

Why the SDGs Require a Governance Debate Based on Precaution, Rights and Fairness

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Geoengineering – large-scale intentional manipulation of the Earth’s natural systems such as oceans, lands, atmosphere and carbon cycles – is increasingly being presented as a strategy to counteract, dilute or delay climate change and its effects. The UN Environment Assembly (UNEA) is expected to address the issue at its fourth session, convening in Nairobi, Kenya, from 11-15 March 2019, and should do so with caution.

Geoengineering threatens global peace and security. Some technologies have significant potential to be weaponized. Deploying Solar Radiation Management (SRM), for example, could create a race to control the Earth’s thermostat and severely alter rainfall and hydrological patterns, particularly in regions that are already suffering from adverse impacts of climate change. Investments in geoengineering could worsen the climate crisis by providing justification for big polluters to continue emitting while locking in fossil fuel infrastructure for decades to come.

Research – and common sense – demonstrate clearly that the SDGs are overwhelmingly in conflict with geoengineering and its effects, particularly in being contrary to strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in line with SDG target 13.1, food security (SDG 2), sustainability and safety. Geoengineering would also risk substantially increasing inequality and compromising SDG 10 (reduced inequalities), since it would introduce a power imbalance between those who control the thermostat and key infrastructures and those who do not. It would also undermine fundamental rights, for example those of indigenous peoples and local communities (SDG 11) who would be affected by any deployment due to the inherent transboundary nature of geoengineering.

Although the technologies proposed – ranging from Carbon Dioxide Removal (CDR) to SRM or solar radiation modification – might sound far fetched and like science fiction to some, it is important to recognize that it is not a new topic. Countries first negotiated geoengineering in 2007, and adopted decisions in five consecutive meetings of the Conference of the Parties (COPs) to the Convention on Biological Diversity (CBD) since COP 9. Significantly, at COP 10 in 2010, the CBD took decision X/33 (w) which established a *de facto* moratorium on geoengineering that was again confirmed in 2016. Parties to the London Protocol to the London Convention unanimously adopted a resolution in 2008 prohibiting all ocean fertilization activities other than “those for legitimate scientific research,” followed by another resolution in 2010 that set out the strict conditions defining what constitutes “legitimate scientific research.” In 2013, Parties to the London Protocol unanimously adopted an amendment to give that prohibition and assessment framework legal force and to open the way for other marine geoengineering activities to be regulated in the future.

When governments at UNEA-4 discuss a resolution on geoengineering, brought forward by Switzerland and

supported by several other countries, including Mali, Burkina Faso, Niger, the Federated State of Micronesia (FSM) and Mexico, they need to ensure that they build on the existing consensus decisions of other UN bodies on that matter. They also need to ensure that this debate is free of commercial conflict of interests to curtail the long and ongoing influence that the fossil fuel industry, the main culprits of climate change, has had on the topic. In addition to that, if an assessment of geoengineering technologies and their risks and impacts is to be developed, as proposed in the Swiss resolution, it is crucial that the composition of any group or body that will lead such task is not restricted to experts who are often those researching the technology or even holding patents, owning companies or applying the technology in the field. It is essential that this body include truly independent civil society representatives, indigenous peoples, farmers, youth and representatives of potentially affected communities. Individuals and organizations that have vested and commercial interests in geoengineering must be excluded. It is also vital that a robust conflict of interest policy be adopted to protect the integrity of processes and outcomes of assessment of geoengineering.

The option of banning certain technologies or sets of technologies due to their inherent risks and dangers to peace, democracy and vital global and local ecosystems should certainly remain on the table. A debate on geoengineering governance in the UNEA must not fall in the trap of merely legitimizing further research and thus moving us down the slippery slope towards eventual deployment. Healthy ecosystems and cultural and biological diversity are crucial to the well-being of all people, societies and economies. They are paramount to achieving the SDGs. Geoengineering, whether on land, in the oceans or in the atmosphere, puts ecosystems, biodiversity and human communities at risk of potentially devastating impacts and side effects. History has proven that human intervention can alter our atmosphere, our oceans and our hydrological cycles. It has also repeatedly revealed the profound ecological, social and political consequences – and profound hubris – of doing so. We do not need open-air testing to know geoengineering will alter the planet, or to know that it is not a solution to the climate crisis.

So one option that governments can decide to go for at UNEA-4 is a ban on SRM. There is an example for this course of action in the recently negotiated nuclear weapons ban treaty as well as in the nuclear test ban: first, a ban on the testing of nuclear weapons was agreed with the Comprehensive Nuclear-Test-Ban Treaty (CTBT), then a ban on nuclear weapons in 2017.

In fact, several hundred civil society organizations (CSOs) from around the world are calling for just that. They are joining forces and have articulated their demand for a ban on geoengineering in the Hands Off Mother Earth Manifesto.

The question thus arises: can we keep the global temperature increase below 1.5°C above preindustrial levels without relying on geoengineering technologies? A growing body of research suggests not only that the world must do precisely that, but that it can. Just recently, the One Earth Climate Model demonstrated that the core assumption that Carbon Capture, Utilization and Storage (CCUS), CDR and other forms of geoengineering are necessary because we cannot meet climate targets without them is simply wrong, and confirmed that we can solve the global climate crisis with currently available technologies. Indeed, setting aside the false promise of geoengineering and focusing on both accelerating the energy transition and truly protecting and restoring our ecosystems so that they can act as carbon sinks, is the safest and surest way to confront the climate crisis.

Background Material:

Fuel to the Fire: How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis, Center for International Environmental Law (CIEL), Heinrich Böll Foundation, 2019

The Big Bad Fix: The Case Against Geoengineering, Biofuelwatch, Heinrich Böll Foundation, ETC Group, 2017

Riding the GeoStorm: A briefing from civil society on Geoengineering Governance, Heinrich Böll Foundation, ETC Group, 2017 (currently being updated)

Governing the Big Bad Fix? What to Do about Geoengineering, Heinrich Böll Foundation, 2018

Policy Brief: Governance of Geoengineering, German Federal Environment Agency, 2019

Additional information on geoengineering:

<https://www.boell.de/en/geoengineering>

<https://www.geoengineeringmonitor.org/>

<https://map.geoengineeringmonitor.org/>

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