



Factsheet on Marine issues

As the CBD considers further work regarding marine issues, the CBD alliance welcomes the overview of gaps that are still to be addressed, as outlined in the Annex of the draft decision Conservation and sustainable use of marine and coastal biodiversity. (pages 12-14). It is important to address the many aspects of conservation of the most important ecosystem on earth - our marine ecosystem.

There are however a few key issues left out of this gap analysis, which may have a huge impact on the health of Marine ecosystems, and to which we would like to draw the attention of delegates.

1) Marine geoengineering

Powerful actors, including corporations and some scientists and governments, mostly from the countries that bear the largest historical responsibility for climate change, have been promoting risky geoengineering technologies, to either absorb or remove carbon dioxide or else to reduce the strength of the sun's rays, with the stated aim of helping to address climate change.

However these technologies are unproven and could have major negative impacts on biodiversity and on related livelihoods. With COP decisions IX and X, the CBD established a global landmark in precaution, calling for a de facto moratorium on geoengineering, with the exception only of small-scale experiments. The decisions were reaffirmed in several COP decisions, the last one being decision XIII/14 (2016)

In the past few years, new projects and experiments have been proposed, spurred on by the promise of new carbon markets. Many of these would have serious impacts on coastal and marine ecosystems and the Indigenous Peoples and local communities that depend on them.

These new geoengineering proposals include:

- ocean fertilization projects
- enhancing ocean alkalinity
- the use of biomass for carbon sequestration such as via macroalgae cultivation
- artificial upwelling

- solar geoengineering techniques like marine cloud brightening
- deploying microbubbles/reflective particles/materials on glaciers and arctic marine ecosystems.

Marine geoengineering proposals seek to intervene in vital ecosystems and processes (eg: ocean currents) that are not well understood and that are extremely important, e.g. for planetary weather systems and climate stability. They would also impact on marine food webs, cause turbidity, dump chemicals and produce changes in light and temperature that could have devastating effects on natural marine flora and fauna, including endangering natural seaweed and coral systems.

Because of the many risks to marine ecosystems, the London Convention /London Protocol on ocean dumping resumed their discussions on marine geoengineering, and called for the deployment of marine geoengineering techniques to be prevented, because they could have serious and irreversible “deleterious effects that are widespread, long-lasting or severe” (<https://bit.ly/4diiTrS>).

The CBD Alliance therefore believes that SBSTTA should recommend reaffirming decisions IX/16 C on ocean fertilization and X/33 (w) and (x) on geoengineering (which also includes marine geoengineering), and ensure its implementation and the prevention of open air experiments. It should also build upon the ongoing work of the London Convention / London Protocol. In line with decision CBD XI/20 (9), it should demand that Parties report to the CBD Secretariat on any proposed initiative re geoengineering.

2) Deep sea mining

The world is currently seeing a massive increase in demand for minerals for “clean energy”, including for solar panels, electric cars, wind farms as well as the increased demand for electricity transmission. Ever-growing global consumption keeps increasing the demand for all types of materials. The expansion of on-shore mining already has enormous impacts on terrestrial ecosystems, but these impacts pale in comparison to the damage deep sea mining could cause.

The impacts may be less immediate and visible than those of onshore mining, but are nevertheless very severe. Some of the required materials occur in nodules on the ocean floor which unfortunately makes them appear more attractive for mining in the deep ocean than on land. However, it would likely stir up massive, long-lasting plumes of debris suspended in the water, as well as causing serious noise pollution, destruction and contamination of living organisms and ecosystems.

The International Seabed Authority has already granted permits for exploration and some parties are pushing hard for exploitation permits to be granted soon. Yet there are many extraordinary ecosystems and species in these regions, about which almost nothing is known. This means mining impacts cannot be predicted with any precision.

The CBD Alliance therefore calls for the implementation of the decision from CBD COP15 (XV/24) on marine and coastal, point 16 and we suggest that the CBD should build on this decision by calling clearly for a moratorium, so providing leadership in this hotly contested area.

3) Blue carbon in marine and coastal ecosystems

Blue carbon refers to the carbon dioxide (CO₂) naturally stored in the world's coastal and marine ecosystems, including mangroves, saltmarshes, and seagrass meadows. All these are vital for biodiversity and protecting coastlines against floods. They are also nurseries for many species, including commercially important ones. Seagrass meadows oxygenate water, but are currently being rapidly lost.

Recently, 'blue carbon' areas are being created as sinks for carbon dioxide removal (CDR), and thus eligible for carbon markets. Carbon markets are designed to allow ongoing emissions elsewhere, thus leading to the avoidance of immediate action to reduce carbon emissions. In the case of many Blue Carbon projects, such emission permits would be created by the conservation of biodiversity, which means merely avoiding potential emissions, and no additional carbon would be absorbed .

This leads to further global warming, and to further ocean acidification, which in turn will negatively impact marine biodiversity. Another risk from Blue Carbon Projects is that they are overly focused on creating artificial carbon sinks; for example, by planting huge areas with seaweed, to capture CO₂. It is claimed that the seaweed biomass could then be harvested and swiftly sunk down to the deep ocean floor, to enhance ocean carbon stocks while reducing atmospheric carbon emissions.

Such projects could be extremely negative for biodiversity in the area where the seaweed is grown, and long-term impacts from such projects on marine ecosystems are possible, including major changes to ocean food webs.

Conclusion

The issues of Marine Geoengineering, deep sea mining, and the negative side effects of Blue Carbon Projects are not included in the current analysis of the CBD regarding marine and coastal ecosystem health. The CBD should include it in the current annex which identifies these gaps, and thus the future scope of work.

These issues build upon previous work of the convention:

1. The CBD has already shown its leadership with its moratorium on geoengineering. It should now take the lead and call for the application of the principles of precaution and the ecosystem approach to marine geoengineering.
2. The issue of carbon markets should be studied to ensure consistency with the ecosystem approach, and particularly so for the very delicate and little understood marine ecosystems. Their orientation to the avoidance of immediate action to reduce emissions can be considered a perverse incentive. The exploitation of marine and coastal ecosystems for blue carbon projects is simply another attempt to avoid immediate action on carbon emissions and is therefore unacceptable.
3. The CBD already has a useful text on deep sea mining in the COP decision 15/24. This calls for no mining to take place without appropriate rules, regulations and procedures, plus the free, prior and informed consent of indigenous peoples and the application of the precautionary principle and the ecosystem approach. The CBD must strongly maintain its position in the face of continuing calls for deep sea mining.

We need urgent collective action to tackle the climate and biodiversity crises we now face, applying principles of contraction and convergence, human rights and justice. The CBD has taken some uniquely strong positions on these issues, which must now be strengthened in its approach to marine geoengineering, deep sea mining and blue carbon.