

United Nations Environment Programme

2 May 2018

Briefing of the
Committee of Permanent Representatives
Tuesday 22 May 2018
Conference Room 4
United Nations Office in Nairobi, Gigiri
9:30a.m. – 11:30a.m.

Concept Note on the Carnegie Climate Geoengineering Governance Initiative (C2G2)

The Carnegie Climate Geoengineering Governance Initiative (C2G2) has submitted the attached note on the Initiative, in support of the briefing of the Committee of Permanent Representatives by the Carnegie Climate Geoengineering Governance Initiative (C2G2) to be held on Tuesday 22 May, 2018.

Briefing by

The Carnegie Climate Geoengineering Governance Initiative (C2G2)

to the Committee of Permanent Representatives

22 May 2018, 09:30 to 11:30 a.m.

United Nations, Nairobi, Kenya

Challenge

Two years after the Paris Agreement on climate change, evidence is growing that without a rapid acceleration in action, limiting global average temperature rise to 1.5-2°C might not be achieved through emissions reductions alone. Scientists have begun exploring the additional use of carbon removal and solar geoengineering technologies to limit climate impacts, including keeping temperature rise down.

Carbon removal technologies aim to address the source of human-caused climate change by drawing out carbon dioxide from the atmosphere, and their large-scale use this century is assumed in most scenarios by the Intergovernmental Panel on Climate Change. However, large-scale deployment poses significant environmental, social and economic risks and many governance challenges including for biodiversity, land and water-use and food security.

Solar geoengineering technologies aim to address a symptom of climate change, by reflecting more solar radiation into space, and thereby cooling the Planet. They are 15-20 years away from a properly researched and governed deployment. While mostly confined to lab research, an outdoor experiment is planned this year in the airspace above the US state of Arizona. Planetary level deployment of these technologies poses potentially profound risks—both known and unknown—that transcend borders and raise significant ethical, socio-economic, political and governance challenges.

Limited, if any, comprehensive rules and guidelines exist at the national or international level to govern how geoengineering technologies might be tested or used, and policymakers have low levels of awareness about their risks and potential benefits.

Objective

The Carnegie Climate Geoengineering Governance Initiative (C2G2) aims to **catalyse the creation of effective governance** of solar geoengineering and carbon removal to ensure that research, identification and deployment of such policy options - as part of the global response to manage the risks of increased temperatures - inform decisions on whether to deploy them or not.

Carbon removal technologies pose governance challenges at national and transboundary level that can be dealt with largely within existing frameworks. Solar geoengineering however raises profound challenges due to the nature of intervention into a major part of the global earth system and ensuing impacts. Given the current global level of understanding of the science, and of the socio-economic, development- and transboundary impacts, it is far from clear whether the international community will deem it acceptable to use, or if so, how it would manage its deployment and termination over decades, possibly hundreds of years.

A precautionary approach calls for international agreements to prevent the deployment of solar geoengineering unless (i) the risks and potential benefits are sufficiently understood, and (ii) international governance frameworks are agreed. Given the time it will take to get such

agreements in place, this debate should begin as soon as possible. C2G2's briefing and workshop is part of our first steps in reaching our objective.

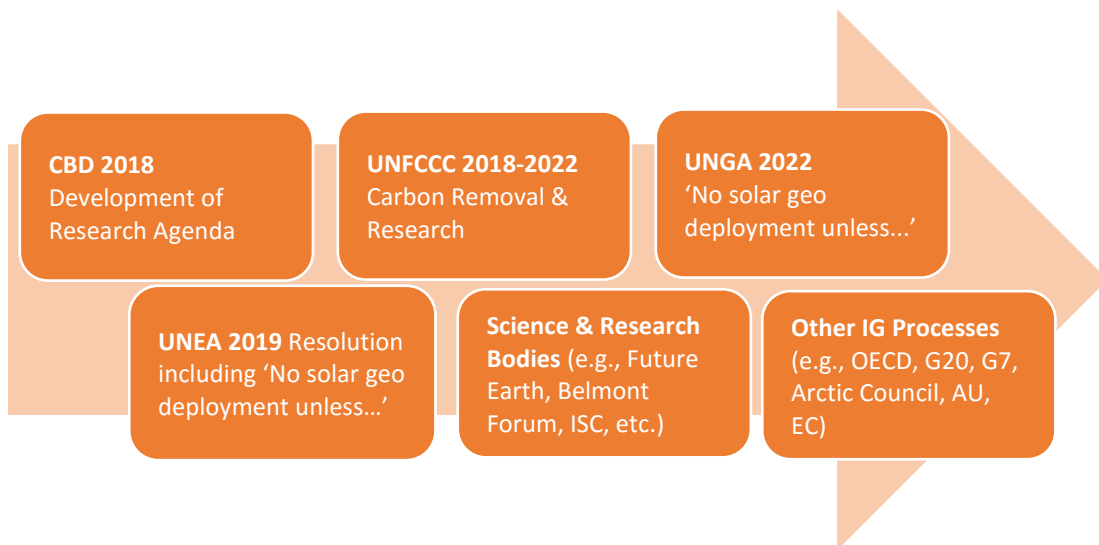
Opportunities

Effective governance involves many processes and communities coming together. The UN Environment Assembly has an opportunity within its mandate and processes to identify and provide insights into emerging environmental issues that require attention and action from governments, stakeholders, decision makers as well as the public at large to play a key role in preventing hasty, unilateral, ungoverned deployment of solar geoengineering technologies, and to provide important input into governance of carbon removal, and the broader research agenda. The CBD has taken steps to explore these with regard to impacts on biodiversity. UNEA together with the UN Environment Programme can broaden the scope with a view to contribute to learning and decision making in a timely manner.

This briefing and the workshop will provide an initial opportunity to jointly learn and exchange knowledge on the issue of governance of both solar geoengineering and large-scale carbon removal. It will be an opportunity to begin an important and timely conversation and learning process.

C2G2 believes a UNEA resolution in 2019 could be a landmark step towards developing effective international safeguards, as researchers continue to explore the potential for solar geoengineering technologies and their governance.

Figure 1: A potential timeline towards multilateral governance of geoengineering



Key actors now urgently need to engage in this discussion and facilitating this engagement will require knowledgeable, credible champions who can share information and mobilize others, assume leadership of ideas, and develop the knowledge to design appropriate governance.

To that end, C2G2 is catalysing an international leadership movement committed to preventing ungoverned deployment of solar geoengineering and ensuring informed intergovernmental decisions regarding its use or not. Permanent Representatives to the UN Environment Programme are ideally placed to help catalyse and create that movement.

For more information including video presentations, blogs and views, please visit www.c2g2.net or write to us via: contact@c2g2.net.