Financial Institutions and the Risks of Deep Sea Mining

DEEP SEA MINING CAMPAIGN BRIEFING PAPER | October 2022

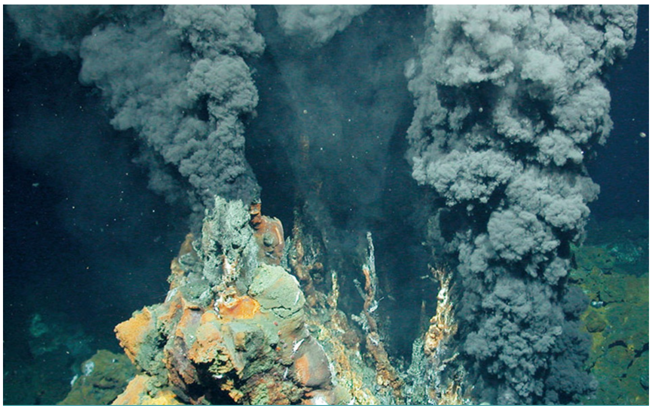
This paper summarises the risks associated with the deep sea mining (DSM) sector, and the ways in which financial institutions have responded, particularly with the development of policies that exclude financial services to DSM activities.

Deep sea mining (DSM)

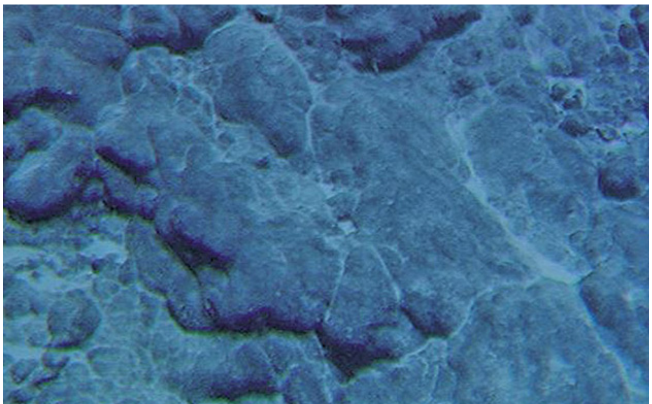
DSM refers to the extraction of metals such as iron, manganese, copper, zinc, lead, nickel, cobalt and rare earths from the deep seafloor. Although the deep sea is technically considered to be below 200 meters, the DSM deposits under exploration are at depths greater than 1.5 km. No commercial scale DSM has taken place yet, either within national waters (exclusive economic zones or EEZs) or in international waters, where rules are being negotiated at the International Seabed Authority (ISA).

Three types of DSM deposits are of commercial interest - seafloor massive sulphides (produced by hydrothermal vents), cobalt-rich crusts and polymetallic nodules. These deposits are located in distinctly different environments, each with unique ecosystems that mining would destroy.

Proponents of the sector claim that DSM is an 'environmentally friendly' alternative to terrestrial mining essential for the swift transition to renewable energy.



HYDROTHERMAL VENTS



COBALT-RICH CRUSTS

POLYMETALLIC NODULES

These claims contradict the accumulated scientific consensus that mining the deep sea for minerals poses a significant risk to ocean ecosystems. DSM also threatens the deep cultural and spiritual connections of islanders and maritime communities who have navigated, fished and traded across oceanscapes for thousands of years.

The commercial viability of DSM is a significant unknown, with only a limited number of companies willing to accept that risk. The first company to gain a licence to mine the seabed, Nautilus Minerals, went into administration in 2019 with creditors, including the Government of Papua New Guinea, losing hundreds of millions of dollars. A related DSM company, The Metals Company (TMC), which lost the majority of its initial investors, is facing a class action suit mounted by shareholders claiming that it understated the financial and environmental risks, and overstated its value and scale of operations. TMC has also been at risk of being de-listed from Nasdaq.

The risks of DSM

Apart from the financial risks noted above, there are several other reasons financial institutions should be wary of lending to, underwriting or investing in DSM. These include reputational risks, operational risks, and regulatory uncertainty both within EEZs and in international waters.

The ISA secretariat's attempts to rush the development of regulations for DSM in international waters to accommodate the commercial agenda of The Metals Company is meeting firm resistance.

In addition, scientific knowledge about the environmental risks of DSM is continuously expanding and can be expected to toughen any regulatory frameworks that may be developed. It is also possible such frameworks may be significantly delayed or never established due to the increasing opposition to DSM from scientists, civil society, companies and governments. This lack of regulatory certainty carries the prospect of additional costs for companies aspiring to undertake DSM, including from potential breaches of environmental regulation and liabilities due to significant environmental damage.

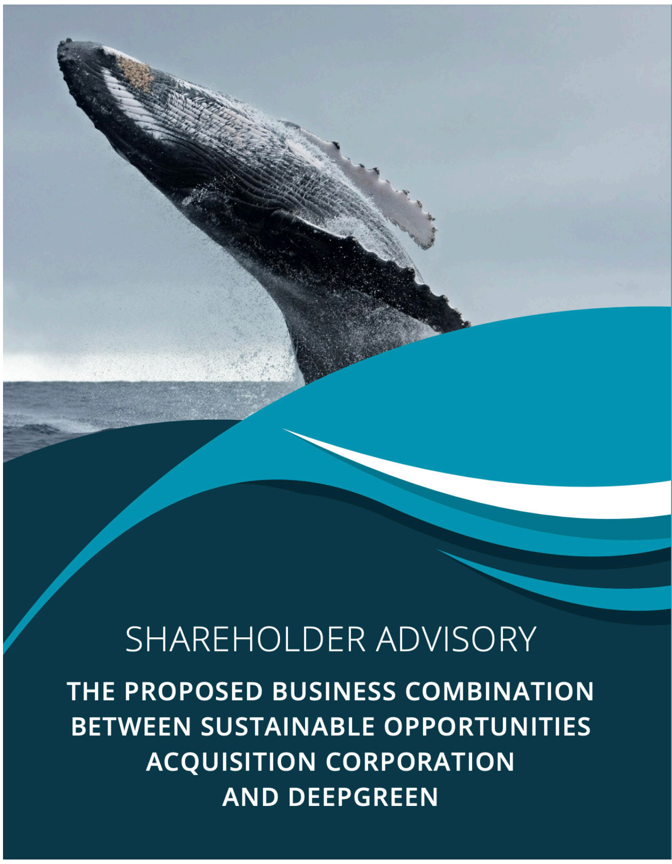
Lack of social license and community consent creates reputational as well as operational risks. In the Pacific, for example, many of the conflicts experienced with terrestrial mining can be seen to be already emerging with DSM. These essentially relate to tensions over economic gain for developed nation corporations versus the social and environmental harm that would be experienced by maritime and island communities.

Other operational risks are likely from seismic and extreme weather events, and a failure of commercially unproven equipment operating in extreme deep sea conditions.

Civil society and business responses to DSM

Globally civil society, academia, governments, intergovernmental organisations and business are increasingly aware of the risks of DSM, with more stakeholders calling for a ban or moratorium on DSM. The International Union for Conservation of Nature (IUCN) adopted a resolution at its September 2021 meeting calling for a moratorium on DSM which was supported by 81 governments and government agencies, and over 500 civil society groups. This presents potential reputational risk for financial institutions supporting or considering to 777support DSM.

There is also growing momentum from the business sector in support of a moratorium on DSM. A number of large companies – including from the automotive and technology sectors – have committed not to source minerals from the deep seabed, to exclude such minerals from their supply chains, and not to finance deep seabed mining activities. Triodos Bank is one signatory to a call for a moratorium on DSM.



TMC: A warning to investors

In September 2021, The Metals Company (TMC) publicly floated after a merger of DeepGreen and the SPAC, Sustainable Opportunities Acquisition Corp (SOAC). It is the second initial public offering (IPO) involving a deep sea mining company - the first being Norwegian Green Minerals in March 2021. Over 90% of warrant holders redeemed rather than invest, two PIPE investors failed to complete, and the shares initially lost 90% of its share value one year after launch.

The Deep Sea Mining Campaign (DSMC) published a shareholder advisory forcing TMC to revise its stated risks with the SEC.

Financial institutions excluding support for DSM

Due to the risks posed by DSM, the United Nations Environment Programme Finance Initiative – which brings together the UN with banks, insurers and investors to shape the sustainable finance agenda – **has concluded that the extraction of seabed deposits cannot be considered sustainable, and urges financial institutions to not support the sector.**

In recognition of the risks associated with DSM and the expectations of their stakeholders, a number of financial institutions have published polices which explicitly exclude the provision of financial services for DSM activities. These are listed in Table 1.

Insurance and DSM

While, banks have been the first to develop policies excluding services to DSM, the insurance sector also has a powerful role to play in determining the viability of extractive industry projects. For example, the denial of insurance to fossil fuel projects increasingly hampers their development.

The many uncertainties relating to DSM means it is not currently possible to quantify associated risks. This should be of particular concern to the insurance sector as it would ultimately carry the financial burden of failure.

Avoiding DSM Risk

Financial institutions are increasingly developing policies seeking to avoid biodiversity loss and further environmental stress on the planet's oceans. Within that wider context, this paper outlines the risks associated with the proposed DSM industry, and the movement by financial institutions towards supporting a moratorium and/or developing policies excluding services to DSM.

In keeping with this momentum, it would be prudent for investors to seriously consider UNEP FI's conclusion that deep sea mining cannot be considered sustainable, and particularly its recommendation not to provide support for the industry.

Table 1. Financial institutions who have published polices which explicitly exclude the provision of financial services for DSM activities

FINANCIAL INSTITUTION	PUBLISHED POLICY
ABN·AMRO	[from their exclusion list] "Commercial large scale deep sea mining beyond exclusive economic zones" read here
BBVA	"BBVA will not support the provision of financial services to clients or projects who are involved in ... seabed mining" read here
CREDIT SUISSE	"Will not provide any project-related financing towards the exploration or extraction of mineral deposits of the deep seabed" and "will not provide any lending or capital markets underwriting to companies that are primarily engaged in the exploration or extraction of mineral deposits from the deep seabed" read here
LLOYDS BANK	"Lloyds Banking Group will not support (new or existing) customers undertaking deep-sea mining" read here
NatWest	"... restricted list includes 'companies undertaking deep-sea mining" read here
standard chartered	"We will not provide financial services directly towards: ... The exploration or production of Deep-sea Mining projects" read here
The co-operative bank	"Will not provide banking services to any business or organisation whose activity contributes to global climate change or the destruction of ecosystems [including] ... the exploration or extraction of minerals using deep seabed mining, including the conduct of research that facilitates deep sea mining" read here
Triodos Bank	"Triodos Bank excludes companies that: ... Are involved in controversial mining activities, for example deep sea mining or asbestos mining" read here
European Investment Bank The EU bank	"The following activities cannot benefit from EIB financing: ... b. Projects unacceptable in climate and environmental terms ... Extraction of mineral deposits from the deep sea[13] ... 13. Deep sea is defined as the areas of the ocean below 200 m — The International Seabed Authority and Deep Seabed Mining. United Nations." read here