

Climate Change and Biodiversity Beyond National Jurisdiction

The BBNJ Agreement provides a vital opportunity to better integrate biodiversity protection with climate change action in ABNJ to help limit the global temperature increase to 1.5 °C.

The ocean and its biodiversity beyond national jurisdiction serve as the planet's greatest mitigator of climate change by removing over 90% of the Earth's excess heat and over 25% of excess carbon dioxide from the atmosphere. This makes it crucial for BBNJ and climate change policy to work together.

Opportunities to integrate climate change in the BBNJ Agreement include:

- **Recognize in the preamble** the critical role of biodiversity in ABNJ in climate mitigation, the 30% GBF targets for 2030, including specifically to ABNJ, and the 1.5°C targets of the Paris Agreement as fully connected.
- **Add ocean deoxygenation** (oxygen loss) alongside warming and ocean acidification throughout (Preamble, Art. 5 (g), Art. 14 (c), Annex 1(f), Annex 2 (b.iv)).
- **Promote in Art. 5** “an approach that supports the conservation of biodiversity’s carbon services that enable the ocean to provide climate mitigation, including carbon uptake, transport, transformation and sequestration.”
- **Include in Annex I** as indicative criteria for protection “Special importance for the carbon cycle, climate mitigation or adaptation”.
- **Advance in Annex II (a)** knowledge transfer of biodiversity-enabled climate services (including mitigation, adaptation and carbon conservation) to enable states to build nature-based solutions from ABNJ into their NDCs and other planning.

Through climate and ocean modelling combined with knowledge synthesis, we can identify areas that can serve as future climate refugia (in 3 dimensions) and protect carbon services along with biodiversity. MPAs and other area-based management tools (ABMTs) can be used to promote carbon conservation and increase climate change mitigation.

Climate considerations should therefore be included to help guide the prioritization of new proposed MPAs and inform other ABMTs. Because current MPAs account for only 1.4% of ABNJ, the potential contribution to carbon conservation and climate mitigation of achieving at least 30% protected areas by 2030 would significantly reinforce the ocean's role as the world's largest carbon sink. These contributions would support the international community's goal of limiting global temperature increase to 1.5 °C under the Paris Agreement.

Major threats to the ocean carbon cycle and ability to mitigate climate change are:

- **Climate change impacts** on deep-sea ecosystems including warming, ocean deoxygenation and ocean acidification
- **Human disturbances** associated with resource extraction including high seas/bottom fishing and seabed mining
- **Waste disposal and contamination** (plastics, organic pollutants, mine tailings, etc.) that compromise marine organism health
- **Emerging large-scale ocean-based climate interventions** (e.g., iron fertilization, enhanced alkalinity, macroalgal sinking and CO₂ injection) that may cause unintended changes to ocean biogeochemistry and ecosystems in ABNJ

Environmental impact assessments (EIAs) are likewise an important tool to ensure that any new activities do not disturb or disrupt essential carbon cycles or otherwise cause unintended changes to ocean biogeochemistry and ecosystems in ABNJ. Moreover, EIAs can help screen for activities with climate-positive, biodiversity-positive and people-positive impacts. **Similarly, strategic environmental assessments can help build knowledge** to inform climate-smart planning and management more generally.

Capacity building, technology transfer and support for collaborative research will be key to advancing knowledge of biodiversity-enabled climate services that can be incorporated into ABMTs, NDCs and other climate accounting and planning processes.

“Investing into nature also means fighting climate change”

Ursula von der Leyen, President, European Commission

This Policy Brief was prepared by:

Lisa A. Levin, Kristina M. Gjerde, and
Fuad Bateh

About DOSI:

The Deep-Ocean Stewardship Initiative is a global network of experts that seeks to integrate science, technology, policy, law and economics to advise on ecosystem-based management of resource use in the deep ocean and strategies to maintain the integrity of deep-ocean ecosystems within and beyond national jurisdiction.

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Other Relevant Policy Briefs:

[Climate and Biodiversity Beyond the Limits of National Jurisdiction \(2018\)](#)

[Ocean Deoxygenation: A Hidden Threat to Biodiversity Beyond National Jurisdiction \(2019\)](#)

Contact us: DOSIcomms@gmail.com