



## MARINE, SOLAR AND LAND GEOENGINEERING

Geoengineering refers to large-scale technological interventions in the Earth's oceans, land and atmosphere with the aim of weakening some of the symptoms of climate change. Geoengineering perpetuates the false belief that the status quo cannot be changed and that we need climate and ecosystem manipulating techno-fixes to tame its effects. Geoengineering technologies are usually grouped into two categories – Carbon Dioxide Removal (CDR) (large-scale removal of GHGs from the atmosphere after they have been emitted) and Solar Radiation Management (SRM) (Reflects or blocks solar radiation to reduce warming effect).

**RELEVANCE FOR BONN/ COP28:** Article 6.4 (carbon markets/ removals) includes engineering-based removals. Submissions on SRM expected in the Global Stocktake. Large promotion of land geoengineering via CCS at COP28. Advocates at Bonn and COP28 for quiet diplomacy and normalisation.

### HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- We need all options on the table to not undermine climate ambition
- These techniques are proven to have potential, with more research we can make them work
- Let's get Geoengineering right - let's research everything and assess "all" scenarios
- If everything else fails, we need this as back up
- Geoengineering is the only pragmatic pathway to limit global temperatures given the situation we are in.

### HERE'S HOW TO RESPOND:

1. CDR technologies are in the early lab phase and conceptual - they are not proven at scale and many are unprovable when precaution is applied because of the risks to rights and ecosystems. CDR is increasingly considered vaguely within country policy commitments and in international discourse because of the exaggerated claims of their research stage, readiness, efficiency and feasibility.
2. CDR technologies are already being considered by large polluting industries and corporations, as a substitute for reducing and transforming their operations on large scales, which generate greenhouse gases via production and transportation, driven by colossal consumption.
3. Recent IPCC reports make it clear that projected 1.5-degree pathways involving CDR pose both known and unknown risks, and that these technologies may not be available or scalable in the timeframe needed for averting further and irreversible climate harm. The (externally provided) models within the IPCC include large amounts of CDR. These models are not designed to consider technologies' effects on ecosystems nor the protection of the rights of communities.
4. SRM has the potential to introduce massive new disruptions and aggravate already disrupted climate systems through weather and precipitation changes - causing increasingly disastrous and unpredictable impacts on regional climates, ecosystems and peoples' livelihoods.
5. There are current precautionary methods of governance of CDR and SRM, such as The Convention on Biological Diversity (decision X/33, 2010) as well as The London Convention / London Protocol which is undergoing a review of marine geoengineering techniques.

### Important Links

- Analysis and reports by Geoengineering Monitor  
<https://www.geoengineeringmonitor.org/>
- Hands Off Mother Earth Manifesto, signed by 200+, 2018,  
<https://www.handsoffmotherearth.org/>