



ICAO Symposium on Non-CO₂ Aviation Emissions

16 — 18 September 2024
Montréal, Canada

The banner features a stylized illustration of a white airplane flying over a green and blue landscape. A globe is visible in the background, and there are green plants in the foreground. The text is positioned on the right side of the banner.

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Jane Hupe

Deputy Director Environment

International Civil Aviation Organization (ICAO)

Closing

The banner features a green and blue background with a stylized globe, a white airplane flying over it, and a sun in the top left corner. The text is white and blue.

ICAO Symposium on Non-CO₂ Aviation Emissions

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Jan Fuglestedt

Research Director, CICERO
and

Vice-Chair, Working Group III
Intergovernmental Panel on Climate Change (IPCC)

Closing Speech

What's next from the IPCC?

The new IPCC bureau was elected July 2023

IPCC Chair
Jim Skea



The IPCC Vice-Chairs



Ladislaus Chang'a
IPCC Vice-Chair
TANZANIA, UNITED REPUBLIC OF



Ramón Pichs-Madruga
IPCC Vice-Chair
CUBA



Diana Úrge-Vorsatz
IPCC Vice-Chair
HUNGARY

Working Group I

Co-Chairs



Robert Vautard
Co-Chair, Working Group I
FRANCE



Xiaoye Zhang
Co-Chair, Working Group I
CHINA

Vice-Chairs



Edvin Aldrian
Vice-Chair, Working Group I
INDONESIA



Nana Ama Browne Klutse
Vice-Chair, Working Group I
GHANA



Aida Diongue
Vice-Chair, Working Group I
SENEGAL



Sherilee Harper
Vice-Chair, Working Group I
CANADA



Ines Camilloni
Vice-Chair, Working Group I
ARGENTINA



Sonia Seneviratne
Vice-Chair, Working Group I
SWITZERLAND



Maheshwar Rupakheti
Vice-Chair, Working Group I
NEPAL

Working Group II

Co-Chairs



Winston Chow
Co-Chair, Working Group II
SINGAPORE



Bart van den Hurk
Co-Chair, Working Group II
NETHERLANDS

Vice-Chairs



Fatima Denton
Vice-Chair, Working Group II
GAMBIA



Laura Gallardo
Vice-Chair, Working Group II
CHILE



Carlos Méndez
Vice-Chair, Working Group II
VENEZUELA, BOLIVARIAN REPUBLIC OF



Mark Howden
Vice-Chair, Working Group II
AUSTRALIA



Cromwel Lukorito
Vice-Chair, Working Group II
KENYA



Adelle Thomas
Vice-Chair, Working Group II
BAHAMAS



Raman Sukumar
Vice-Chair, Working Group II
INDIA



Zinta Zommers
Vice-Chair, Working Group II
LATVIA

Working Group III

Co-Chairs



Katherine Calvin
Co-Chair, Working Group III
UNITED STATES OF AMERICA



Joy Jacqueline Pereira
Co-Chair, Working Group III
MALAYSIA

Vice-Chairs



Malek Al Nory
Vice-Chair, Working Group III
SAUDI ARABIA



Eduardo Calvo Buendia
Vice-Chair, Working Group III
PERU



Siir Kilkis
Vice-Chair, Working Group III
TURKEY



Oliver Geden
Vice-Chair, Working Group III
GERMANY



Jan Sigurd Fuglestad
Vice-Chair, Working Group III
NORWAY



Noureddine Yassaa
Vice-Chair, Working Group III
ALGERIA



Gervais Isoua Madzous
Vice-Chair, Working Group III
CONGO

- **Special Report on Climate Change and Cities** (decision from the Sixth Assessment Cycle AR6).
- **Methodology report on Short-lived Climate Forcers** (decision from the AR6)
- **Methodology report Carbon Dioxide Removal Technologies, Carbon Capture Utilization and Storage**
- **Working Group contributions to the Seventh Assessment Report:**
 - Working Group I report on the Physical Science Basis
 - Working Group II report on Impacts, Adaptation and Vulnerability
 - Working Group III report on Mitigation of Climate Change
- **An update of the 1994 IPCC Technical Guidelines on impacts and adaptation as well as adaptation indicators and metrics, in conjunction with the Working Group II report and published as a separate product.**
- **Synthesis Report (SYR) based on key findings from the three Working Group reports by late 2029**

Report Process | Ten Steps



Chapter 4:

Future global climate: scenario-based projections and near-term information

Executive Summary

- Projections of global mean surface temperature and other key global indicators
- Evaluation of multi-model ensemble methods
- Large scale patterns of climate change
- Committed climate response, climate targets, overshoot, irreversibility, abrupt change
- Climate response to greenhouse gas removal scenarios
- Climate response to solar radiation management scenarios
- Interplay between internal variability and response to forcings, including short-lived forcers
- Variability and unexpected changes of global mean surface temperature
- Near-term predictability, sources and capabilities
- Synthesis of climate information in the near-term

Frequently Asked Questions

Report Process | Ten Steps

1 Scoping

The outline is drafted and developed by experts nominated by governments and observer organizations.

2 Approval of Outline

The Panel approves the outline.

3 Nomination of Authors

Governments and observer organizations nominate experts as authors.

4 Selection of Authors

The Bureau selects authors.

5 Expert Review First Order Draft (FOD)

Authors prepare a first draft which is reviewed by experts.

6 Government and Expert Review Second Order Draft (SOD)

The second draft of the report and first draft of the Summary for Policymakers (SPM) are reviewed by governments and experts.

7 Final Draft Report and SPM

Authors prepare final draft of the report and SPM which are sent to governments.

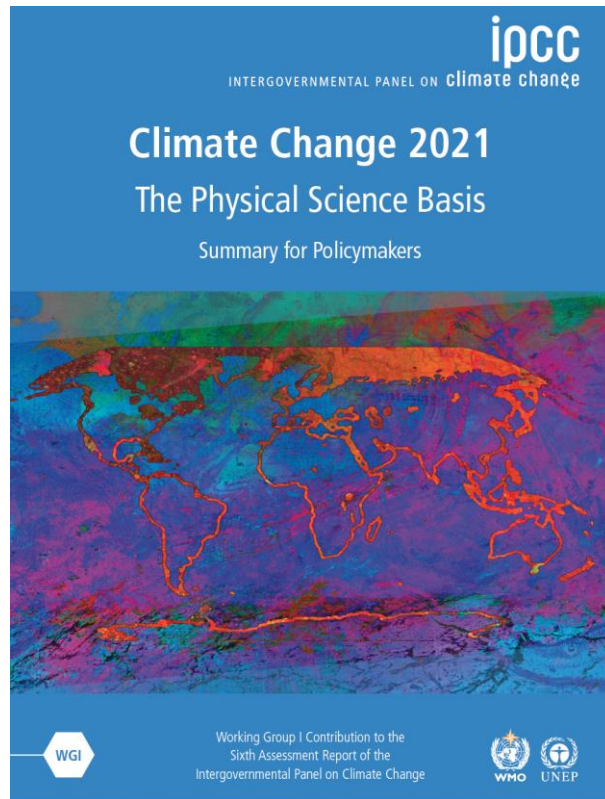
8 Government Review of Final Draft SPM

Governments review the final draft in preparation for its approval.

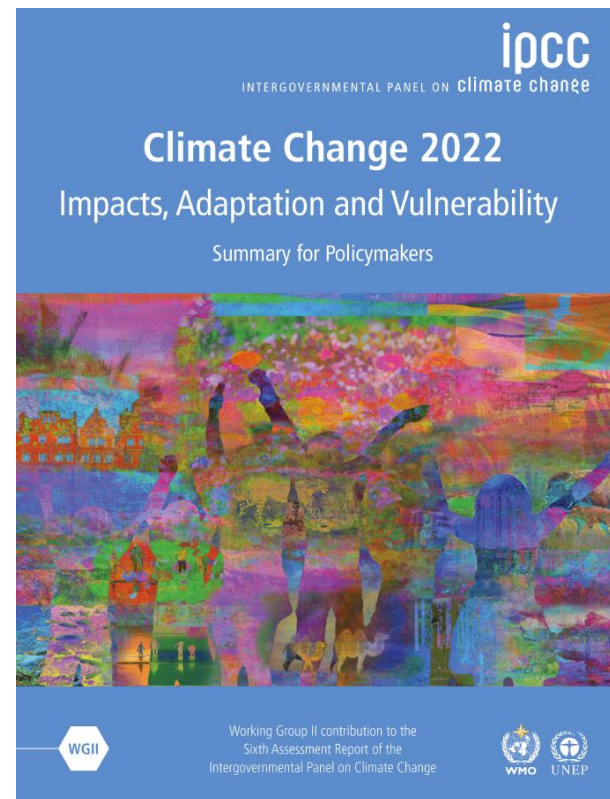
9 Approval & Acceptance of Report

Working Group/Panel approves SPM and accepts reports.

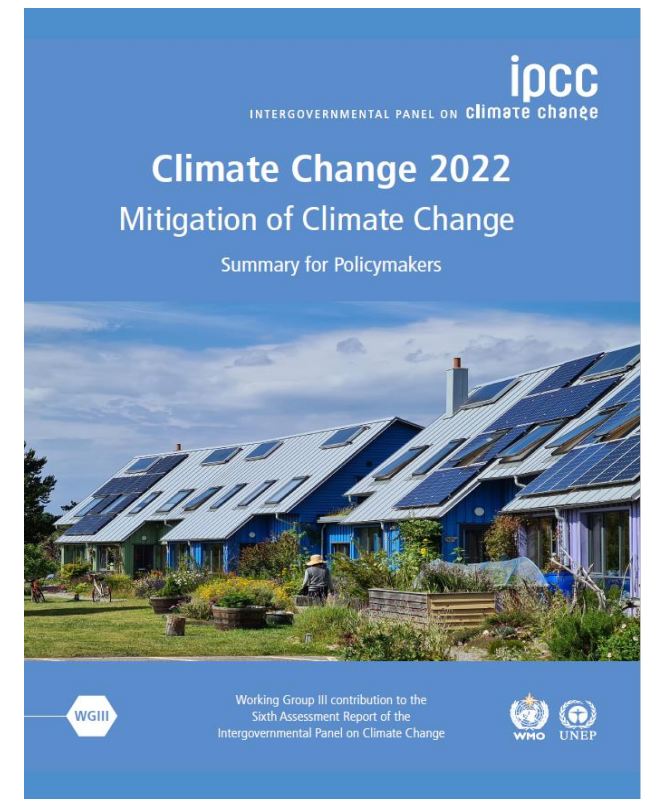
10 Publication of Report



234 authors, **65** countries
14,000+ scientific papers
78,000+ review comments



270 authors, **67** countries
34,000+ scientific papers
62,000+ review comments



278 authors, **65** countries
18,000+ scientific papers
59,000+ review comments

Scoping of Working Group reports and the Synthesis Report:

9-13 December, Kuala Lumpur

- 2210 expert nominations received
- Invites issued (240)
- Outlines will be presented to the IPCC plenary early 2025
- After that, call for author nominations will be announced

THANK YOU
FOR YOUR ATTENTION

STAY IN TOUCH



ipcc.ch



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ipcc-media@wmo.int

<https://www.ipcc.ch/about/>

Find out more in these fact sheets:

- [What is the IPCC?](#)
- [How does the IPCC select its authors?](#)
- [What literature does the IPCC assess?](#)
- [How does the IPCC review process work?](#)
- [How does the IPCC approve reports?](#)
- [How does the IPCC deal with alleged errors?](#)
- [What is an Expert Reviewer of IPCC?](#)
- [Timeline](#)

STAY CONNECTED



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Jane Hupe

Deputy Director Environment

International Civil Aviation Organization (ICAO)

Closing

Announcement - New ICAO Tracker Tool



ICAO

ENVIRONMENT

Tracker of Aviation Non-CO2 emissions initiatives

18-Sep-24 11:02:03

Last update - UTC time

Non-CO2 tracker projects

Year	Partnership/research project/policy	Stakeholders (all names)	Focus of the initiatives	Weblink
2023	Non-CO2 Climate Impacts of Aviation: Contrails	US; EU/Clean Air Task Force	Contrails	https://cdn.catf.us/wp-content/uploads/2023/10/18100300/contrails-brief.pdf
2024	Report: Aviation contrails and their climate effect	IATA	Contrails	https://www.iata.org/contentassets/726b8a2559ad48fe9decb6f2534549a6/aviation-contrails-climate-impact-report.pdf
2024	SESAR AEROPLANE Project	EU	Contrails	https://www.sesarju.eu/news/addressing-non-co2-effects-aviation
2023	SESAR CICONIA	Airbus; NATS; Meteo-France; DLR	Contrails Operations	https://sesarju.eu/projects/CICONIA
2023	Blue Condor	Airbus UpNext	Hydrogen Contrails	https://www.airbus.com/en/newsroom/stories/2023-11-contrail-chasing-blue-condor-makes-airbus-first-full-hydrogen-powered
2022	Air France-KLM Statement	Air France-KLM Group	non-CO2 Impacts	https://www.airfranceklm.com/sites/default/files/2023-06/Air%20France-KLM%20Statement%20on%20Aviation%20Non%20Co2%20effects_06072022.pdf
2024	Joint Statement for Advancing Science on Aviation's Non-CO2 Impacts	Boeing; Airbus; Dassault; GE Aerospace; Rolls-Royce; RTX; Safran	non-CO2 Impacts	https://www.boeing.com/content/dam/boeing/boeingdotcom/sustainability/pdf/cto-agreement-letter.pdf
2023	Non-CO2 emissions from the aviation sector: A4E perspectives	A4E	non-CO2 Impacts	https://a4e.eu/publications/non-co2-emissions-from-the-aviation-sector-a4e-perspectives/
2024	Policy: A4A's Approach to Addressing Non-CO2 Climate Impact	A4A	non-CO2 Impacts	https://www.airlines.org/wp-content/uploads/2024/04/A4A-Non-CO2-Position-FINAL.pdf

A banner for the ICAO Symposium on Non-CO2 Aviation Emissions. The background is a stylized illustration of a green and blue landscape with a white airplane flying over it. The sun is visible in the top left corner, and a globe is in the top right corner. The text is in white and blue.

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Juan Carlos Salazar

Secretary General

International Civil Aviation Organization (ICAO)

Closing

Thank You

