

How Early Career Research Scientists can contribute to the work of the IPCC

What roles are there?

Hundreds of experts in the different areas volunteer their time and expertise to produce the reports of the Intergovernmental Panel on Climate Change. The roles of these experts are different.

Report chapters are prepared by teams consisting of **Coordinating Lead Authors, Lead Authors** and **Review Editors**. Coordinating Lead Authors and Lead Authors have collective responsibility for the contents of a chapter. Hundreds of Contributing Authors assist the work of the author teams, provide specific knowledge or expertise in a given area, and help ensure that the full range of views held in the scientific community is reflected in the report. Author teams are supported by **Chapter Scientists**.

The **Review Editors** ensure that all substantive comments received during review are given appropriate consideration by the author teams and ensure that genuine diversity in perspectives in the literature is reflected adequately in the report.

The Coordinating Lead Authors and Lead Authors are selected by the Bureau of the respective Working Group or of the Task Force on National Greenhouse Gas Inventories. The Working Groups and Task Force are supported by **Technical Support Units**, whose staff help authors with the preparation of reports, from the organization of Lead Author Meetings and Approval Plenaries to compiling relevant material and editing drafts. These include a number of scientific roles.

Expert Reviewers and government representatives are invited at different stages to comment on the draft reports.

How to get involved?

The basic strategy is to build your reputation and get noticed: publish, go to conferences, engage in online debates. Much IPCC participation is through recommendation or invitation so your name should be out there.

Contribute to existing literature

IPCC reports are assessments of published literature. Contributing to the body of existing published literature through articles in peer-reviewed journals provides the essential foundation for the assessment, as IPCC reports can only be as good as the available literature.

In order for a paper to be assessed in a particular report, it must be accepted for publication or published by a certain date. Working Groups issue different cut-off dates for publication for the reports that they are working on. These dates are posted on the IPCC website (www.ipcc.ch).

As Lead Authors and Contributing Authors

Following a call of nominations, experts are suggested for the roles of Coordinating Lead Authors, Lead Authors and Review Editors by IPCC Bureau Members and IPCC Focal Points from governments and observer organizations.

Coordinating Lead Authors are responsible for coordinating work on major sections of a report such as chapters. Review Editors help identify expert reviewers, ensure that all substantive comments are afforded appropriate consideration, and advise Lead Authors on how to handle contentious or controversial issues. These roles require considerable experience.

For Early Career Research Scientists the roles of Lead Author and Contributing Author are more appropriate. Lead Authors are responsible for the production of designated sections of the report within a chapter on the basis of the best scientific, technical and socio-economic information available. Contributing Authors prepare technical information in the form of text, graphs or data for assimilation by the Lead Authors into the draft of a section. Contributions may be solicited by Lead Authors but unsolicited contributions are encouraged.

After the nomination deadline, the Bureau of the relevant IPCC Working Group or Task Force selects the scientists for the roles of Coordinating Lead Authors, Lead Authors and Review Editors, taking into account that the composition of author teams aims to reflect a range of scientific, technical and socio-economic views and backgrounds. They select experts known through their publications and works, whose profile fits the expertise required by the approved outline of the report.

A comprehensive assessment requires author teams to include a mix of experts from the six World Meteorological Organization regions and from developed and developing countries in general. This ensures that reports are not biased towards the perspective of any one country or group of countries, and that questions of importance to particular regions are not overlooked. Conversely, it can be difficult to stand out in the nomination or selection process if you come from a region where many experts are based.

The IPCC also seeks a balance of men and women, as well as between those experienced with working on IPCC reports and those new to the process, including Early Career Scientists. Author teams may also include experts from industry and from non-governmental organizations who can bring a valuable perspective to the assessment.

Working as a Coordinating Lead Author or Lead Author involves a significant commitment of time.

Coordinating Lead Authors and Lead Authors may enlist other experts as Contributing Authors to assist with their work.

If you are interested in becoming an IPCC Lead Author look out for calls for nominations and contact the relevant IPCC government or observer organization focal points and/or Bureau members for more information.

If you are interested in becoming an IPCC Contributing Author, contact the relevant IPCC Technical Support Unit for more information.

As Chapter Scientists

Chapter Scientists are scientific assistants who provide technical and logistical support to author teams. They assist chapter teams with technical aspects of chapter development, including cross-checking between findings presented in different parts of the report, additional fact-checking, and reference management. Chapter Scientists are either recruited directly by Coordinating Lead Authors of a specific chapter, or through a call issued by the Technical Support Unit.

(More on Chapter Scientists in this article: <http://www.sciencedirect.com/science/article/pii/S1877343515000640>)

As Expert Reviewers

The IPCC is committed to preparing reports that aim for the highest standards of scientific excellence, balance, and clarity. The review process includes wide participation, with hundreds of reviewers critiquing the accuracy and completeness of the scientific assessment contained in the drafts.

Multiple stages of review are an essential part of the IPCC process to ensure a comprehensive, objective and transparent assessment of the current state of knowledge of the science related to climate change. There are two stages of review; an Expert Review of the First Order Draft, and a Government and Expert Review of the Second Order Draft.

At the beginning of each review period, the IPCC issues a press release with details of the duration of the review period and how to participate. Look out for these announcements on the IPCC website and volunteer as an Expert Reviewer.

Expert Reviewers must provide a self-declaration of expertise. No further qualifications, or publishing record, are required.

An Expert Reviewer may decide to comment on one section of the report, or a complete chapter, or the report as a whole, for instance looking at structural questions.

Other possibilities

During an assessment cycle the IPCC organizes and co-sponsors conferences, workshops and expert meetings to contribute to the work programme of a Working Group or Task Force or the IPCC as a whole. These also offer opportunities for participation.

How to keep informed?

To be involved – keep informed about the activities of the IPCC.

- Learn about the IPCC processes and how the IPCC produces its reports. This knowledge will help you to follow up the different stages in the production of the report and understand the different roles the various experts are playing.
- If you are a scientist from a developing country you might be interested in learning about the IPCC Scholarship Programme, which was established with the funds received from the 2007 Nobel Peace Prize award to the IPCC. The aim of the Scholarship Programme is to build capacity in the understanding and management of climate change in developing countries by providing opportunities for Early Career Scientists from developing countries to undertake doctoral studies.
- Participate in the outreach events the IPCC is holding around the world to create awareness about its work of and findings. Webinars and video presentations could also be organized for you.

To do that:

- Check the IPCC website regularly for up-to-date information: www.ipcc.ch
- Follow IPCC on  @ipcc ,  @ipcc_ch ,  @ipcc ,  @ipcc and send questions to ipcc-media@wmo.int
- For information and activities specific to a Working Group or Task Force:

<http://wg1.ipcc.ch/>

tsu@ipcc-wg1.universite-paris-saclay.fr

<http://www.ipcc-wg2.awi.de/>

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