



NAVIGATING THE DEPTHS: FINANCE, BIODIVERSITY, AND THE THREAT OF DEEP SEA MINING

Deep Sea Mining Campaign | October 2024

Introduction

The world's oceans and deep sea ecosystems face a number of threats including climate change, bottom trawling, over-fishing, and pollution.

Deep sea mining (DSM) would add to these stressors, resulting in a [loss of biodiversity](#) that would be irreversible on multi-generational timescales. The [consequences for ocean ecosystem function](#), planetary systems, and for humanity, could be vast.

It is not just the scientific community that recognises the risks posed to biodiversity by DSM.

[IUCN Member States](#), civil society and Indigenous organisations also support a moratorium on DSM.

32 governments at the time of publication have [called for a ban or pause on DSM](#), largely due to environmental concerns.

The [finance sector](#) is beginning to recognise the risks to biodiversity posed by DSM the world's oceans and deep sea ecosystems posed by DSM.

This concern is linked to a growing awareness within the finance sector about biodiversity, as evidenced by the growing number of finance sector initiatives on biodiversity – see [Annex](#).

Civil society is also [demanding](#) the

finance sector do more to halt and reverse nature loss and biodiversity collapse.

Further, central banks and financial supervisors (including through the Network of Central Banks and Supervisors for Greening the Financial System) recognise nature loss as a source of [systemic risk](#) to financial systems and economies, and are setting new expectations of financial institutions as a result. The finance sector will be required to respond to regulatory and reputation pressures, including to better assess, report on and manage biodiversity risks.

This briefing paper highlights the connection between the risks of DSM to biodiversity, and the initiatives emerging in the finance sector on biodiversity.

It recommends actions financial institutions can take to ensure that global financial flows do not support DSM's unacceptable biodiversity risks.

Global commitments to biodiversity

The Convention on Biological Diversity (CBD) was ratified in 1993 and was the first significant attempt to protect the earth's biodiversity. The [Kunming-Montreal Global Biodiversity Framework](#) was adopted by 196 Parties to the Convention on Biological Diversity in December 2022.

The Framework aims to protect and restore biodiversity; ensure biodiversity is sustainably used; and that benefits from this use are shared equally.

The Framework is clear that success relies on action and cooperation by all levels of government and by all actors of society; including the [finance sector](#). Targets 14 and 15 of the Framework specifically outline responsibilities related to the financial sector.

At the [December 2022 meeting of the CBD](#), it was also agreed that; *“before deep seabed mineral exploitation activities take place, the impacts on the marine environment and biodiversity are sufficiently researched and the risks understood, ... and appropriate rules, regulations and procedures are put in place by the International Seabed Authority, in accordance with the best available science and the traditional knowledge of indigenous peoples and local communities with their full, free, prior, informed consent, and the precautionary and ecosystem approaches”*.

The Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction ([BBNJ Agreement](#)) was adopted in June 2023.

The Agreement, which applies to areas beyond national jurisdiction (where DSM exploration occurs), aims to ensure the conservation and sustainable use of marine biological diversity, for the present and in the long term. Among other things, the BBNJ Agreement establishes general principles and approaches for the conservation and use of marine biodiversity.

These include the precautionary principle, the principle of the common heritage of (hu)mankind, an ecosystem approach and an approach that builds ecosystem resilience, and the use of best available science and scientific information.

However, the BBNJ Agreement is still to be ratified by the required 60 States.

The BBNJ Agreement will have important implications for the International Seabed Authority and its regulation of DSM, area-based management tools and environmental impacts, in particular.¹

Numerous other [global commitments to biodiversity](#) exist. States have repeatedly committed to apply the precautionary approach; halt and reverse the loss of marine biodiversity; take action to restore degraded ecosystems; and build the resilience of marine ecosystems. Deep sea mining [is not consistent](#) with these commitments.

Deep sea mining is a key biodiversity risk

There is a paucity of independent scientific research on the biology, ecology and connectivity of deep sea species and ecosystems, as well as the ecosystem functions they provide.

[Without this information](#), the potential risks of DSM cannot be fully understood, and it could take decades to [close the scientific gaps](#).

It is clear the [potential risks of DSM to biodiversity](#) are many, including:

- The direct [loss of unique and ecologically important species](#) and populations as a result of the degradation, destruction, and elimination of seafloor habitat.
- The generation of [sediment plumes](#) from mining activity on the seafloor, midwater discharge of waste water from the surface vessel, as well as leakage from riser pipes and accidental spillage. These plumes would smother and bury seabed fauna and clog the gills of filter feeders and fish, and potentially expose deep sea and other marine species to metal toxicity.
- Toxins spread by plumes may

¹ It is worth noting that the BBNJ Agreement was adopted later in time than the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982. Thus, under [Treaty law](#) inconsistencies between the two agreements, the 1994 Agreement applies only to the extent that its provisions are compatible with those of the BBNJ Agreement.

accumulate in food webs and subsequently have [negative impacts on marine mammals](#) and other species, including mortality and adverse impacts on health, potentially including reduced reproductive performance.

- [Uncertain impacts on carbon sequestration](#) dynamics and deep-ocean carbon storage. The impacts of DSM activities are expected to [interact with climate change stressors](#), reducing the resilience of deep-sea organisms and ecosystems and exacerbating impacts.
- The [generation of light and noise](#) in a naturally dark and quiet environment is anticipated to interfere with prey detection, communication and navigation.

These and other potential risks to ocean biodiversity are acknowledged by the [37 financial institutions](#) that signed the 'Global Financial Institutions Statement to Governments on Deep Seabed Mining'.

In the statement, the ***“widespread concern in the scientific community regarding DSM and the irreversible impact it would have on delicately balanced and sensitive, deep ocean ecosystems”*** is acknowledged.

Further, the signatories argue that *“the intrinsic long-term benefits of a healthy ocean far outweigh any short-term incentives offered by DSM.”* As [Triodos Bank](#) (one of the signatories to the statement) have noted, *“while land-based mining can be problematic (including because of serious human rights violations) mining minerals from the seabed will not solve these problems but would instead create additional ecological problems”*.

Potential biodiversity risks are influencing decision making within financial institutions.

Swiss Re, one of Switzerland's largest insurers, has noted that the unknowns

and potential risks of DSM [are many](#), and Zurich Insurance Group has said that it does *“not have any appetite”* for insuring these types of mining activities.

To date 15 financial institutions – including some of the world's largest insurance companies – have published policies which explicitly exclude the provision of financial services for DSM activities.

Storebrand, for example, [has said](#); *“the deep sea contains many of the world's most pristine, biodiverse, and poorly studied ecosystems, which provide a broad range of critical ecosystem functions. In line with the precautionary principle, Storebrand will not invest in companies involved in deep-sea mining until we have more scientific knowledge on the impacts of these activities. Significant challenges must be overcome before the sector can be recognised as environmentally and economically sustainable”*.

Recommendations for financial institutions

Collectively, all financial institutions can ensure that global financial flows are not supporting DSM projects.

Actions that can be taken include:

1. In line with the [precautionary principle](#), choosing to not finance, invest in, or underwrite DSM activities or companies involved in DSM, and developing and disclosing [policies](#) to this effect;
2. Signing public statements signalling caution in regard to DSM such as the [‘Business statement](#) supporting a moratorium on deep sea mining’; and
3. Engaging with ESG due diligence or ratings agencies to ensure that they label DSM as high risk and provide information on associated companies that should be avoided.

Annex: Financial sector initiatives on biodiversity

Financial sector initiatives on biodiversity include those listed below. Numerous [other initiatives](#) are also driving financial sector awareness and action with regards to biodiversity.

It should be noted that these initiatives vary in their aims and level of ambition and are not universally supported by civil society. Concerns include weaknesses in reporting requirements; a lack of independent verification of company reporting; and the voluntary nature of many of the initiatives.

Nevertheless, these initiatives do signal growing finance sector interest in and action on biodiversity.

INITIATIVE	SUMMARY
Taskforce on Nature-related Financial Disclosures (TNFD)	<p>TNFD has developed a set of recommendations and guidance for business and finance to assess and report on their nature-related dependencies, impacts, risks, and opportunities. Over 400 companies have committed to disclose their impacts and risks consistent with the TNFDs recommendations.</p> <p>In its sector guidance on mining and metals, the TNFD notes that DSM is associated with potentially irreversible changes to deep sea ecosystems and the broader ecosystems they support, and that avoiding DSM as an activity is the best way for companies to avoid related risks.</p>
Science Based Targets Network (SBTN)	<p>SBTN is developing science-based targets for nature for companies to address their environmental impacts across climate, biodiversity, land, freshwater, and oceans. Specific guidance for the finance sector is being developed and is likely to be published by the end of 2024.</p>
UN Environment Programme Finance Initiative (UNEP FI)	<p>Over 500 banks and insurers are implementing the UNEP FI's Principles for Responsible Banking, Principles for Sustainable Insurance and Principles for Responsible Investment. Among other things, UNEP FI is supporting its members to align with the objectives of the Kunming-Montreal Global Biodiversity Framework.</p> <p>The UNEP FI published an opinion that there is no foreseeable way in which the financing of deep sea mining activities can be viewed as consistent with the Sustainable Blue Economy Finance Principles.</p>
Finance for Biodiversity	<p>Over 170 financial institutions have signed the Finance for Biodiversity pledge calling on global leaders to reverse nature loss, ensure ecosystem resilience, and commit to contributing to the protection and restoration of biodiversity and ecosystems through their own financing activities and investments.</p> <p>Finance for Biodiversity coordinated the Global Financial Institutions Statement to Governments on Deep Seabed Mining.</p>
Nature Action 100	<p>Nature Action 100 is an investor-led initiative focused on supporting greater corporate ambition and action to reverse nature and biodiversity loss. Actions that companies can take to reverse biodiversity loss are formalised in its expectations for companies which includes actions on ambition, assessment, and target setting.</p>

DSMC

www.dsm-campaign.org