

TEMPLATE – SIDE EVENTS SUMMARIES

TWO PAGES MAXIMUM

Summary of Side Event

“Managing the risks of lack of governance around solar radiation modification”

Carnegie Climate Governance Initiative (C2G)

and

United Nations Economic Commission for Latin America and the Caribbean (ECLAC)

4 May 2023, 8:30 – 9:45 EDT

Background on the event (one paragraph)

Global temperature overshoot poses serious threats to the achievement of the Sustainable Development Goals and increasing voices are calling for and preparing alternative “emergency” options such as solar radiation modification (SRM) to keep global temperature rise in check. This side event aimed to enable participants to gain a better understanding of solar radiation modification and its governance, examining what we do and don’t know, the potential risks and benefits of these approaches, and why the current international governance gaps around SRM itself poses risks. The side event also explored why and how strengthening the capacity and inclusion of youth and global south researchers may provide important insights to inform decision-making around managing the risks from global warming overshoot.

Key Issues discussed (5- 8 bullet points)

- The world has made insufficient progress in meeting climate goals. There are different opinions on the need to research emergency options such as solar radiation modification. Formal and robust governance frameworks to address knowledge gaps and ensure responsible decision-making on SRM are needed whether one agrees with SRM research, experimentation and deployment, or not, as the lack of governance on SRM poses risks in itself.
- There are risks and implications of temperature overshoot with potential irreversible impacts on human health and ecosystems. Responsible governance, including transdisciplinary research of solar radiation modification in the context of achieving and safeguarding the SDGs, could help determine if these techniques could be considered as a supplement to mitigation efforts in the context of a temporary temperature overshoot.
- SRM deployment could have potential positive and negative impacts on the Sustainable Development Goals (SDGs). Governance around SRM research could guide comprehensive and transdisciplinary research on SRM and its potential impacts and could support the overall governance process. This, coupled with global cooperation to address the risks and benefits associated with SRM could help informed decision-making.

- Decisions made regarding SRM research, experimentation and deployment will directly impact future generations, making young people's voices and active engagement in the decision-making process an important element of the governance process. This could be done by providing young people with training, access to information, and mainstreaming the science of solar radiation to build awareness and understanding among young people to foster a sustainable future.
- Building research capacity in the Global South to better understand the vulnerability of Global South communities to climate change and the potential impacts of SRM is another key element of the governance process. African countries face high climate risks, research to understand and mitigate these risks is particularly important to adapt mitigation and adaptation efforts and build resilience to climate change. There is very limiting funding for climate research in Africa and limited involvement of African scientists in conducting research on SRM. Some initiatives like the Degrees Modeling Fund which aims to support scientists from the Global South by supporting them in their SRM research have enabled more involvement of Global South researchers on this subject.

Key recommendations for action (5 - 6 bullet points)

- In line with IPCC findings, SRM could only be considered, once better understood, as a supplement to mitigation efforts to limit the risks from temperature overshoot; SRM does not address the cause of climate change and should not be considered as a solution in itself.
- Governments need to take action and reduce risks associated with climate change including the risk of lack of governance around SRM.
- Uncertainty on SRM and its impacts in the context of a temporary temperature overshoot needs to be reduced through transdisciplinary research and understanding.
- Global governance such as global fora and collaboration are essential parts of decision-making to address climate change and addressing the risk of lack of governance around determining the potential, if any, of SRM research, development and/or deployment.
- Safeguarding the SDGs will require research and collaboration on SRM and its impacts to better understand its potential risks and benefits against a world that exceeds the Paris Goal of 1.5°C.
- Including youth voices in the governance processes relating to SRM could contribute to a sustainable future.
- Support to Global South research initiatives and collaboration would help build understanding of the social, political, and physical aspects of climate change and SRM and support Global South policy makers to engage in the governance process meaningfully.