

Synthesis of UNEP FI's position on Deep Sea Mining

DEEP SEA MINING CAMPAIGN BRIEFING PAPER | October 2022

This briefing paper provides a synthesis of recent United Nations Environment Programme Finance Initiative (UNEP FI)¹ publications regarding deep sea mining (DSM). UNEP FI has produced several publications on sustainable oceans and the finance sector, including its recent report *Harmful Marine Extractives: Understanding the risks & impacts of financing non-renewable extractive Industries*. In publishing these reports, UNEP FI has stated that it is seeking to support financial institutions to manage and accelerate the transition away from unsustainable activities and search for sustainable activities instead.

UNEP FI recognises that financial institutions have a major impact on our oceans through the activities and companies they lend to, underwrite and invest in.

This is based on the understanding that the ocean is fundamental to life on our planet and to our future. Yet the world's oceans are facing unparalleled threats, including climate change, unsustainable fishing, eutrophication, pollution and the extraction of natural resources.

Deep sea mining impacts

DSM poses yet another threat to the world's oceans, with potential far reaching impacts. The accumulated scientific evidence indicates that the impacts of mining polymetallic nodules in the Pacific Ocean are likely to be extensive, severe and last for generations, causing essentially irreversible harm – not only for sea beds and their species but for marine ecosystems more broadly.

Sediment plumes generated by mining activities could cause bioaccumulation of toxic metals in marine food webs and affect the movement and migration of species that feed on plankton and fishes, such as birds, sharks and cetaceans.

Although to date no commercial DSM operations have been established, there is much exploration and companies are starting to trial DSM machinery and systems – with impacts similar in nature to those anticipated from commercial scale mines.

Due to the risks posed by DSM, UNEP FI concludes that the extraction of seabed deposits cannot be considered sustainable.

1. The UNEP FI brings together the UN with banks, insurers and investors to shape the sustainable finance agenda. It has established sustainability frameworks within the finance industry to address global environmental, social and governance (ESG) challenges. Its Leadership Council and Global Steering Committee includes representatives from some of the world's largest financial institutions

This is despite claims by proponents of the sector that it is necessary to ensure a swift transition to renewable energy globally, and that it is an 'environmentally friendly' alternative to terrestrial mining.

Deep sea mining and the Sustainable Blue Economy Principles

The UNEP FI has developed [The Sustainable Blue Economy Finance Principles](#) as a guiding framework for the finance sector. These define a sustainable blue economy as one that "provides social and economic benefits for current and future generations; restores, protects and maintains diverse, productive and resilient ecosystems; and is based on clean technologies, renewable energy and circular material flows". The principles exclude non-renewable extractive industries (e.g., offshore oil and gas, and deep-sea mining) as well as

unsustainable practices in other sectors.

The Principles include commitments to transparency, to being science-led and precautionary, and to protect marine ecosystems. [Over 70 institutions](#) representing US \$11 trillion in assets have joined the Sustainable Blue Economy Finance Initiative as members or signatories to these Principles.

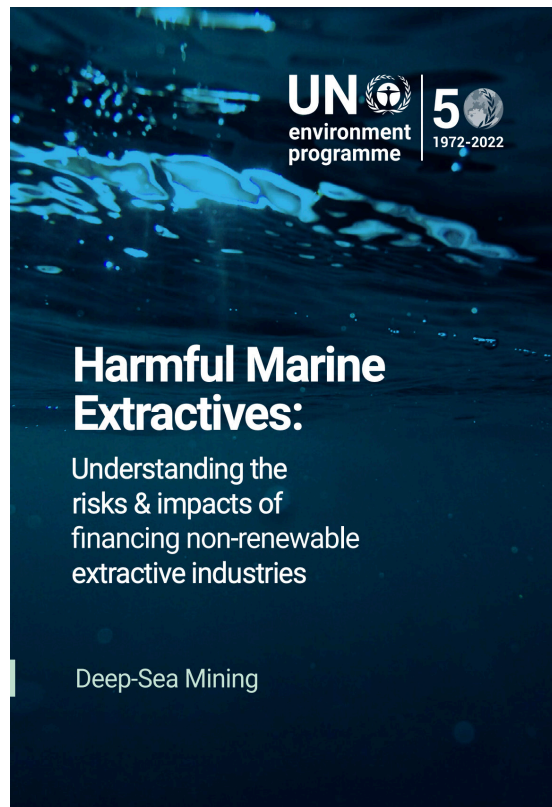
UNEP FI has [concluded](#) that "... there is no foreseeable way in which the financing of DSM activities can be viewed as consistent with the Sustainable Blue Economy Finance Principles".

UNEP FI has [identified](#), through a review of the available scientific literature, a range of possible environmental and social pressures and impacts of DSM. These are summarised in Table 1.

Due to these pressures, DSM will raise significant environmental, social and governance challenges.



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Table 1. Possible environmental and social pressures and impacts of deep sea mining identified by UNEP FI

PRESSURE	IMPACT
Seabed disturbance and disruption of habitat	<p>Loss or degradation of coastal and marine habitats</p> <p>Loss or reduction in marine biodiversity including loss of endangered, threatened and protected species</p> <p>Loss of ecosystem resilience and provision of ecosystem services</p> <p>Changes to marine biological, chemical and geological cycles</p>
Increased turbidity of water above the seafloor	<p>Loss or degradation of coastal and marine habitats</p> <p>Loss or reduction in marine biodiversity including loss of endangered, threatened and protected species</p> <p>Loss of ecosystem resilience and provision of ecosystem services</p> <p>Reduction in animal welfare</p>
Discharge of fine sediments and metals to the water column	<p>Loss or degradation of coastal and marine habitats</p> <p>Loss of ecosystem resilience and provision of ecosystem services</p> <p>Reduction in animal welfare</p> <p>Changes to marine biological, chemical and geological cycles</p>
Disruption to wildlife	Reduction in animal welfare
Pollution and water contamination	<p>Loss or degradation of coastal and marine habitats</p> <p>Changes to marine biological, chemical and geological cycles</p>
Air pollution	<p>Increased greenhouse gas concentrations</p> <p>Changes to marine biological, chemical and geological cycles</p>
Use conflict	<p>Reduction or loss of access to sustainable and inclusive livelihoods</p> <p>Economic damage and loss of productivity</p>
Social and economic conditions	<p>Violation of human rights including rights of indigenous communities</p> <p>Economic damage and loss of productivity</p> <p>Inequality of opportunities on the basis of age, sex, disability, race, ethnicity, origin, religion or economic or other status</p>



A brittle star (*Relicanthus* sp.) seen in a field of manganese nodules.
Image: DJ Amon & CR Smith, University of Hawai'i

Finance sector risks and opportunities

UNEP FI has [identified](#) the following risks in financing DSM activities:

1. Reputation risk: This derives from the growing awareness of civil society, academia, governments, intergovernmental organisations and business of the risks of DSM, with more and more stakeholders calling for a ban or moratorium on DSM.
2. Regulatory risk: Comprehensive regulatory frameworks are currently lacking. There are ongoing concerns that the environmental risks associated with DSM may result in changes to existing or proposed regulatory frameworks. This lack of regulatory certainty creates significant risks for miners, investors and insurers.

3. Operational risk: These include circumstances where DSM projects do not have community consent. Civil society has already demonstrated the willingness and capacity to engage in direct protest against marine extractive industries.

Rather than investing in DSM, UNEP FI is [encouraging](#) financial institutions to focus on efforts that would reduce the environmental footprint of terrestrial mining; and support the transition toward a circular economy, including through increased metals recycling and reuse and innovation in battery technology.

A growing number of financial institutions are hearing this message and developing policies excluding services to DSM activities.