# How to participate in the IPCC

The Intergovernmental Panel on Climate Change (IPCC) assesses the state of scientific, technical and socio-economic knowledge on climate change, its impacts and risks, and response options. The IPCC does not conduct its own research, so these assessments can only be as comprehensive and representative as the available literature.

Different regions and sectors are not all equally represented in the literature. In some cases, knowledge is not yet in a form the IPCC can (readily) assess and IPCC assessments often include information on knowledge gaps. By addressing these imbalances and gaps, the scientific community can help improve future IPCC assessments. Rigorous review of draft documents by experts and governments around the world is also essential to ensure an objective and complete assessment and to reflect a diverse range of views and expertise.

This document provides guidance and suggestions that aim to help the scientific community participate and contribute more effectively in IPCC processes and products, and to stimulate activities that can improve the global knowledge base relevant to climate change.





# **1** BRIEF OVERVIEW

Participate in the IPCC through:

•	Section 3 - <b>Publication of relevant literature</b>		4
	0	Check approved AR6 chapter and cross-chapter content outlines of the three Working Groups (WGI, WGII and WGIII)	
	0	Check for mention of knowledge gaps in past reports.	
	0	Check other emerging topics.	
	0	Particularly valuable for assessments: policy-relevant information, robust findings, numerical information useful for planning, costing, evaluation.	
•	Sec	tion 4 - Co-authoring IPCC reports	8
	0	Lead Authors are nominated by IPCC government Focal Points or Observer Organizations and selected by the IPCC Bureau based on expertise, aiming for regional, sectorial and gender balance	
•	Sec	tion 5 - Expert meetings and workshops	9
•	Sec	tion 6 - Nomination Process	10
•	Section 7 - Expert review of IPCC reports		11
	0	Review any part of the report, drawing on your personal experience and knowledge of the literature	
	0	Check for coverage, balance, accuracy, handling of topics, biases, important conclusions, overlaps, gaps, inconsistencies, language, references, etc. and suggest improved text	
	0	Upcoming review periods of IPCC reports, 6th Assessment Cycle:  — WGI: 2 March — 26 April 2020	
		<ul> <li>WGII: 18 October – 13 December 2019 and 7 August – 2 October 2020</li> <li>WGIII: 13 January 2020 – 1 March 2020 and 13 July – 13 September 2020</li> </ul>	
•	Sec	tion 8 - Networking, outreach and communications	14
Fur	thor	datails follow below	





## **2** IPCC FACT SHEETS

What is the IPCC?
 https://www.ipcc.ch/site/assets/uploads/2018/02/FS what ipcc.pdf

• Highlights of IPCC history https://www.ipcc.ch/site/assets/uploads/2018/04/FS\_timeline.pdf

• About the 6th Assessment Cycle https://www.ipcc.ch/site/assets/uploads/2018/09/AC6\_brochure\_en.pdf

• How does the IPCC select its authors? https://www.ipcc.ch/site/assets/uploads/2018/02/FS\_select\_authors.pdf

• What literature does the IPCC assess? https://www.ipcc.ch/site/assets/uploads/2018/02/FS\_ipcc\_assess.pdf

• How does the IPCC review process work? https://www.ipcc.ch/site/assets/uploads/2018/02/FS\_review\_process.pdf

• How does the IPCC approve reports? https://www.ipcc.ch/site/assets/uploads/2018/02/FS\_ipcc\_approve.pdf

• How does the IPCC deal with alleged errors? https://www.ipcc.ch/site/assets/uploads/2018/02/FS\_ipcc\_deals\_errors.pdf





# **3** PUBLICATION OF RELEVANT LITERATURE

- To get an idea of **topics that are relevant to the IPCC**, check the **approved content outlines** of the three Working Groups (WGI, WGII and WGIII) contributions to the Sixth Assessment Report (AR6) currently under preparation both chapters and cross-chapter papers. The cut-off dates for literature included in the assessment are strictly enforced to reduce inclusion bias.
  - WGI The Physical Science Basis https://www.ipcc.ch/site/assets/uploads/2018/11/AR6\_WGI\_outlines\_P46.pdf
    - Submitted, accepted or published by 31 December 2019
    - Accepted or published by 30 September 2020
  - WGII Impacts, Adaptation and Vulnerability https://www.ipcc.ch/site/assets/uploads/2018/11/AR6\_WGII\_outlines\_P46.pdf
    - Submitted, accepted or published by 26 June 2020
    - Accepted or published by 14 May 2021
  - WGIII Mitigation of Climate Change https://www.ipcc.ch/site/assets/uploads/2018/11/AR6\_WGIII\_outlines\_P46.pdf
    - Submitted, accepted or published by 15 June 2020
    - Accepted or published by 19 January 2021
- Ideally publish in **peer-reviewed journals**, but the IPCC also assesses other types of literature **grey literature**, which include reports, white papers and books.
  - One option is to upgrade grey to peer reviewed literature. Publish syntheses and reviews from industry journals, or reports and working papers from governments, industry, research institutions and organizations, or conference and workshop proceedings.
  - Publish as yet unpublished data, at least as grey literature.
  - o If you publish a grey literature the material is reviewed before publication and the final document is accessible to authors. Ensure that it fulfils the **minimum requirements for grey literature**, see the IPCC Guidance Note on Literature: https://wg1.ipcc.ch/AR6/documents/AR6\_WGI\_General\_Guidance\_note\_on\_literature.pdf
  - A paper about indigenous knowledge, published in a peer-reviewed journal, is a good way to bring indigenous knowledge into the IPCC assessment



- A good source for research inspiration are any **knowledge gaps** reported in IPCC reports. Reported knowledge gaps do not undermine the key findings of reports, but flag areas where knowledge was missing and thus was not part of the assessment. These knowledge gaps indicate policy-relevant research directions where new knowledge production will be particularly useful for the AR6. Check for mention of knowledge gaps in IPCC reports, such as
  - various reports from the previous 5th Assessment Cycle
  - ° The Special Reports on The Impacts of Global Warming of 1.5°C (SR15) Climate Change and Land (SRCCL) and The Ocean and Cryosphere in a Changing Climate (SROCC) from the current 6th Assessment Cycle
  - Find reports at https://www.ipcc.ch/reports/
  - Orafts of the main assessment of the current cycle. These can be accessed by registering as an expert reviewer, see Section 7 on Review of IPCC reports for details

#### • Emerging topics from the 6th Assessment Cycle:

- Cities and urban issues, earmarked for a Special Report in the 7th Assessment Cycle. See the cities and climate change research agenda that was the output of a conference convened by nine international partners and co-sponsored by the IPCC: https://citiesipcc.org/wp-content/uploads/2018/09/Research-Agenda-Aug-10\_Final\_Long-version.pdf
- Risks and response options (or solutions) in both adaptation and mitigation, with evidence
- Co-benefits risks and co-costs of mitigation and adaptation, including interactions and trade-offs, technological and financial challenges and options
- Ethics and equity: climate change, sustainable development (including the United Nations Sustainable Development Goals), gender, poverty eradication, livelihoods, and food security
- Perception of risks and benefits of climate change, adaptation and mitigation options, and societal responses, including psychological and sociological aspects
- ° Climate engineering, greenhouse gas removal, and associated feedbacks and impacts
- Nature-based solutions that have benefits for local communities, adaptation, carbon storage, and biodiversity
- Regional and sectoral climate information
- Different forms of climate-related knowledge and data, including indigenous and practice-based knowledge

#### **3** PUBLICATION OF RELEVANT LITERATURE (cont.)

- Any topics covered in IPCC assessments where a regional perspective is still missing
- Numerical information useful for planning, costing, evaluation etc (rather than just descriptive)
- After publication, increase the impact of your research by presenting at conferences and produce **conference proceedings**
- What is particularly useful in publications:
  - Make it easy for the IPCC authors to extract relevant information from your article.
    - Numerical information that can be easily assessed and compared with other similar studies, with clear reporting of data, methodologies, caveats and uncertainty
    - Synthesis work that clearly sets out evidence
    - Studies that address topics in the scoped outline; regional case studies; process understanding; evaluation of actions and solutions
  - The role of the IPCC is to be policy-relevant but not prescriptive and there is an increasing focus on outlining the response and solution options available in different regions and at different scales. These include mitigation and adaptation, interactions (co-benefits and trade-offs) with each other and with the Sustainable Development Goals.
  - o For climate modellers, also see:
    - IPCC Good Practice Guidance Paper on detection and attribution at https://wq1.ipcc.ch/guidancepaper/IPCC\_D&A\_GoodPracticeGuidancePaper.pdf
    - IPCC Good Practice Guidance Paper on Assessing and Combining Multi Model Climate Projections https://wq1.ipcc.ch/quidancepaper/IPCC EM MME GoodPracticeGuidancePaper.pdf

#### Important considerations:

- Policy-relevant (people, area, health, financial, basic needs, security, etc.)
- Strong evidence, multiple lines of evidence, broad evidence, robust findings
- Numerical information useful for planning, costing, evaluation etc (rather than just descriptive)



- **Getting your publications seen by IPCC authors**, as individuals or group (e.g. institute or university department)
  - Via the expert review process
  - ° Contact relevant chapter authors alerting them of your work
  - Contact the relevant Technical Support Unit (TSU), who can then pass on the information to the relevant chapter authors
  - o It will be most helpful if you indicate which chapter/section/topic the research provides evidence for, and how. Also supply Internet links to these articles, the articles themselves (especially if they are published in smaller / local journals and for grey literature). In the case of multiple documents, providing the reference list as an EndNote or Mendeley database will be most helpful





### **4** CO-AUTHORING IPCC REPORTS

You can get directly involved in the production of the IPCC reports. To find out more about how reports are prepared, please see https://www.ipcc.ch/about/preparingreports/ and the fact sheets (linked above).

- **Chapter teams** consist of Coordinating Lead Authors (CLA), Lead Authors (LA), Review Editors (RE), Contributing Authors (CA), Chapter Scientists (CS).
- Coordinating Lead Authors, Lead Authors and Review Editors are
  - nominated by IPCC focal points from governments, observer organisations, and the IPCC Bureau, and
  - selected by the IPCC Bureau of the relevant IPCC Working Group or Task Force
  - balancing expertise, region and gender
- **Contributing Authors** and **Chapter Scientists** are invited to contribute by Lead Authors, also with balance for expertise, region and gender in mind.
- Also see the Nomination Process (Section 6)





# **5** EXPERT MEETINGS AND WORKSHOPS

- You can also get involved in the IPCC through:
  - Co-sponsored meetings
  - Expert meetings and Workshops
  - Scoping meetings
    - Each IPCC report starts with a scoping meeting where nominated experts prepare a draft outline of the report. See https://www.ipcc.ch/about/preparingreports/
  - Public lectures by IPCC authors
- Meetings are announced on the IPCC website and social media, see http://ipcc.ch/
  - Check News (https://www.ipcc.ch/news/), Activities (https://www.ipcc.ch/activities/) and Calendar (https://www.ipcc.ch/calendar/) for updates
- Also see Nomination Process (Section 6)





## **6** NOMINATION PROCESS

- To be considered for Lead Authorship or for expert IPCC meetings and workshops, you need to be nominated by either:
  - IPCC Focal Points
     https://www.ipcc.ch/apps/contact/interface/focalpoints.php
  - IPCC observer organizations
     https://www.ipcc.ch/list-observer-organisations/
    - The Admission policy for observer organizations is published at https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc-principles-observer-org-1.pdf
- **Calls for nominations** are advertised on various IPCC channels:
  - For instance, the News page on the IPCC website https://www.ipcc.ch/news/
  - Announcements are also on the IPCC Twitter account @IPCC\_CH
- Focal points and observer organizations also receive **letters of invitation** for nominations.
- If you as an individual are interested to take part in expert meetings or to become an author in the future, express your interest to the above.
- Video about being an IPCC author: https://vimeo.com/234523346 (trailer) https://vimeo.com/216669432 (full version)





## **7** EXPERT REVIEW OF IPCC REPORTS

We encourage you to register as an expert reviewer of IPCC reports via the IPCC website.

- Why become an expert reviewer?
  - Reviews are an essential part of the IPCC process, ensure highest standards of scientific excellence, clarity and balance, and encompass as wide a range of views, expertise and geographical representation as possible
  - Reviewers contribute to shaping and content of the report, gain new scientific knowledge, broaden their scope, and gain useful experience of IPCC process. They do not go unnoticed
  - Videos: Encouragement of African scientists to review IPCC reports
    - Dr Youba Sokona (IPCC Vice-Chair): https://youtu.be/ooeDPo7NZul
    - Dr Cheikh Mbow (IPCC Coordinating Lead Author): https://youtu.be/FeKSzilYieE
- All reviewers are **acknowledged** in the annex to the published report, which is also provided online.
- Every comment receives a **response**. Once a report is published, the drafts, the comments submitted by expert reviewers on the drafts, and the responses from the IPCC chapter teams, are published on the IPCC website.
  - For example see SR15 at https://www.ipcc.ch/sr15/download/
- **Individual** or **group** reviews are possible.
  - See Guidelines for group reviews: https://apps.ipcc.ch/comments/srocc/sod/template/IPCCWG2\_GroupReviewGuidelines.pdf
- **Announcements of reviews** are published on the IPCC website and social media (see end of document)
- **Upcoming review periods** of IPCC reports, 6th Assessment Cycle:
  - WGI The Physical Science Basis
    - Second Order Draft: 2 March 26 April 2020
  - WGII Impacts, Adaptation and Vulnerability
    - First Order Draft: 18 October 13 December 2019
    - Second Order Draft: 7 August 2 October 2020
  - ° WGIII Mitigation of Climate Change
    - First Order Draft: 13 January 2020 1 March 2020
    - Second Order Draft: 13 July 13 September 2020
  - 6th Assessment Synthesis Report: dates to be confirmed





#### **7** EXPERT REVIEW OF IPCC REPORTS (cont.)

• Note on **confidentiality**: reviewers sign an agreement not to publicly disclose or talk about the content of the IPCC reports that they review until the report is published.

#### What to review?

- You may review the entire report, or only chapters or sections that interest you most, or that you know much about
- Practitioners and policymakers are also particularly encouraged to review the Executive Summaries, the Summary for Policymakers and the Frequently Asked Questions, and ultimately the Technical Summary
- Search for topics you are well acquainted with throughout the report and review instances
- Search by region or country throughout the report and review instances
- You may also comment on the structure and clarity of the report or a chapter or section
- Draw on your **personal experience and knowledge of the literature**. Provide your unique and valuable perspective. The more varied the experts that read and comment, the more balanced the reports will be.

#### • **Style** of comments:

- Formal, polite, constructive, helpful
- Comments should focus on content, not editorial issues
- Comments can be statements (should be factually correct), observations, suggestions, requests for clarification, etc.
- When suggesting substantive edits to content, comments should be supported by providing the reference to the underlying literature that is the basis of the suggestion
- Here are some suggestions on what to look out for:
  - ° Coverage: are topics covered comprehensively?
    - Check that the government-approved outline has been covered (see links under Section 3 Publication above). The outlines show the minimum content that must be included in chapters.
    - Look out for content gaps (for instance issues that are important but not yet, or not adequately covered)
  - Accuracy: look out for factual errors, things that do not apply / are different (in your field/region specifically, or generally)
  - Check handling of topics (e.g. silo approach only, missing integrated approach)
  - Look out for **biases** (e.g. where evidence is under-represented, or represented in a skewed way, for a topic or region)

- Look out for **important conclusions** that are relevant for policymakers in your region, that you think should be elevated (to Executive Summary or Summary for Policymakers), and point them out, giving reasons
  - Look especially at solutions and response options
- Is the language clear and understandable even to non-specialists? Call out overly complicated or highly technical language and jargon (especially in the formulation of key findings) and suggest alternative wording for improved clarity, so that conclusions are clearly expressed.
- ° Check references: are you aware of research that has not been assessed?
  - Supply references or Internet links to these articles
  - Send a copy of the articles themselves to the TSU, particularly for smaller / local journals and for grey literature
  - For non-English literature, send a short summary in English of the purpose and findings of the study
- Other things to look out for are provided in the Review Guidance Note published when a report opens for review. For example, the review of AR6 WGI First Order Draft (https://www.ipcc.ch/site/assets/uploads/2019/04/AR6\_WGI\_FOD\_Expert\_Review\_ GuidanceNote.pdf) suggested looking out for:
  - the structure, comprehensiveness and balance of the assessment
  - overlaps, inconsistencies, gaps in the assessment, for example across different chapters or in relation to other IPCC reports
  - shortening the text without loss of relevant information
  - improving the presentation of material graphically or through tables
- Whenever appropriate, suggestions for new wording (with references) are welcome.





# **8** NETWORKING, OUTREACH AND COMMUNICATIONS

- **Become familiar with content** of IPCC reports and communicate the information in your own countries and institutions.
- **Communicate on climate change** within your field of influence, through seminars, newspaper articles, social media, general public, schools etc.
  - See IPCC Principles for effective communication and public engagement on climate change handbook: https://wg1.ipcc.ch/AR6/documents/Climate-Outreach-IPCC-communications-handbook.pdf
  - See the IPCC Visual Style Guide for clear figures: https://www.ipcc.ch/site/assets/uploads/2019/04/IPCC-visual-style-guide.pdf
- Be involved in **public debate** around climate change to help mainstream knowledge from the assessments.
- Participate in **IPCC outreach events** and help advertise them locally. Events are announced on the IPCC website and social media.
- National Focal Points are encouraged to reach out across all relevant scientific disciplines (e.g. not just National Meteorological and Hydrological Services) for nominations and reviews. Encourage national platforms across ministries, institutions and universities to get multi-disciplinary input.





## **9** WEBINARS

- E-learning course on Reviewing Assessment Reports of the IPCC
  - How does the IPCC work? https://youtu.be/q-5Xd70M6CQ
  - How to conduct an IPCC review https://youtu.be/R3GzH4IKCaA
  - In-depth review analysis and further guidance https://youtu.be/uf-dffSZiC0
- How to get involved in the work of the IPCC as an Early Career Scientist https://www.youtube.com/watch?v=L5Ri4GBhcKk
  - Time stamp 2:55 Introduction: History of IPCC, function of IPCC, current assessment cycle
  - ° 13:07 **Roles in IPCC** and how to get involved
  - 20:53 Ways to contribute, particularly through **publication of relevant literature**, and how to make your research visible to the IPCC; how authors work, how they find literature, what literature they assess, literature suitable for IPCC assessment
  - 34:34 The 6th Assessment Cycle, the various products, how reports are prepared (scoping, outline, drafts, reviews, approval) concrete examples of where scientists can get involved
  - 55:34 Question and Answer session





# **10** CONTACT DETAILS

- IPCC website: https://www.ipcc.ch/news/
- Working Group and Task Force Websites
  - Working Group I: https://www.ipcc.ch/working-group/wg1
  - Working Group II: https://www.ipcc.ch/working-group/wg2
  - Working Group III: https://www.ipcc.ch/working-group/wq3
  - ° Task Force on National Greenhouse Gas Inventories: https://www.ipcc.ch/working-group/tfi
- IPCC social media sites:
  - ° Facebook: facebook.com/ipcc
  - Twitter: twitter.com/ipcc\_ch or @ipcc\_ch
  - Instagram: instagram.com/ipcc
  - LinkedIn: linkedin.com/company/ipcc
- Technical Support Units for more information:
  - Working Group I: tsu@ipcc-wg1.fr
  - Working Group II: tsu@ipcc-wg2.awi.de
  - Working Group III: tsu@ipcc-wg3.ac.uk
  - Task Force Inventories: nggip-tsu@iges.or.jp
- IPCC Secretariat: ipcc-sec@wmo.int



