

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

SECRETARIAT NOTES

Agenda Item 1: Opening of the meeting and adoption of the agenda

1. The Secretary of Governing Bodies, Mr. Jorge Laguna-Celis opened the meeting. The meeting adopted the agenda.

Agenda Item 2: Briefing on the Governing Solar Geoengineering and Carbon Removal.

2. The Secretary invited Mr. Janos Pasztor, Executive Director, Carnegie Climate Geoengineering Governance Initiative of the Carnegie Council for Ethics in International Affairs an accredited organization to UN Environment Programme. Mr. Pasztor highlighted that the Initiative is neither in support nor against Solar Geoengineering or Carbon Removal but is promoting discussion on their potential governance, by providing a platform for impartial views to be expressed and explored. To strengthen the knowledge base to inform government decision making. He further notified the meeting that there will be an additional workshop on Wednesday 23 May 2018, open to all, that will provide participants with more in-depth information.
3. Mr. Wenjian Zhang, Assistant Secretary General, World Meteorological Organization provided background and context to the meeting on the current status of climate change as well as providing background information on the World Meteorological Organization as a UN specialized agency on weather, climate and water. Highlighted strong El Niño episodes in '81/'82, '96/'97, '15/'16, and 2017 being the warmest non-El Niño year on record whilst the global mean temperature records show that temperatures continue to rise, which is also affecting the global ocean heat content. Pointing out that due to climate change and global warming, 2017 had record breaking economic losses. Highlighted that energy consumption is still far from majority use of green energy with coal being in the lead of consumption.
4. Mr. Jian Liu, Chief Scientist, UN Environment Programme highlighted that Solar Geoengineering and Carbon Removal is an area of great interest in a scientific and political perspective and welcomes the approach of the Carnegie Climate Geoengineering Governance Initiative to catalyze a mechanism for governance of Solar Geoengineering. He noted the good intention of the Initiative and noted the need for more research and knowledge to narrow down the gap of uncertainties and consider if geoengineering would be the best mitigation approach in a wholistic approach addressing both environmental and economic spheres. He expressed that the Science community is

concerned about geoengineering as a technology and that the Science Community has voted the inclusion of the topic to be included in the annual Frontier report.

5. Mr. Pasztor, provided the meeting with background and context on Solar Geoengineering governance. He highlighted that Solar geoengineering will have some environmental impacts that may result in geo-political impacts. Pointing out the need to link governance of geoengineering with other governance processes, such as the implementation of the Sustainable Development Goals, since both carbon removal and solar geoengineering technologies are expected to have impacts on the SDGs. He announced the publication of a new report by the Carnegie Climate Geoengineering Governance Initiative looking at what we know about how Solar Geoengineering and Carbon Removal may influence delivery of the Sustainable Development Goals, which is available on their website¹. He also highlighted the need to look into the role of the UN Environment Assembly in monitoring of emerging technologies and its impact on environment is a strong mandate befitting the UN Environment Assembly.
6. Ms. Sabine Fuss, Head of the working group on Sustainable Resource Management and Global Change of the Mercator Research Institute, made a pre-recorded presentation on the role of Carbon Removal in delivering global climate change goals. Highlighting that the 2017 Emissions Gap Report cites that if the emissions gap is not closed by 2030 it will be extremely unlikely to reach the 1.5 or 2 degrees Celsius goal and that Carbon Removal will likely have an important role to play.
7. Mr. Douglas MacMartin, Professor of Mechanical and Aerospace Engineering at Cornell University made a presentation on the role that Solar Geoengineering might play in an overall climate strategy. He brought it to the meeting's attention that there is uncertainty on climate impacts that will happen in the future noting that there is not sufficient information on climate impacts of a warmer world. Cautioning that all ideas of Carbon Removal though they have not been proven may be expensive and have impacts on air and water and that societal and scientific risks are unknown. He noted that practices of marine cloud brightening or stratospheric aerosols may also cool the planet.
8. Dr. Arunabha Ghosh, Executive Director, Council on Energy Environment and Water, an independent climate think tank from India made a presentation on the needs of governance of Solar Geoengineering and Carbon Removal highlighting that ethical concerns have been raised on the intentions and material concerns on the risk of engaging in geoengineering. Underlining the need for research on the type of governance and by whom. He highlighted scenarios that range from privately funded research, small numbers of countries collaborating on field experiments, collaboration of research groups in several countries, large economies unilaterally acting or small island States/coalition of vulnerable countries permitting the use of their territory. Reminding the meeting of the need for a progressively inclusive approach to Climate Geoengineering governance.
9. Mr. David Cooper, Deputy Executive Secretary of the Convention of Biological Diversity provided a pre-recorded statement. Urging the meeting to consider about how to encourage people to move towards a more sustainable world, and the need to engage

¹ <https://www.c2g2.net/geoeng-sdgs/>

people in a meaningful way with full range of perspectives. Noting that the Convention on Biological Diversity, has long recognized the damaging impacts of climate change on biodiversity and considered impacts of mitigation measures. The tenth meeting of the Conference of Parties held in 2010 agreed that in the absence of governance no climate changing geoengineering activities should take place until there is a clear governing body and research undertaken to justify. The 12th meeting of the Conference of the Parties to the Convention on Biological Diversity noted that there is no single geoengineering approach that meets the criteria of effectiveness of control and regulation and affordability.

10. Mr. Stephan Singer, Senior Adviser, Climate Action Network International, informed the meeting that the network of close to 1,200 Non-Governmental Organizations and think tanks from 120 countries is working on phasing out fossil fuels and the equity and fairness to all communities and nations. He noted that Negative Emissions Technologies will play a role, noting the need for credible and transparent governance discussions that support the Paris Agreement and called for liability as part of the governance structure.
11. Dr. Pablo Suarez, Associate Director - Research and Innovation, Red Cross Red Crescent Climate Centre, noted that geoengineering is a humanitarian concern and questioned how the most vulnerable people in the world will provide input in making decisions as well as who will pay for humanitarian work in a geoengineered world. Noting that geoengineering has potential implications for the world's most vulnerable people, all of whom would be unwilling participants in experimentation of geoengineering. He cautioned against the potential delusions of rationality which might lead to using geoengineering, particularly if decisions are made under stress or in the context of a geopolitical arms race for power. He warned against the potential for predatory geoengineering for self-benefit which may have widespread negative impacts for others. Solar radiational management and Solar Geoengineering could lower impacts for all but not currently set up to ensure that the interests of the most vulnerable are elicited, considered and addressed.
12. One Member State recommended to the Chief Scientist of the UN Environment Programme to lead on research for a unified and scientific approach due to the lack of central governance on the matter and to ensure vulnerable communities are informed. Another Member brought forward the need for an indigenous/nature-based approaches to the meetings attention, further questioning the use of experimental technology. The meeting was informed that new innovations in the area of climate mitigation have been openly exhibited during a previous session of the Conference of Parties of the UN Framework Convention on Climate Change.
13. The meeting invited the Secretariat to organize similar briefings on emerging scientific issues with potential impacts on the environment.
14. In conclusion, the panelists brought it to the meetings attention that most research efforts currently being undertaken are from the academic field, noting that the International Panel on Climate Change recognizes Carbon Removal as an essential aspect to climate change mitigation. It was also brought to the meetings attention that while many technical assessments indicate that national mitigation efforts may not be enough to reach the 1.5

degrees Celsius objective, there is still considerable uncertainty about the potential consequences of geoengineering.

15. Mr. Jian Liu, Chief Scientist of UN Environment Programme, informed the meeting that UN Environment Programme will be including the topic on Solar Geoengineering in an upcoming Frontiers report and is looking into the feasibility and concerns surrounding the matter. He invited the Carnegie Climate Geoengineering Governance Initiative to reach out to and work with the United Nations Framework Convention on Climate Change, the Intergovernmental Panel on Climate Change and UN Environment Programme in this field.
16. In his concluding remarks, Mr Pasztor thanked all speakers for their contributions and the participants for their frank and open interactions. He underlined the importance and objective of C2G2 to catalyse the intergovernmental consideration and the need to ensure that all actors of society and views be included. He recalled that C2G2 is guided by an Advisory Group² that provides insights from scientists researching on solar geoengineering, from leading environmental Non Governmental Organizations, youth, climate scientists. He further clarified that C2G2 is interacting closely with many other UN entities. He invited participants to join a workshop in Nairobi on May 23 which would allow for more in-depth discussions.
17. The meeting closed at 12:10 p.m.

² <https://www.c2g2.net/c2g2-advisory-group/>