

IPCC finalizes its sixth assessment cycle (AR6) "Climate Change 2023"

20 March 2023

On 20 March 2023, the Intergovernmental Panel on Climate Change (IPCC) released the Synthesis Report of its Sixth Assessment (AR6). This report is the final component of the sixth assessment cycle, an effort that started in 2016 to assess the scientific, technical, and socio-economic aspects of climate change on the basis of scientific literature. The IPCC AR6 is the most comprehensive and upto-date assessment of the state of the climate, the impact of human activities on it, and the response options. It provides policymakers, stakeholders, and the public with critical and evidence-based information to inform decision-making and action on climate change.

The report summarises the state of knowledge on observed climate change, its causes and impacts as well as future climate change and risks. Importantly, it assesses current progress, knowledge gaps, opportunities and challenges for combatting climate change through mitigation and adaptation. The key messages include:

- IPCC establishes in unequivocal terms that the cause of global warming is human activities, principally through emissions of greenhouse gases and that human-caused climate change has already caused widespread impacts, losses and damages worldwide.
- Vulnerable communities and individuals who have historically contributed the least to current climate change are disproportionately affected. Despite individuals with high socio-economic status having most capacity to contribute to climate action, they contribute most to greenhouse gas emissions.
- Some future changes in climate are unavoidable and potentially irreversible but can be limited by deep, rapid, and sustained global greenhouse gas emission reduction. Many risks are now assessed to be higher, for a given warming level, than in the previous synthesis, in 2014.
- IPCC once more emphasizes the urgency for action. Current efforts to mitigate climate change by reducing global greenhouse gas emissions do have an effect but are largely insufficient to keep global warming well below 2°C and seek 1.5°C as the Paris agreement was agreed upon.
- There is sufficient global capital to close the global investment gaps but there are barriers to redirect capital to climate action. Enhancing technology innovation systems is key to accelerate the widespread adoption of technologies and practices.

Participation of Belgium in the IPCC and in the approval of the Synthesis Report

Belgium has been supporting the work of the IPCC since its inception. In addition to providing financial contributions to the IPCC Fund, BELSPO hosts the Belgian Focal Point to the IPCC, who

coordinates the Belgian position at the IPCC and prepares the list of national experts to help implement the IPCC work programme. At the occasion of this unique and pivotal moment as the IPCC completes its 6th Assessment Cycle, the State Secretary for Recovery and Scientific Research Thomas Dermine in collaboration with the Belgian Minister for Climate and Sustainable development Zakia Khattabi has invited their European colleagues to the first European Climate Change Science Summit, the Equinox Summit, to jointly consider the next steps for Europe and particularly how it can act to accelerate the transfer of climate knowledge from science to policy and action. Website reference in the end.

During the approval session of the Synthesis report of the sixth assessment cycle, the Belgian delegation consisted of twelve representatives, including members from BELSPO, Foreign affairs, the Belgian Climate Centre, the Government of Wallonia (Ministry of Climate) and experts from VUB, UCLouvain and the *Plateforme Wallonne pour le GIEC* representing the *Agence Wallonne pour l'Air et le Climat (Awac)*.

This report clearly highlights that limiting global warming to 1.5°C is still possible, but requires immediate, deep and sustained reductions in global CO₂ emissions', says Prof. Jean-Pascal van Ypersele, climate scientist at UCLouvain and member of the Belgian IPCC delegation. 'Limiting global warming to 1.5°C is absolutely needed,' adds Prof. Wim Thiery, climate scientist at VUB and member of the Belgian IPCC delegation, 'because the likelihood of abrupt changes, such as tipping points, increases with higher global warming levels'. 'Today, we have the financial means and most of the technologies needed to transition to a climate-neutral and resilient society', says Dr. Ella Jamsin, codirector of the Belgian Climate Centre and member of the Belgian IPCC delegation. 'Accelerating the implementation of adaptation as well as mitigation actions will reduce losses and damages for humans and ecosystem, especially the most vulnerable. It is crucial to remove barriers that constrain the implementation of adaptation such as the insufficient mobilization of finance, lack of political commitment, limited research on adaptation science and low sense of urgency.' says Dr. Pénélope Lamarque, member of the Walloon IPCC Platform and Belgian IPCC delegation. 'Countries around the world rely on the IPCC report to inform their policy decisions, and Belgium has consistently made significant contributions to this vital effort. As we look to the future, Belgium remains committed to continuing our strong support for the IPCC and its critical mission." concludes Dr. Bart Rymen, Belgian focal point for IPCC based at BELSPO and head of the Belgian delegation.

About the IPCC

The IPCC is a scientific body created by the United Nations to provide policymakers with recurring assessments of the latest developments and research on climate change. Founded in 1988 by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO), the IPCC draws on the expertise of thousands of scientists and experts from around the world, all working on a voluntary basis. It has 195 member states.

The organization's assessment reports are considered the most authoritative and comprehensive source of information on climate change, covering the latest scientific, technical, and socio-economic literature. Policymakers, governments, and the public have relied on the IPCC's reports to make informed decisions regarding climate policy and action. The IPCC's efforts to raise awareness about the urgent issue of climate change have been recognized on the global stage; in 2007, the organization was awarded the Nobel Peace Prize, a testament to its vital role in the fight against global warming.

Useful links:

IPCC AR6 report: https://www.ipcc.ch/report/ar6/syr/

IPCC AR6 press release: https://www.youtube.com/watch?v=5vJJTE9V7EA

Equinox summit: https://jpi-climate.eu/equinox/
Belgian Climate Centre: www.climate.eu/equinox/

AwAC: www.awac.be

Walloon IPCC Platform (Plateforme Wallonne pour le GIEC): https://plateforme-wallonne-giec.be/

VUB bclimate group: https://hydr.vub.be/research-groups/bclimate

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