular regarding access to information in international institutions Sophie Schlingemann, Legal and Liaison Officer, IPCC Secretariat

12h15 *Discussion* 

13h00 — 14h30 Lunch

#### **SESSION 3: The IPCC process and information**

14h30

Access to information held by the TSUs and access to information from Plenaries, Working Group Meetings, Expert Meetings, Workshops, Author's meetings Gian-Kasper Plattner, WGI TSU, Joint presentation by the Heads of the five Technical Support Units

14h45

Information held by the IPCC Secretariat and its accessibility Jonathan Lynn, Head Communications and Media Relations, IPCC Secretariat

15h00 *Discussion* 

15h30 Break

#### **SESSION 4: Concerns, Challenges and Opportunities**

16h00 IPCC Author Perspective John Church, IPCC WGI CLA, Commonwealth Scientific and Industrial Research Organization, Australia

16h15 *IPCC Author Perspective* Pauline Dube, IPCC WGII CLA, University of Botswana, Botswana

16h30 IPCC Author Perspective Jacob Mulugetta, IPCC WGIII CLA, University College London, UK

16h45 *IPCC Country Focal Point Perspective* Jose Romero, Federal Office for the Environment, Switzerland

17h00 *IPCC Country Focal Point Perspective* Khalid Mohamed Abuleif, Ministry of Petroleum and Mineral, Saudi Arabia

17h15

Discussion: Open discussion on concerns, challenges and opportunities from the Authors and National Focal Points perspective

18h00 *Closing of Day 1* 

#### DAY 2 (29 January)

08h30

Drafting Group, Breakout Groups Facilitators and Rapporteurs meet to discuss structure for Report/Recommendations and outputs needed from Breakout Groups.

09h00

Summary of Day 1 and Introduction to Day 2 Youba Sokona, IPCC WGIII Co-Chair, The South Centre, Geneva, Switzerland

# 09h15

#### SESSION 5: BREAKOUT GROUPS (in parallel)

**Breakout Group 1:** *Guidelines covering author and studier requirements in studies of IPCC assessment and consensus-building processes.* 

Chair: David Wratt, IPCC Vice Chair WGI, National Institute of Water and Atmospheric Research, New Zealand

**Breakout Group 2:** *Guidelines regarding studies requiring access to information and data held by the IPCC, including the Secretariat, the Technical Support Units, author home institutions, and National Focal Points.* Chair: Catherine Johnson, Department of Energy and Climate Change, United Kingdom

11h00 Break

11h30 Break-out groups (continued, in parallel)

**Breakout Group 1:** *Guidelines covering author and studier requirements in studies of IPCC assessment and consensus-building processes* 

**Breakout Group 2:** *Guidelines regarding studies requiring access to information and data held by the IPCC, including the Secretariat, the Technical Support Units, author home institutions, and National Focal Points* 

13h00 — 14.30 Lunch

#### **SESSION 6: GUIDELINES AND REPORT**

14h30 *Report back from Breakout Group 1* Introduction and open discussion

14h50 *Report back from Breakout Group 2* Introduction and open discussion

15h10

Agreement on recommended principles to guide the IPCC engagement with such research for consideration by the Panel. Agree on general structure and content of the report of the meeting which will be finalized by the Scientific Steering Committee.

17h50 *Closing Remarks and Next Steps* Youba Sokona, Chair, IPCC WGIII Co-Chair, The South Centre, Geneva, Switzerland

18h00 End of Meeting

# Annex 2: Abstracts

### **Table of Contents**

Introduction - The purpose and scope of the Expert Meeting Renate Christ, Secretary of the IPCC, IPCC Secretariat	. 16
<b>Why and How Social Scientists Study Science Processes?</b>	. 17
How Social Scientific Researchers Protect their Subjects	. 18
<b>Why Study the IPCC?</b> Naomi Oreskes, Harvard University, USA	. 19
What Kind of Studies and Research Questions on the IPCC Might be Expected? Michael Oppenheimer, IPCC WGII CLA, Princeton University, USA	. 20
IPCC Rules and Procedures	. 21
<b>The Aarhus Convention: National and International Obligations on Public Access</b> <b>to Information</b> <i>Ella Behlyarova, Secretary of the Aarhus Convention on Access to Information, Public Participation in Decision-making</i> <i>and Access to Justice in Environmental Matters, UNECE</i>	. 22
Implementing Principle 10 of the Rio Declaration, in Particular Regarding Access to Information in International Institutions	. 24
<b>Access to Information Held by the IPCC Technical Support Units</b> Joint Presentation by the Technical Support Units of the IPCC Working Groups I, II, and III, the Synthesis Report and the Task Force on National Greenhouse Gas Inventories (Contributors in alphabetical order: David Dokken, Ellie Farahani, Katharine Mach, Leo Meyer, Jan Minx, Gian-Kasper Plattner, Kiyoto Tanabe and Melinda Tignor)	. 25
Information Held by the IPCC Secretariat and its Accessibility	. 26
<b>Concerns, Challenges, and Opportunities: A WGI Author Perspective</b>	. 27
Concerns, Challenges, and Opportunities: A WGII Author Perspective Pauline Dube, IPCC WGII CLA, University of Botswana, Botswana	. 28
Concerns, Challenges, and Opportunities: A WGIII Author Perspective	. 29
<b>Concerns, Challenges, and Opportunities: An IPCC Focal Point Perspective</b>	. 30
Concerns, Challenges, and Opportunities: An IPCC Focal Point Perspective Khalid Mohamed Abuleif, Ministry of Petroleum and Mineral, Saudi Arabia	. 31

# Introduction - The purpose and scope of the Expert Meeting

#### Renate Christ

#### Secretary of the IPCC, IPCC Secretariat

In the year 2013 the IPCC had received two proposals from researchers who wanted to study the IPCC process and asked for access to information and meetings. The Panel considered that matter at its 37th Session in Batumi, Georgia. It welcomed interest from the social science community in how the IPCC works and draws its conclusions. In the debate delegations raised issues such as the importance of reducing all risks of interference in IPCC work; the need for the authors to be comfortable with being studied while working for the IPCC; anonymity and non-attribution; objectivity of researchers; transparency and openness, but also confidentiality. The Panel therefore requested to initiate an expert meeting, which should produce a report that recommends principles to guide the IPCC's engagement with such research.

IPCC assessments build on the scientific work of researchers in different disciplines and benefit from a range of views and approaches. Therefore it is not the intention of this meeting to restrict the type of research, which scholars might want to carry out about the IPCC and its processes. Good scientific analysis of how IPCC works will add to transparency and enhance the understanding of the relevance and specific features of IPCC reports. It may lead to improvements of the IPCC process and help others who want to establish a similar assessment process. It is in the interest of the IPCC to attract researchers of high standing. Nobody will benefit from wrong conclusions, which are derived from insufficient understanding of how IPCC works.

IPCCs mandate is to provide information for decision makers and openness and transparency are principles of the IPCC. IPCC has a long tradition of making information about its process available to the public, on the IPCC website. This includes procedures, plenary documents, information about authors and meetings and after completion of reports the drafts, the comments received on the drafts and responses by authors, and finally lots of data and models used in the assessment.

But of course, researchers must not interfere with the IPCC assessment process, nor must they release any draft IPCC chapters or conclusions before the IPCC has released them. There are also other legal and confidentiality matters which require attention, in particular as IPCC experts are operating under different legal systems.

Each discipline has its tools and approaches, including tools to protect the subject of studies and the toolbox for social science is very comprehensive because very often personal information and development processes need to be protected. Therefore this dialogue, which should focus on essentials and does do not become prescriptive or narrow the freedom of science, is very useful.

What question may social scientists ask about IPCC?

What are the essential elements of the IPCC process, which lead to its credibility and acceptance by policymakers as compared to other similar exercises?

Why does an increasing number of scientists offer their expertise and time free of charge to the IPCC?

What is the optimum balance between strict rules and oversight, and freedom of expression and approaches?

Which process of expert judgment is used and is it different in the Working Groups and disciplines?

How does the dialogue between different disciplines evolve?

# Why and How Social Scientists Study Science Processes?

Yulia Yamineva, University of Eastern Finland, Finland

#### University of Eastern Finland, Finland

The IPCC as an intergovernmental institution is not just a science process, although a process about science. On why social scientists study science processes, the first obvious reason is because science has a significant influence on policy by framing discussion: for example, in climate policy we talk about a 2 degree target, mitigation pathways, adaptation potential etc - the terms which came from science. However, clearly the influence of science on policy is not sufficient: informing policy is not straightforward even if science is solid. Here comes another interesting research question: how to make science-policy interaction more effective, and what factors and institutional design impact this. For example, the IPCC as an example of a successful science-policy interface was closely studied during the design of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Another reason why social scientists are interested in the IPCC because any science process is a social process which can be characterized through the following aspects: institutional arrangements and culture,

personal values of participants, interests (economic, political), group dynamics (group think, power dynamics), and context (domestic politics, international negotiations). Also, social scientists are interested in science processes because they want to know if they, and the public, can trust this process: who is involved and who is not; can the process be described as rigorous, objective, inclusive, and unbiased; who influences the process, who pays, and who defines scope. A further important question is "who are the experts?" because expert knowledge is influenced by disciplinary, geographic, and other backgrounds of those who produce that knowledge. On research methodology, there is a variety of qualitative and quantitative methods adopted in social sciences. In political science, when studying international institutions, researchers frequently apply desk research, semi-structured interviews and participant observations. Any sensitive or new information should be checked across other data according to the principle of triangulation.

## How Social Scientific Researchers Protect their Subjects

Martin Mahony

#### King's College London, UK

Social scientific research brings great benefits to individual research participants, to particular social groups and bodies, and to society as a whole. However, such research can also present risks, including potential harm to participants, social groups or researchers themselves. This talk focuses on one subset of these risks – harm to research participants – and the legal, ethical and institutional structures through which social scientists seek to minimize these risks and protect their subjects.

A pre-condition of any social research project is the obtaining of informed consent. This is a process by which researchers disclose to prospective participants the nature and funding of research, including its aims, outcomes, and the rights of research participants. Central to this process is discussion of how the identities of research participants will be protected. Participants' rights to privacy and to protection from harm are implemented through the granting of anonymity. As most social scientists are interested in group and organizational dynamics rather than personal stories, information which connects data to individuals is only relevant insofar as it informs understanding of wider social processes. Anonymity is therefore the default setting in social research.

However, there may be occasions when anonymity is complicated. Social scientists are interested in groups, but also in the specificities of local contexts. Therefore, some research questions might require data with some levels of personal identification. However, recognizing the potential risks associated with data which is traceable to individuals, the appropriate level of anonymity to be used (e.g. job description, rank or pseudonym) will be decided through dialogue between the researcher and the participant(s). Data which contains any trace of personal identities has to be handled in accordance with local data protection laws and in accordance with strictures laid down by research funders. Data is kept on secure, password-protected devices, separate from any additional information which might contain traces of personal identities. Binding initial agreements drawn up between researchers and their participants may also cover further elements of confidentiality where necessary, for example covering certain elements of institutional processes.

The participants of social scientific research are therefore protected by a combination of a trusting and honest relationship between researcher and researched – it is after all, in the interests of the researcher to maintain an amicable relationship with research participants – and by a well-established set of institutional structures through which the ethical conduct of research is governed. Professional associations issue guidelines, research funders make increasingly exacting requirements for data protection and ethical clearance, and research organizations oversee the conduct of individual research projects. Accountable to all these institutions, it is the job of the researcher to ensure that the research is ultimately conducted in an ethical and honest manner, with the protection of participants being the primary concern.

# Why Study the IPCC?

Noami Oreskes

#### Harvard University, USA

Before addressing the question: Why study the IPCC, it is useful to address a prior question: Why study science at all? For most of the late 19th and early 20th century, historians and philosophers of science held science to be a model of rational-and therefore efficacious-thought. The reliability of scientific knowledge, it was widely believed, rested on its particular method, variously known as the hypothetico-deductive method, the deductivenomological method, the experimental method, or simply (albeit tautologically) the scientific method. Philosophers focused their attention on the question of what, precisely, that method was. Few thought it necessary to study scientists themselves, because any scientist who failed to follow the method was simply doing bad science. Historians of science viewed their task as the recognition and documentation of scientific achievements, and if the history of science was the history of accomplishment, there was little reason to study work-in-progress, because one could not know whether that work would prove to be a historically significant achievement.

In the mid 20th century, this view was radically challenged by Thomas Kuhn, Ludwig Fleck, Michael Polanyi, and others, who argued that science was defined not so much by a singular method, but by the cooperative work of scientific communities. This invited attention to the character of those communities and the characteristics of their work. As historians, sociologists, and anthropologists turned to the details of scientific work, they found it to be far more variegated than previously imagined. Rather suddenly, the need to study science in practice became seemingly obvious. Historians turned their attention to archival evidence of past practices; sociologists and anthropologists trained their attention on active science.

Today, participant-observation of "science in action" to use the title of Bruno Latour's famous book-is considered both a standard form of scholarly practice and essential to understand how scientific work is conducted under particular cultural, political, and social conditions. This, however, has led to a new question, one to which our team (and others) have called attention. If the practice of science varies over time and place, what are the factors that allow users to judge it as reliable? How do scientists produce reliable knowledge? And what is the basis for societal trust in the outputs of scientific labor? These questions, lead us directly to major scientific laboratories, as in Latour's famous study of the Salk Institute, Laboratory Life. But they also lead us to scientific institutions, such as the IPCC, who have been given a unique socially- and politically-sanctioned role to assess scientific knowledge for policy.

Today, the world depends on scientists to provide crucial information on issues such as climate change, biodiversity, infectious disease, etc., on which the health and well-being of humanity depends. Often scientists do this work not so much in the traditional venues of laboratories, universities, research institutions, but in formal assessments whose mandate is not to produce basic research, but to certify existing scientific knowledge as offering a stable basis for decision-making. As the recognized body responsible for assessing climate science, and as the most well-known formal assessment of scientific knowledge, the IPCC plays a unique and critical role in the contemporary world. It is for this reason that it should be studied—so that the world can understand how this crucial work is done.

# What Kind of Studies and Research Questions on the IPCC Might be Expected?

#### Michael Oppenheimer

#### IPCC WGII CLA, Princeton University, USA

Existing literature provides an indication of the types of studies and questions which researchers might pursue. Previous inquiry (not involving direct observations) reveals an interest in several categories of questions, but two are especially prominent: 1) How do deliberations of IPCC authors lead to the specific decisions embodied in the IPCC assessments' judgments on uncertainty, ranging from statements that are regarded as matters of fact to statements involving characterization which follows the uncertainty guidance to those for which no characterization is provided? 2) What considerations weigh most heavily when IPCC decides the structure of working group reports and the composition of chapter author teams, including coordinating lead authors?

With regard to the first question, researchers have already requested permissions to observe author meetings and if granted, they might seek to understand what type of interaction, deliberation, or argumentation takes place among the authors; what weight is given to related statements from previous IPCC assessments? What is the hierarchy of decisions: do only a few authors provide the core of the assessment on particular points? How does the judgment of such a core of experts interact with the judgments of those chapter authors who are less focused on the particular question during the assessment? What role do review editors play at author meetings and do they directly influence judgments of the authors? With regard to the second question above, observers might seek to understand the specific criteria used and whether there are differences in the authorselection process across the three working groups as well as the Synthesis Report; how tradeoffs are decided in applying the criteria; how much does general scientific judgment versus particular expertise matter; and which level of the IPCC governing structure is most active or most influential in making decisions.

In addition to proposals of the type already received by IPCC to observe author meetings of individual chapter teams and interview authors, proposals to observe discussions of author selection and chapter and report organization at the Working Groups, Bureau, and Executive Committee are to be expected.

# **IPCC Rules and Procedures**

#### Renate Christ

#### Secretary of the IPCC, IPCC Secretariat

In this presentation, the Secretary of the IPCC provides an overview of IPCC principles, procedures and other guiding documents. As part of this presentation, key provisions are highlighted and it is noted that these procedural documents are reviewed and revised regularly to take into consideration new developments and requirements.

The "Principles Governing IPCC Work" contains the key provisions about the IPCC mandate, its role, organization, membership and procedures. The Principles have three Appendices:

 Appendix A - PROCEDURES FOR THE PREPARATION, REVIEW, ACCEPTANCE, ADOPTION, APPROVAL AND PUBLICATION OF IPCC REPORTS elaborates in detail rules for the scoping, writing, review and finalization and of IPCC reports, describes roles of different actors and it contains a protocol on how to address errors discovered in IPCC reports.

- Appendix B FINANCIAL PROCEDURES FOR THE INTERGOVERNMENTAL PANEL ON CLIMATE (IPCC) governs the financial administration of the IPCC, its Trust Fund and contributions to the Trust Fund and other resources of the IPCC and budget preparation.
- Appendix C contains the PROCEDURES FOR THE ELECTION OF THE IPCC BUREAU AND ANY TASK FORCE BUREAU.

In addition to the principles and its appendices IPCC has further procedural documents and specific guidance is provided in Panel decisions.

In order to set priorities and guide decisions on whether to prepare Special Reports, Methodology Reports and Technical Papers, the IPCC has adopted the "Decision Framework and Criteria for Special Reports, Methodology Reports and Technical Papers". The IPCC also has a "Conflict of Interest Policy", and an "IPCC Policy and Process for Admitting Observer Organizations".

# The Aarhus Convention: National and International Obligations on Public Access to Information

#### Ella Behlyarova

Secretary of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, UNECE

The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, or Aarhus Convention, and its Protocol on Pollutant Release and Transfer Registers (PRTRs) are the only legally binding international instruments on environmental democracy that put Principle 10 of the Rio Declaration on Environment and Development in practice. Their powerful twin protections for the environment and human rights can help us respond to many challenges facing our world: from climate change and the loss of biodiversity, air and water pollution to poverty eradication, peace and security. They provide a solid and comprehensive framework for governments to engage the public effectively in sustainable development, in greening the economy and in setting and implementing the post-2015 development agenda, sustainable development goals (SDGs) and climate change policies. Both instruments are open for global accession. As of 27 January 2015, there are 47 Parties to the Convention and 33 Parties to the Protocol.

# Why do we need access to environmental information?

The main benefits of access to information include enabling the public to take measures to prevent or mitigate harm arising from environmental risks (i.e. in the case of climate change) as well as well informed, improved and inclusive decision-making leading to greater acceptance of the decisions.

# National and international obligations on public access to information under the Convention

- Ensure public access to environmental information upon request
- Ensure collection and dissemination of environmental information to the public
- Ensure effective access to all information relevant to the decision-making
- Promote public participation and the application of the Aarhus principles in international forums relating to the environment

# Environmental information to be disclosed under the Convention

The scope of "environmental information" covers information on the state of elements of the environment like atmosphere or air but; factors, activities or measures affecting or likely to affect the environment; analyses and assumptions in environmental decision-making; state of the human environment affected or may be by the state of the elements of the environment. The list is indicative and non-exhaustive.

# Aarhus Convention Parties' obligations regarding access to environmental information

(i) Access to environmental information upon request, (ii) collection and dissemination of environmental information, (iii) timely informing the public within the public participation procedure as well as promote informed public participation and (iv) the application of the Aarhus principles in the international forums in matters relating to the environment. While the first three obligations focus on the national level, the fourth one is focused on international forums. Convention is a minimum standard.

# Disclosure of environmental information and its limits

Information may be withheld where disclosure would adversely affect various interests, e.g. national defense, international relations, public security, the course of justice, commercial confidentiality, intellectual property rights, personal privacy, the confidentiality of the proceedings of public authorities; or where the information requested has been supplied voluntarily or consists of internal communications or material in the course of completion. There are however some restrictions on these exemptions, e.g. the commercial confidentiality exemption may not be invoked to withhold information on emissions which is relevant for the protection of the environment. To prevent abuse of the exemptions by public authorities, the Convention stipulates that most of the aforementioned exemptions are to be interpreted in a restrictive way, and in all cases may only be applied when the public interest served by disclosure has been taken into account. Refusals, and the reasons for them, are to be issued in writing where requested. For more information consult:

http://www.unece.org/env/pp/publications/the\_power\_is \_in\_your\_hands.html

http://www.unece.org/env/pp/implementation\_guide.html .

# Implementing Principle 10 of the Rio Declaration, in Particular Regarding Access to Information in International Institutions

Sophie Schlingemann

#### Legal and Liaison Officer, IPCC Secretariat

Principle 10 of the Rio Declaration on Environment and Development urges States to promote openness, transparency and public participation in their handling of environmental issues. Ensuring access to information is essential in that respect.

Principle 10 has been implemented in many national laws and international agreements and constitutes one of the corner stones of the IPCC work and its report preparation and review process. The other major pillar of that process is the need to conduct it in such a way as to ascertain and obtain the best scientific and technical advice.

Meeting the two requirements is not an easy task. Authors of the IPCC reports need to be able to exchange views in privacy in order to arrive at the best scientific results, while at the same time the public may want to know and being able to comment on what is going on.

The most far reaching legal instrument on public access to information and participation in decision-making, the UNECE (UN Economic Commission for Europe) Aarhus Convention, is obliging its Contracting Parties to secure public access at request to the environmental information that they hold. A request for access can be rejected if it concerns "material in the course of completion" or "internal communications". All IPCC writers and contributors, as well as the Technical Support Units are bound by the national laws and regulations of the country in which they reside/are based.

The IPCC as such is not bound by the provisions of the Aarhus Convention or other international treaties, but at the same time supposed to strive towards maximum openness and transparency in its work. The call for such transparency became louder when, at the time of the Copenhagen Summit on Climate Change (Dec. 2009), some mistakes in IPCC reports were discovered. IPCC solicited outside advice from the Inter-Academy Council (IAC) and adapted its Procedures and Principles governing its work, including the report review process. The IPCC also adopted the Protocol for Addressing Errors in IPCC Reports.

It is clear that there will continue to be a tension between the requirements for openness and transparency on the one hand and a process which respects privacy as an essential condition for frank and open exchanges leading to the best scientific results on the other. The practice followed by the IPCC and its Working Groups in preparing the reports will furthermore continue to be governed by the question to what extent the privacy of the contributors and participating institutions can be guaranteed. The IPCC is not bound by the provisions of the Aarhus Convention but has to abide by what its Member governments decide collectively. Their common opinion may in cases be not entirely consistent with their individual prevailing policies and practices with respect to questions governing public access to information.

# Access to Information Held by the IPCC Technical Support Units

Contributors in alphabetical order: David Dokken, Ellie Farahani, Katharine Mach, Leo Meyer, Jan Minx, Gian-Kasper Plattner, Kiyoto Tanabe and Melinda Tignor

# Joint Presentation by the Technical Support Units of the IPCC Working Groups I, II, and III, the Synthesis Report and the Task Force on National Greenhouse Gas Inventories

\_

The Intergovernmental Panel on Climate Change (IPCC) has recently published its 5th Assessment Report "Climate Change 2013/2014" (AR5). The AR5 consists of three Working Group reports and a Synthesis Report. In addition, a series of products by the Task Force on National Greenhouse Gas Inventories have been published over the timeframe of the AR5. The activities of each Working Group, the Synthesis Report and of the Task Force are coordinated and administrated by a Technical Support Unit (TSU). The role of the TSUs is to support the elected Co-Chairs and Bureau of the Working Group or Task Force, or the IPCC Chair in the case of the Synthesis Report. The TSUs manage all activities and all operational, administrative, technical, logistical and editorial aspects in the preparation and production of Working Group, Synthesis Report and Task Force products. As part of the assessment process, the TSUs also provide scientific support to elected Co-Chairs (or the Chair in case of the Synthesis Report), Bureau, writing teams, thus facilitating the work of the hundreds of volunteer authors from the international scientific

communities who draft and review the assessments. The presentation will provide an overview over the work of the TSUs in the AR5 with a focus on materials and information available at the TSUs, including those required by Appendix A to the Principles Governing IPCC Work, those publicly available from the Working Group, Synthesis Report and TFI websites as well as other relevant resources. Further information on the IPCC AR5 and their Technical Support Units can be found on the respective websites:

- Working Group I: www.climatechange2013.org
  - Working Group II: www.ipcc-wg2.gov/AR5
- Working Group III: www.mitigation2014.org
- Synthesis Report: www.ipcc-syr.nl
- Task Force on National Greenhouse Gas Inventories: www.ipcc-nggip.iges.or.jp

or from the IPCC website administrated by the IPCC Secretariat: www.ipcc.ch.

# Information Held by the IPCC Secretariat and its Accessibility

#### Jonathan Lynn

#### Head Communications and Media Relations, IPCC Secretariat

The IPCC websites contain a wealth of documentation about the preparation of IPCC reports, IPCC meetings and other matters, as well as the reports themselves and other IPCC products. All the Principles and Procedures – the "constitution" of the IPCC – can be consulted in fall in the section Procedures. Recent changes to them are gathered under "Review of Processes & Procedures" in the Organization section. Documents submitted to Sessions of the Panel or Bureau, and reports on those meetings, as well as reports on meetings of the Executive Committee, are included under Meeting Documentation. The various reports are compiled under Publications and Data. These include, for the more recent reports, the official drafts and comments by expert reviewers and governments, with responses. Communications activities around the reports and on other occasions are gathered in News and Outreach, or in Presentations and Speeches. Supplementary materials about the reports such as lists of contributors are on the main and working group pages.

# Concerns, Challenges, and Opportunities: A WGI Author Perspective

John Church

IPCC WGI CLA, Commonwealth Scientific and Industrial Research Organization, Australia

In preparation for this meeting, I asked all of the CLAs in WGI and all of the LAs in Chapter 13 for their views of having social scientists study the IPCC process, being embedded within LA meetings and having access to LA documentation (email, etc.). The talk will draw heavily upon this input, as well as my own views. The responses received from CLAs and LAs all expressed concerns to the proposed studies, with varying levels of intensity. To provide the appropriate background, I will begin with an overall description of my experience of the IPCC AR5 process and the demands it made on LAs and then move to the spectrum of views related to the study of IPCC.

There was broad agreement amongst LAs that open, unfettered, candid debate between LAs and having the right atmosphere is critical to the completion of a robust assessment. There is a need to be able to think issues through, to agree, to disagree and to explore alternative formulations. Developing and maintaining trust within chapter author teams (and the across the WGI Assessment) and building consensus, particularly on difficult and controversial issues, takes time. There was also strong recognition that lead authors are already under significant pressure and that providing a robust report requires the best scientists to commit to this demanding task. The process is open with opportunities for review, input via workshops, and scientists providing authors material directly. The major challenge remains to develop a comprehensive, independent, robust and reliable assessment and to maintain integrity of the report and the process.

In light of this challenge, any potential for distraction, change of atmosphere or burdening LAs with additional tasks should be approached with caution. Before approving studies, the questions of 'what will be the impact of being observed/studied, including on the frankness of debate?', 'whether the studies will lead to better understanding of the IPCC process?' and 'how will IPCC or the community benefit from this process?' need to be addressed. There will be a need to agree how to select studies that require access to LA meetings and material, requiring rigorous assessment of the proposed study and the proponents' credentials. Of course, for any study the personal consent of LAs affected is essential. The studies would need to focus on the process (and not the science) and not individuals. There is also a need to agree when the results can be published.

Alternative approaches that could be encouraged are exploration of the experience of past authors (guidelines to LAs for these would be useful) and specific studies of the final SPM Approval Plenaries (the real science/policy interface). Of course many studies of the IPCC can be completed without access to author meetings or other privileged information.

## Concerns, Challenges, and Opportunities: A WGII Author Perspective

Pauline Dube

#### IPCC WGII CLA, University of Botswana, Botswana

The Intergovernmental Panel on Climate Change (IPCC) has delivered on its mandate "to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socioeconomic impacts" and gone further to cover vulnerability and adaption. The process leading to this success—i.e., starting with plenary to mobilizing hundreds of volunteer international scholars to sifting through thousands of grey and published literature and review comments and provide a credible assessment—is a very important subject of social science research for knowledge sharing. But also the need to re-assess the mandate of IPCC in the light of progress made on the level of understanding on anthropogenic climate change worldwide compared to e.g. in 1988 when IPCC was formed. For example, should future thematic area coverage of IPCC remain as in the three traditional working groups or should there be merger or an additional WG. Adjustment of the mandate may affect the IPCC process including the degree of transparency within its operation. The regional context of the success of IPCC is another essential area of investigation. How far has there been meaningful engagement of vulnerable regions in the IPCC process? What does the IPCC process and its outputs mean to different groups? Different approaches could be applied to conduct research on the IPCC process depending on the specific area of interest and also the working group involved. IPCC authors may on one hand be the subject of investigation but they may also be engaged as researchers for certain aspects of the IPCC process.

# Concerns, Challenges, and Opportunities: A WGIII Author Perspective

Jacob Mulugetta

IPCC WGIII CLA, University College London, UK

Embedding social science research in the various IPCC processes presents us with new opportunities and challenges. Those who have participated in the IPCC as lead authors acknowledge the importance of team building in the chapters and across the AR, having participatory consensus building processes in author teams around areas of conflicts, and basically to work for the common goal of high quality assessment report.

All these issues come up against a number of challenges that impact the quality of the final product. Some of these include questions such as:

- How to prioritize what is to be included in the chapters?
- What are the differences in the understanding of key concepts such as risk among the lead authors who come from a range of disciplines and geographical backgrounds?
- In what way does discipline dominance (economics, engineering or sociology) shape the framing of the chapters?
- What effect does chapter dominance within the whole report affect the assessment of chapters? For example, what influence did the modeling chapter have on the sector chapters?
- Are some lead authors from certain geographical regions at a disadvantage with they way lead author meetings are conducted?

• Does language limit the participation of some lead authors?

While ethnographic studies may help the IPCC to improve its internal process, this will depend on a number of issues. Firstly, how transferrable are ethnographic studies conducted at national level (such as the National Research Council) to an international and complex science-policy process such as the IPCC? Secondly, what degree of independence should the researchers be granted and how much access could they be granted to do their job well and for the lead authors to do their well? Thirdly, would having a research team embedded in the chapters impact the team dynamics and willingness of authors to discuss about conflict issues freely? Fourthly, which methodologies/ approaches would be seen as effective and will not add to the workload of the lead authors?

Further, the ethnographic studies could offer a mechanism to reflect on the variety of perspectives, disciplinary tensions, gender and regional balance issues. To this end, interim results can be used to feed into improvement in communications, team dynamics, widen perspectives and establish dialogue between disciplines. Finally, it would help if the composition of the observers is sufficiently representative to handle the issues of culture, gender and geographical balance. Ideally, this would mean having an international team of researchers who have the skills set to undertake the studies.

# Concerns, Challenges, and Opportunities: An IPCC Focal Point Perspective

Jose Romero

#### Federal Office for the Environment, Switzerland

As Swiss IPCC Focal Point since the last 19 years, my experience on matters related to requests for studies on the IPCC include demands from a broad range of stakeholders and the public. These requests emanate from academia to primary schools, the private sector, journalists and private persons with interest in climate change issues, including lobbyists and persons challenging the IPCC assessments from various paradigmatic perspectives. Therefore, the IPCC has to adopt a data and information policy (with principles, rules and institutional arrangements) with the aim, inter alia, to clarify the management and access from outside the IPCC to internal information. By doing so, there is a need to ensure responsiveness, openness to any request for information while protecting the privacy and the reputation of the experts participating to the IPCC process, avoiding conflict of interest, and comparable and fair access conditions to the IPCC information in all countries, in particular for all academic institutions around the world.

# Concerns, Challenges, and Opportunities: An IPCC Focal Point Perspective

Khalid Mohamed Abuleif

#### Ministry of Petroleum and Mineral, Saudi Arabia

As a developing country, IPCC science is the main authoritative comprehensive report that is used as a reference to many decisions by many countries. Therefore, approach, content and outreach are essential for IPCC to continue its success and build on it as authoritative, credible and comprehensive reports.

Social science is very sensitive to local, national, regional and international circumstances, priorities and outlooks. Therefore, the scientific methods for social science in the IPCC must account for the social and economic perspective between the North and the South.

The discussion will focus in the beginning on the evolving role of governments and its focal points from the first to the fifth assessment reports with regard to social sciences. The focus, then, will turn to the role of the approach, content and outreach requirements in advancing developing countries effective participation in the IPCC.

On the approach, developing countries are usually concerned with the lack of effective and proper participation in all aspects of the process. Lack of proper participation will impact the recognition of different circumstances between the developed and developing countries. As a developing country focal point, the perception is that there two major processes under the IPCC. first level is the buildup and development of the assessment and the second level is the approval and endorsement of the work at the policy maker level. The perception is that there are major gaps in the first level in in two interrelated areas: 1) the feed in regional literature, 2) the regional expert pool. This is mainly reflected in the outcomes of the IPCC in the social science related outputs. Also, this why many developing countries are very vocal in the second level related to the review and approval of the report for policy makers.

On the content, there is a need to integrate the recognition of different circumstances of our stakeholders particularly the developing countries. They do have a perception that the reports lack treatment of the regional aspects related to information and assessment, sustainable development requirements, equity concerns, and empathy to poverty eradication.

On the outreach, IPCC present an important resource for those countries (developed or developing countries) who does not have the ability to conduct their own national assessment of climate change and its implication on them. It is also difficult to most of the developing countries that do not have resources to even have outreach. Therefore, translation to other languages, offering regional workshops, and providing materials that have regional aspects are extremely important to ensure that IPCC will continue its future success.

To build on the success and reputation of the IPCC as the most comprehensive, credible and authoritative assessments reports, we need to address these precept actions and cater for these concerns.

IPCC Expert Meeting on Potential Studies of the IPCC Process - 32

## Annex 3: Breakout Group (BOG) Guidance

**Breakout Group 1:** *Guidelines covering author and studier requirements in studies of IPCC assessment and consensus-building processes.* 

Chair: David Wratt, Rapporteur: Gian-Kasper Plattner

This Breakout Group will cover issues like the authors as objects of study, admission of observers in any kind of discussions/debates (in personal meetings, web-based discussions, etc.), protection of authors, free room for open discussions among experts, access to author team correspondence, as well as requirements on study teams to address these issues. An important output will be a set of bullet-point suggested guidelines for the IPCC on these matters, for further discussion in the plenary session of the Expert Meeting.

**Breakout Group 2:** *Guidelines regarding studies requiring access to information and data held by the IPCC, including the Secretariat, the Technical Support Units, author home institutions, and National Focal Points.* Chair: Catherine Johnson, Rapporteur: Ellie Farahani

This Breakout Group will cover issues related to formal requirements for potential requests, IPCC-internal decision process (including guidance on how to make decisions on whether to accept a particular request), access to information and data relevant to the assessment process, including related to IPCC procedures and process (rather than science), also covering legal (FOI) issues, as well as requirements on study teams to address these issues. An important output will be a set of bullet-point suggested guidelines for the IPCC on these matters, for further discussion in the plenary session of the Expert Meeting.

## Annex 4: Expert Meeting Proposal and Scoping Paper

The Panel at its 39<sup>th</sup> Session discussed the matter of potential studies of the IPCC process and it requested the Executive Committee to initiate an expert meeting which should produce a report that recommends principles to guide the IPCC's engagement with such research. The Executive Committee addressed this issue at its 27<sup>th</sup>, 28<sup>th</sup> and 29<sup>th</sup> meetings and approved the following paper on the Scope of the IPCC Expert Meeting on Studies of the IPCC Process.

#### Scope of IPCC Expert Meeting on studies of the IPCC process

Based on a request from the IPCC-37 and in line with section 7.1 on IPCC Workshops and Expert Meetings of Appendix A to the Principles Governing IPCC Work

#### Background

The IPCC is in many ways a unique institution. It has operated successfully for more than 25 years at the science policy interface. 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. IPCC reports should be policy relevant but not policy prescriptive. IPCC reports provide a balanced assessment of what is known and what is not known. The process engages scientists in a manner that assures development of the report contents by the entire scientific community, while at the same time the procedures allow governments to trust the process and "own" the reports when they are complete. The IPCC process is an attractive target for serious studies by social scientists from a range of disciplines. Potentially interesting and valuable studies might address history, organizational dynamics, sociology, political science, psychology, or a combination of these disciplines. At least three kinds of considerations motivate studies of the IPCC. One is that the institution combines importance with unique features. IPCC is simply different from all of the other entities that provide scientific information at the interface with policy. A second motivation is providing information to support improving the process. The ongoing evolution of technology for generating reports, geographic spread of authors, publishing technology, and stakeholder needs all point to the value of information to underlie future changes to the IPCC process. A third motivation is the historical and ongoing attacks on the IPCC, especially from organizations with concerns about the messages. High quality research on the IPCC process could potentially help address some of these criticisms and improve the depth of public understanding of the IPCC. The IPCC has been the subject of several studies, ranging from historical narratives (Bolin 2007) to the psychology of risk communication (Budescu et al. 2009). None of the past studies has, however, used careful scholarly methods to study the inner workings of the IPCC process. There are a lot of first-person narratives based on the experiences of authors and country delegates, but there are no systematic studies based on observations in writing meetings and at approval sessions. While there may be much to be gained from systematic studies of the IPCC process, there are also some important challenges that need to be addressed. Perhaps the most important of these is finding a way to open options for including observers into author meetings while also assuring that authors feel fully empowered to express their views and allow discussions to mature, without concern that some entity is looking over their shoulders. A second concern is assuring that the discussions in author teams are limited to authors and that embedding non-authors in the author meetings might distort the discussions or balance of the writing team. A third possible concern is whether the IPCC culture of openness and supportiveness is somehow threatened by embedding non-authors. A fourth is the status of documents to which the researchers are given access to by IPCC during their work, and the status of their own notes and documents on Lead Authors and other IPCC meetings or discussions with authors. Finally, the large number of authors makes it challenging to assure informed consent. The presence of non-authors in writing meetings, and perhaps at Bureau and Plenary meetings, should not come as a surprise to anyone.

Finding a way to facilitate studies of the IPCC process while also recognizing the challenges is a subtle task. Following a discussion of the IPCC Panel at its 37th Session, the Panel requested the IPCC Executive Committee to initiate an Expert Meeting on studies of the IPCC process and to produce a report that recommends principles to guide the IPCC's engagement in such research.

#### **Aim of Expert Meeting**

The specific aims should include:

- 1) Collecting perspectives on useful targets of study and research questions
- 2) Clarifying potential and real concerns about informed consent and other challenges
- 3) Suggesting processes and guidelines for decision by the IPCC Panel on whether to accept particular future requests for studies of the IPCC process that involve embedding non-authors in writing team meetings or in other IPCC activities.
- 4) Suggesting guidelines for undertaking such studies.
- 5) To inform the work of the Task Group on the Future Work of IPCC.

#### **Scientific Steering Committee**

The Scientific Steering Committee will meet by phone to consider the list of experts drafted by the Secretariat and to be recommended to the IPCC Chair for decision and the draft agenda for the meeting prepared by the Secretariat. The Scientific Steering Committee will consist of (listed alphabetically):

Shardul Agrawala	CLA WGIII (India)
Eduardo Calvo	Vice-Chair WGII (Peru)
Renate Christ	Secretary of the IPCC (IPCC)
Cathy Johnson	UK Government representative, Co-Chair of the contact group at IPCC-37 (UK)
Youba Sokona	Co-Chair WGIII (Mali), Chair of the Scientific Steering Committee
Naomi Oreskes	Harvard University (representing social scientists interested in conducting studies) (USA)
Jongikhaya Witi	South Africa Government representative, Co-Chair of the contact group at IPCC-37 (South Africa)
David Wratt	Vice-Chair WGI (New Zealand)

#### Product

The primary product of the Expert Meeting will be a report that recommends principles to guide the IPCC's engagement in potential studies of the IPCC process, for consideration by the IPCC Panel. The report of the meeting will explain the motivation behind the suggestions. The suggested guidelines and the report of the meeting will be available on the internet and in printed form. The outcomes will be available in time to inform the work of the Task Group on the Future of the IPCC.

#### **Timetable and Location**

The meeting will be held in Geneva in February 2015.

2014	
1 August	Nominations from the Executive Committee and Working Group/Task Force Bureaux
6 October	Meeting of the Scientific Steering Committee
2015	
February	Expert Meeting in Geneva
April	Draft suggested guidelines and meeting report
June	Final suggested guidelines and meeting report
IPCC-42	Consideration of the Expert Meeting suggestions by the Panel

#### **Participants**

The Panel requested a meeting of 40 participants (IPCC-37 report). Participants should include IPCC authors, country delegates, Executive Committee, Working Group and Technical Support Unit members, experts with published research in the field, and social scientists potentially interested in proposing studies of the IPCC process. Participants should be suggested by Executive Committee, as well as Working Group/Task Force Bureaux through their respective Co-Chairs.

#### **Financial Resources**

Funds required will include participant support for up to 16 experts eligible for support from the IPCC Trust Fund (confirm details), plus funds for facilitating a meeting at WMO Headquarters.

#### References

- Bolin, B. 2007: *A history of the science and politics of climate change: the role of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, UK; New York.
- Budescu, D., S. Broomell, and H. Por. 2009: *Improving communication of uncertainty in the reports of the intergovernmental panel on climate change*. Psychological Science **20**:299.

### **Annex 5: List of Participants**

Khalid Mohamed ABULEIF Ministry of Petroleum and Mineral Resources SAUDI ARABIA

Silke BECK Helmholtz Centre for Environmental Research - UFZ GERMANY

Ella BEHLYAROVA Aarhus Convention Secretariat United Nations Economic Commission for Europe SWITZERLAND

Max BOYKOFF Center for Science and Technology Policy Research University of Colorado-Boulder USA

Eduardo CALVO Vice-Chair, IPCC WGII Universidad Nacional Mayor de San Marcos (UNMSM) PERU

Renate CHRIST Secretary of the IPCC IPCC Secretariat SWITZERLAND

John CHURCH CLA, IPCC WGI AR5 Commonwealth Scientific and Industrial Research Organisation (CSIRO) AUSTRALIA

Amy DAHAN Centre National de la Recherche Scientifique (CNRS) FRANCE

Omar DEWACHI American University of Beirut LEBANON Dave DOKKEN Head, IPCC WGII TSU USA

Pauline DUBE RE, IPCC WGII AR5 University of Botswana BOTSWANA

Charbel EL-HANI Institute of Biology Federal University of Bahia BRAZIL

Ellie FARAHANI IPCC WGIII TSU GERMANY

Christian FLACHSLAND Mercator Research Institute on Global Commons and Climate Change (MCC) GERMANY

Tsegay GEORGIS-WOLDE Institute of Arctic and Alpine Research University of Colorado USA

Gladys HERNANDEZ-PEDRAZA Centro de Investigaciones de la Economía Mundial (CIEM) CUBA

Yasuaki HIJIOKA LA, IPCC WGII AR5 National Institute for Environmental Studies JAPAN

Taka HIRAISHI Co-Chair, IPCC TFI Institute for Global Environmental Strategies JAPAN

Joshua HOWE Reed College USA Lance IGNON Citizen Group Communications USA

Antonina IVANOVA BONCHEVA Vice-Chair, IPCC WGIII Autonomous University of Southern Baja California MEXICO

Catherine JOHNSON Department of Energy and Climate Change (DECC) UNITED KINGDOM

Pia KOHLER Williams College Center for Environmental Studies USA

Martin KOWARSCH Mercator Research Institute on Global Commons and Climate Change (MCC) GERMANY

Thelma KRUG Co-Chair, TFI International Affairs Office INPE National Institute for Space Research BRAZIL

Maria Carmen LEMOS LA, IPCC WGII AR5 School of Natural Resources and Environment University of Michigan USA

Jonathan LYNN IPCC Secretariat SWITZERLAND

Katharine MACH IPCC WGII TSU USA

Martin MAHONY King's College London UNITED KINGDOM

Ramón PICHS MADRUGA Co-Chair, IPCC WGIII Centro de Investigaciones de la Economia Mundial (CIEM) CUBA Carlos MARTIN-NOVELLA Deputy Secretary of the IPCC IPCC Secretariat SWITZERLAND

Ritu MATHUR LA, IPCC WGIII AR5 The Energy & Resources Institute (TERI) INDIA

Leo MEYER Head, IPCC SYR TSU PBL Netherlands Environmental Assessment Agency NETHERLANDS

Jose MORENO Vice-Chair, IPCC WGII University of Castilla-La Mancha (UCLM) SPAIN

Yacob MULUGETTA CLA, IPCC WGIII AR5 University College London (UCL) UNITED KINGDOM

Chukwumerije OKEREKE LA, IPCC WGIII AR5 University of Reading UNITED KINGDOM

Michael OPPENHEIMER CLA, IPCC WGII AR5 Princeton University USA

Jessica O'REILLY College of Saint Benedict/ Saint John's University USA

Naomi ORESKES Department of the History of Science Harvard University USA

Luis PAZ-CASTRO Institute of Meteorology (INSMET) CUBA Gian-Kasper PLATTNER Head, IPCC WGI TSU SWITZERLAND

Michael PRATHER LA, IPCC WGI & WGII AR5 Department of Earth System Science University of California USA

José ROMERO Federal Office for the Environment (BAFU / FOEN) SWITZERLAND

Patricia ROMERO-LANKAO CLA, IPCC WGII AR5 Research Applications Laboratory (RAL) National Center for Atmospheric Research USA

Sophie SCHLINGEMANN IPCC Secretariat SWITZERLAND

Jim SKEA Vice-Chair, IPCC WGIII Imperial College London & UK Energy Research Centre (UKERC) UNITED KINGDOM

Youba SOKONA Co-Chair, IPCC WGIII The South Centre SWITZERLAND Melinda TIGNOR IPCC WGI TSU SWITZERLAND

Jean-Pascal VAN YPERSELE Vice-chair of the IPCC Université catholique de Louvain (UCL) BELGIUM

David WRATT Vice-Chair, IPCC WGI National Institute of Water and Atmospheric Research (NIWA) NEW ZEALAND

Yulia YAMINEVA University of Eastern Finland FINLAND

Taha ZATARI Vice-Chair, IPCC WGIII Ministry of Petroleum and Mineral Resources SAUDI ARABIA

Francis ZWIERS Vice-Chair, IPCC WGI University of Victoria CANADA