

Title: Capping Climate Change from Space -Technology Development and Climate Change for SDGs

Summary

The purpose would initiate discussion on deploying an intervention that would be an international endeavor that would not distract from current efforts but might advance those through establishing local, regional, and global collaborations. It would be designed to provide additional time, in a societally acceptable way, to reduce greenhouse gas (GHG) accumulation in the atmosphere.

Without a massive reduction in GHG emissions and the reduction of current atmospheric concentrations, humanity will face catastrophic and likely existential climate impacts even in the medium term. We believe that making governments aware of at least one such possibility, solar radiation modification (SRM) using a space-based system between the Earth and the Sun, would spur the necessary collaborations.

Discussion on the possibility of a global technology development effort to stimulate significant private sector and, eventually, governmental participation will be highlighted creating intent on “The Earth Cup,” an open global solar sailing competition in space, patterned after the America’s Cup open global wind-driven boat racing competition. The Earth Cup is designed as a peaceful, rules-based competition building international efforts to reach its graduated goals, thereby including all countries that have an interest in participating.

Description

Climate Change and impact on Water and Sanitation

Changing precipitation patterns with attention to altered rainfall and snowfall patterns with rising temperatures which can exacerbate droughts and water shortages.

Water, Sanitation, and Climate Change

In consideration to effective water management to help communities adapt to climate change and utilize proper sanitation to reduce waterborne diseases, which can be aggravated by climate-related flooding and contamination.

Global technology development to stimulate significant private sector and governmental participation to create intent on “The Earth Cup,” as an open global solar

GHG emissions and the reduction of current atmospheric concentrations, catastrophic and existential climate impacts to make governments aware of solar radiation modification (SRM) using space-based system between the Earth and the Sun to spur the necessary collaborations.

GHG Emissions from Water and Sanitation to address wastewater treatment processes that can generate GHG emissions, water infrastructure and construction to contribute to GHG emissions.

The outcomes of the meeting with respect to Capping Climate Change from Space - Technology Development and Climate Change for SDGs

- To review the accelerating impacts of climate change on agriculture, including desertification, sea level rise, and extreme weather events. (to inform COP 30 deliberations to take place in November 2025 in Belém, Brazil.)
- The discussion of an “insurance policy” to help ensure sufficient time for current efforts that are, and will be, underway to reduce the impact of atmospheric GHGs in the eventuality that these efforts take longer than planned.
- Review and discuss the project involving building a space-based solar radiation modulation system deployed approximately one million miles from Earth.
- Invite all interested parties to participate in a technological development effort to accelerate the development of the knowledge, tools, methods, and global infrastructure necessary to deploy the “insurance policy” when needed. As an outgrowth of their participation, we believe there will be opportunities for commercial and, more broadly, economic development for all participating nations.
- To define the “next steps” necessary to get the project underway.

Organized by

Permanent Mission of Equatorial Guinea to the United Nations

Permanent Observer Mission of Pan African Intergovernmental Agency for Water and Sanitation

With

Higher Education Innovation Group,

HIFI Health Initiatives,

Earth Cup Solar Sail Regatta