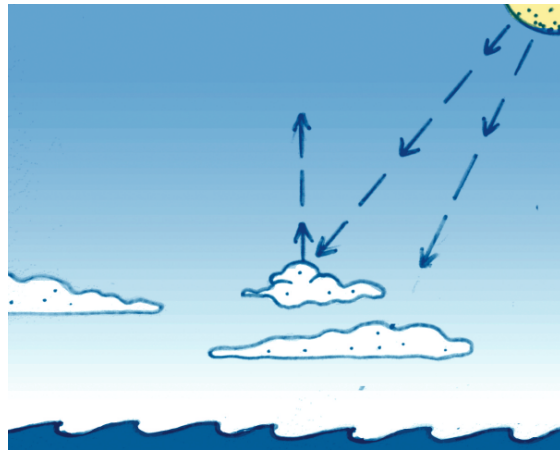


CBD needs to reinforce precaution against geoengineering to protect biodiversity and communities

The United Nations Convention on Biological Diversity (CBD) took a groundbreaking decision by addressing geoengineering and its potential impacts on biodiversity and people early on. In a laudable example of foresight and precaution, the CBD has made highly relevant global consensus decisions on geoengineering at several COP and SBSTTA meetings since 2008.¹ To underpin these decisions, it has produced widely peer reviewed technical scientific reports on ocean fertilization² and on the potential impacts of geoengineering on biodiversity and related regulatory matters.³

By consensus of all Parties and based on the precautionary approach, COP10 (decision X/33 paragraph 8 (w)) called for a moratorium on the deployment of geoengineering activities until a set of conditions were met, including that a transparent multilateral global governance mechanism is in place, that no transboundary harm would



occur, and that there is an adequate scientific basis to justify these proposals, taking into account the risk geoengineering activities pose to biodiversity and related social and cultural impacts.⁴ The decision made an exception for small-scale scientific research studies in controlled settings for the purposes of gathering scientific data and only after a thorough prior assessment of the potential impacts on the environment.

1. See detailed information of all decisions and publications at CBD website on climate-related geoengineering and biodiversity: <https://www.cbd.int/climate/geoengineering/>

2. Scientific Synthesis of the Impacts of Ocean Fertilization on Marine Biodiversity, CBD Technical Series No.45. <https://www.cbd.int/doc/publications/cbd-ts-45-en.pdf>

3. Geoengineering In Relation To The Convention On Biological Diversity: Technical And Regulatory Matters, CBD Technical Series No.66 <https://www.cbd.int/doc/publications/cbd-ts-66-en.pdf>

4. Decision X/33 text includes: 8 (w) "Ensure, in line and consistent with decision IX/16 C, on ocean fertilization and biodiversity and climate change, in the absence of science based, global, transparent and effective control and regulatory mechanisms for geo-engineering, and in accordance with the precautionary approach and Article 14 of the Convention, that no climate-related geo-engineering activities** that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts, with the exception of small scale scientific research studies that would be conducted in a controlled setting in accordance with Article 3 of the Convention, and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment." <https://www.cbd.int/climate/geoengineering/>

None of the conditions expressed in the CBD decisions are in place so far. The precautionary calls from CBD are as important as ever and even more relevant in light of the growing number of risky geoengineering proposals and attempted / ongoing field experiments that threaten biodiversity, the environment, and the rights, territories and livelihoods of Indigenous Peoples and local communities.

Some current developments

At UNFCCC, the Supervisory Body of the Article 6.4 mechanism, which is tasked with developing the rules to govern a new carbon market regime under the Paris Agreement, has received proposals to include large-scale land and marine-based geoengineering technologies – such as large-scale bioenergy with carbon capture and storage (BECCS), direct air capture (DAC), ocean fertilization and ocean alkalization – as sources of carbon credits or offsets. If these technologies were approved as sources of carbon credits, this

would trigger a commercial race to develop these risky proposals.⁵

The London Convention/London Protocol (LC/LP) against ocean dumping established a precautionary governance framework for marine geoengineering in 2013, explicitly including ocean fertilization in an annex listing marine technologies that should not be deployed. The LC/LP recently decided to look into several additional marine geoengineering technologies due to their potential “adverse impacts on the marine environment” including enhancing ocean alkalinity, the use of biomass for carbon sequestration such as via macroalgae cultivation and artificial upwelling, and solar geoengineering techniques like marine cloud brightening and deploying microbubbles/reflective particles/materials. It also reaffirmed that past LC/LP resolutions on ocean fertilization and on marine geoengineering more broadly apply to all LC Contracting Parties.⁶ In relation to the CBD’s geoengineering decisions, CBD COPs have clearly stated that the work of the London Convention/London Protocol should be acknowledged.⁷

A group of over 450 scientists from 60 countries has issued a call demanding a “Solar Geoengineering Non-Use Agreement” stating: “Solar geoengineering deployment at planetary scale cannot be fairly and effectively governed in the current system of international institutions. It also poses unacceptable risk if ever implemented as part of future climate policy. A strong political message from governments, the United Nations and civil society is urgently needed”.

www.solargeoeng.org

5. Geoengineering Monitor, 2022, UNFCCC Article 6.4: No to legitimizing geoengineering and land-based offsets <https://tinyurl.com/293b2cff> and ETC Group, 2022, False Solutions Alert: Geoengineering in climate negotiations, <https://tinyurl.com/yf7ca6yz>

6. International Maritime Organization, 2022, Marine geoengineering techniques - potential impacts, <https://tinyurl.com/sakkrmyu>

7. Convention on Biological Diversity, 2017, Climate-related Geoengineering and Biodiversity, <https://tinyurl.com/4j8ux3y5>

Why CBD needs to reinforce precaution and monitoring

Below are some examples of recent geoengineering activities conducted in contravention to CBD decisions.

Illegal experiments in Mexico

At the end of 2022, the US start-up company "Make Sunsets" released balloons with sulfur dioxide in Baja California, Mexico. They did not ask the government for a permit or consult Indigenous Peoples or local communities. The company claimed it had conducted these solar geoengineering experiments to attempt to block some of the sun rays, with a view to selling online "cooling credits". They appeared to have no concern for the potential environmental or other impacts these experiments would have in Mexico.

Make Sunsets said they based their illegal commercial experiments on the research published by David Keith, the founder of the Harvard Solar Geoengineering Research Program in the US, also founder of the project, SCoPEX, and the Direct Air Company Carbon Engineering, recently sold to Occidental Petroleum.⁸

The Mexican Government reacted quickly and in January 2023 announced it would not permit solar geoengineering experiments in the country.⁹ This unprecedented example was picked up by international media, and is a great example of the precautionary action that governments need to adopt if

they wish to avoid their countries being used as experimental labs by commercial solar geoengineering companies.

It is also a very clear example of why governments and the CBD need to strengthen existing decisions to ensure that solar geoengineering open field experiments are not permitted.

Other open-air experiments taken forward without consultation

Some CBD parties, such as Australia and the UK, have conducted open-air marine geoengineering experiments, in contravention with the CBD decisions. They have not reported these experiments to the London Convention/London Protocol, or to any other UN body that has issued precautionary calls against geoengineering deployment. Some experiments were conducted in the ocean near Australia, and others have been announced, including for the Arabian Sea, Hawaii and India.¹⁰

A solar geoengineering field experiment (to test technical equipment) was announced in 2021 by Harvard University in Kiruna, Sweden, but suspended following Indigenous and civil society protests led by the Saami Council.¹¹

8. ETC Group, 2023, <https://www.etcgroup.org/content/stop-us-start-testing-solar-geoengineering-mexico>

Government of Mexico, 2023, <https://www.gob.mx/semarnat/prensa/la-experimentacion-con-geoingenieria-solar-no-sera-permitida-en-mexico>
9. and Biermann, F., 2023, <https://www.solargeoeng.org/mexico-bans-solar-geoengineering-experiments/>

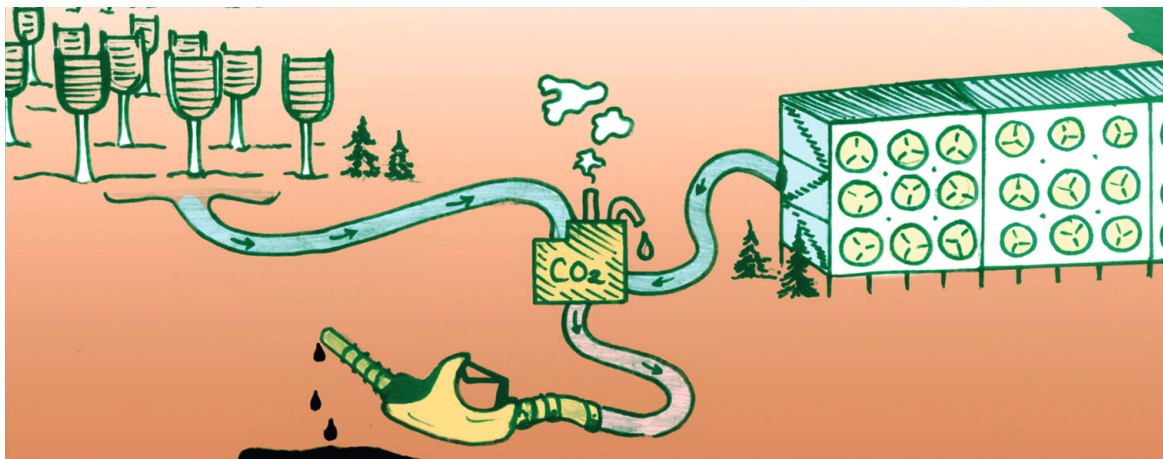
10. Geoengineering Monitor, 2022, Quarterly Review I (part 3): marine geoengineering – ongoing and planned open-ocean trials and recent developments in research, <https://tinyurl.com/uxr4tr66>

11. Geoengineering Monitor, 2022, Support Alaska Native Delegation to Stop Arctic Ice Project!, <https://tinyurl.com/3kahy4h9>

Briefing for delegates at SBSTTA 25

Nairobi, Kenya, 15-19 October 2023

Agenda item: Biodiversity and Climate Change | CBD/SBSTTA/25/12



The US-based Arctic Ice Project (former Ice911) conducted solar geoengineering experiments over Indigenous territories in Alaska in 2022, and plan to expand their work in Alaska to include experiments in the Himalayas and Norway. This project has also been roundly rejected by Indigenous Peoples.¹²

Both the solar geoengineering field experiment in Sweden and the Arctic Ice Project in northern Alaska failed to conduct meaningful consultation with the Indigenous Peoples under the standards of free, prior, and informed consent (FPIC) that are recognized under international human rights law.

Large scale monocultures of algae cultivation with potentially huge negative impacts on biodiversity and the livelihoods of small seaweed cultivators are planned for several countries including

Canada, the Philippines, Indonesia, India¹³ and other countries in Europe, Africa¹⁴ and Latin America.¹⁵ A new ETC group report, “The Seaweed Delusion”, shows the dangers of industrial algae cultivation to marine ecosystems and coastal communities.¹⁶ At the same time, Seafields¹⁷ and Running Tide,¹⁸ two companies aiming to launch commercial marine geoengineering seaweed projects, have recently undertaken the first seaweed biomass sinking trials. These companies were ironically using the same German Government vessel (RV Polarstern) that was used for Lohafex, a marine geoengineering experiment that was questioned at CBD and widely rejected by civil society in 2009¹⁹ and finally suspended because of strong opposition.

See more ongoing geoengineering experiments and projects at <https://map.geoengineeringmonitor.org/>

12. Geoengineering Monitor, 2021, Widespread opposition to solar geoengineering halts test flight, <https://tinyurl.com/yzk25s8>

13. The Fish Site, India sets 9.7 million tonne seaweed target, <https://tinyurl.com/y4rzyudm>

14. Journal of Applied Phycology, 2022, Seaweed farming in Africa: current status and future potential, <https://tinyurl.com/33rdve44>

15. See Geoengineering Map: <http://map.geoengineeringmonitor.org/> and <https://tinyurl.com/yb3k8ehh>

16. ETC, 2023, The Seaweed Delusion: Industrial Seaweed will not cool the climate or save nature, <https://etcgroup.org/content/seaweed-delusion>

17. Geoengineeringmonitor.org, 2023, map: Seafields, <https://map.geoengineeringmonitor.org/other/seafields>

18. Geoengineeringmonitor.org, 2023, map: Running Tide, <https://map.geoengineeringmonitor.org/other/running-tide>

19. See: <https://www.etcgroup.org/content/better-world-we-see-not-geo-engineered-civil-society-statement-against-ocean-fertilization>

What CBD needs and can do

- All CBD parties should **affirm precaution and prevent geoengineering from harming biodiversity**, the environment, the climate, the rights of Indigenous Peoples and the human rights of local communities by recalling decisions IX/16 on ocean fertilization and X/33 paragraph 8(w) on climate geoengineering in the discussions on biodiversity and on climate change and on marine biodiversity at SBSTTA, COP16 and beyond.
- SBSTTA should send a clear message that COP16 must reaffirm the existing precautionary decisions and additionally **ensure that geoengineering open field experiments are not permitted**. If this is not ensured, more countries, especially in the Global South, will be subject to risky open field experiments by commercial companies and Global North projects.
- The CBD Secretariat should be mandated to proactively **reach out to all other UN bodies discussing geoengineering to inform them about relevant CBD decisions** and to highlight the need for a precautionary approach.
- In line with COP decision XI/20,²⁰ paragraph 9, the SBSTTA should mandate the CBD Secretariat to **require all CBD parties to report, on a regular basis, on any geoengineering initiative taken** in and / or by their countries and report measures undertaken related to paragraph 8(w) of decision X/33.²¹ The CBD secretariat should compile reported measures from the parties and bring them to the attention of the Conference of the Parties, starting with COP16.

Contacts for ETC group at SBSTTA 25:

Silvia Ribeiro, Latin America Director, silvia@etcgroup.org

Neth Daño, Asia Director, neth@etcgroup.org



More information:

<https://www.etcgroup.org/issues/climate-geoengineering>

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

20. See: <https://www.cbd.int/decision/cop/?id=13181>

21. See: <https://www.cbd.int/decision/cop/?id=12299>

Side Event at SBSTTA 25

CLIMATE AND BIODIVERSITY:
**AFFIRMING PRECAUTION
ON GEOENGINEERING
AND OTHER DANGEROUS
DISTRACTIONS**

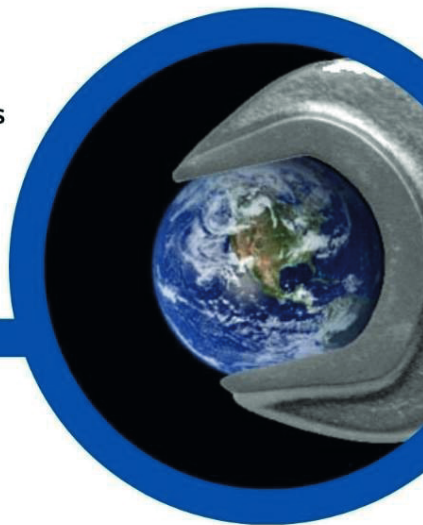
CR-9 - AFRICA, 2ND FLOOR

OCTOBER 17, 2023 | 1:15PM

LIGHT REFRESHMENTS WILL BE SERVED

Affirming the CBD's leadership in taking precautionary decisions on geoengineering is urgent for the world to take real climate action and avoid false solutions.

Join us to learn about the latest dangerous distractions being promoted by geoengineers and hear from experts, civil society and governments who support precaution on geoengineering.



In collaboration with CBD Alliance, AfriTAP, and the Hands Off Mother Earth! Alliance