



# THE PRECAUTIONARY PRINCIPLE APPLIED TO DEEP SEA MINING

*We don't know enough about the deep sea  
and the impacts that deep sea mining will have.  
So it's precaution, precaution, precaution.*

Daniele La Porta, Senior Mining Specialist, The World Bank<sup>1</sup>

# DSMC

Deep Sea Mining Campaign

The Deep Sea Mining Campaign is an association of NGOs and citizens concerned about the likely impacts of deep sea mining on marine ecosystems and communities. We collaborate across the Pacific Islands, Australia, New Zealand, Canada, the USA, and Europe.

**[www.dsm-campaign.org](http://www.dsm-campaign.org)**

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## OVERVIEW

- Mounting evidence points to deep sea mining's long term environmental, economic, and social harm, including to ocean economies such as high value fisheries and tourism, financial, reputational and ESG risks for investors.
- Numerous resolutions urge a precautionary approach to seabed mining in national and international jurisdictions.
- Seabed mining also carries the legal requirement to implement the precautionary principle, use best environmental practices, and conduct prior environmental impact assessments.
- However precautionary regulatory frameworks are yet to be developed with the rush to develop regulations within two years.
- Deep sea mining companies are hastening toward commercial exploitation of seabed minerals despite scientific predictions of significant and widespread ecological harm. In particular mining companies, partnered with developing nations that lack the capacity to develop or implement environmental safeguards, are seeking to commence exploitation without precaution.
- The finance sector has an important role to play in protecting the interests of the wider community and the health of oceans worldwide by establishing its own precautionary approach to deep sea mining. In particular financial institutions have a responsibility to encourage sustainable ocean investments and to exclude finance to deep sea mining.

***The fate of the deep sea and the fate of our planet are intimately intertwined. That we should be considering the destruction of these places and the multitude of species they support – before we have even understood them and the role they play in the health of our planet– is beyond reason.***

Sir David Attenborough<sup>2</sup>



## BACKGROUND

There is **clear scientific consensus** that the impacts of deep sea mining would be extensive, severe and last for generations, causing irreversible species loss and ecosystem degradation. Furthermore, presumed social and economic gains are unsubstantiated and ocean-based livelihoods, food security, and cultures are at risk.

The **International Seabed Authority (ISA)** has **issued 30 licences** for mineral exploration in areas beyond national jurisdiction covering millions of square kilometres, typically at depths greater than 3 kilometres. The ISA is the autonomous intergovernmental body responsible for regulating mineral activities and protecting the marine environment in areas beyond national jurisdiction.

To date, no commercial deep sea mining has occurred – and a wide cross-section of society hopes to keep it that way. **Scientists, legal experts, national and international governments, local communities, high-profile conservationists** and civil society have called for either a **moratorium** or a **complete ban** on deep sea mining. The emerging industry clearly lacks social licence and investment carries financial and reputational risks.

Scientists predict that deep sea mining will cause an **irreversible net loss of biodiversity, endangering** deep sea species and threatening extinction. They have warned of the harms caused by introducing light, sound, and pollution affecting **“thousands of meters of water column, from the seabed to the surface.”** They have raised alarm at the potential **damage caused by plumes** of sediment for **microbial diversity**, smothering organisms and **disorienting migratory species**. They have **demonstrated the slow pace** of recovery of seabed environments adapted to relatively static conditions; recent **mining impact** “experiments confirm that even the soft sediment seafloor would take many decades to hundreds of years to recover from the disturbance caused.”

UNEP’s **practical guidance for finance institutions** on sustainable ocean finance, released in March 2021, clearly notes that deep sea mining cannot be a sustainable investment option given the risks involved. In a rejection of deep sea mining, global companies BMW, Volvo, Google and Samsung are **leading a business call for a moratorium** and have committed to not source metals from deep sea mining. Government officials and NGO representatives voted overwhelmingly in favour of a **motion calling for a moratorium on DSM** and the reform of the ISA.

In addition, a comprehensive **Shareholder Advisory** highlights the high level of financial risk and potential liabilities that investors in The Metals Company may expect to encounter. The majority of these are applicable to deep sea mining projects in general.

Despite these risks in June 2021 Nauru triggered what is known as the “two year rule” which requires the ISA Council to finalise regulations within two years or “consider and

provisionally approve” within two years a plan of work (exploitation contract) for its contractor, Nauru Ocean Resources Inc, (NORI) even without regulations. There is concern that other companies may follow, opening up our oceans to the largest unregulated extractive project in history. This attitude demonstrates neither respect for international processes, nor for the concerns expressed by society, nor for the impacts likely to be borne by the islands in the Pacific that have sponsored exploration contracts.

## THE PRECAUTIONARY PRINCIPLE AND DEEP SEA MINING

### International Tribunal for the Law of the Sea (ITLOS) Advisory Opinion

The Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (ITLOS) has reinforced the role of the precautionary principle in the “responsibilities and obligations” of the ISA, states, and private contractors. According to the ITLOS [2011 Advisory Opinion](#), the UN Convention on the Law of the Sea transforms the “non-binding approach in the Rio Declaration into a binding obligation” for seabed mining.<sup>3</sup> This ruling notes that there is a direct obligation under international law to apply the precautionary principle, use best environmental practices, and conduct prior environmental impact assessments.

The ITLOS decision notes that this obligation applies to all states, regardless of their size or capacity and that this obligation “applies in situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks. A sponsoring State would not meet its obligation of due diligence if it disregarded those risks. Such disregard would amount to a failure to comply with the precautionary approach.”<sup>4</sup>

ITLOS ruled that all states sponsoring mining contracts should be held to high and equal standards, no matter their financial and institutional capacity. Rather than stipulate that nations be held responsible for the best environmental protections within their means, the Tribunal aimed to ensure the global commons be consistently protected from harm. This decision was explicitly motivated to prevent private mining companies from creating relationships of convenience with lower-income countries “in the hope of being subjected to less burdensome regulations and controls” and thus jeopardizing “uniform application of the highest standards of protection of the marine environment, the safe development of activities in the Area and protection of the common heritage of mankind.”<sup>5</sup>

This obligation to apply the precautionary approach exists independently of the ISA’s regulations. Under UNCLOS, state law should be “no less effective than international rules, regulations, and procedures.”<sup>6</sup> Thus the obligation to apply the precautionary principle is also applicable to states considering seabed mining in their own EEZs.

Despite this legal decision, enforcement is weak, and the very scenario this ruling aims to prevent is coming to pass. Mining companies, partnered with developing nations that lack the capacity to develop or implement environmental safeguards, are seeking to commence exploitation without precaution.

### The European Parliament Resolutions

The European Parliament Resolution on [International Ocean Governance: An Agenda for the Future of our Oceans in the Context of the 2030 SDGs](#) (January 2018), makes explicit connections between proper application of the precautionary principle and non-development of deep sea mining.

*Article 66. Stresses that the Union's precautionary principle has to be applied to deep sea mining exploration; is alarmed by the Commission's insistence that deep-sea mining be included in the Union's priority sectors for blue growth; is concerned at the possibility that the further promotion of deep-sea mining could adversely affect the actions that are required under SDG 12 (transition to sustainable consumption and production);*

*Article 67. Stresses that the precautionary principle must be applied to the emerging deep-sea mining sector, and that given the scientific warnings regarding significant and potentially irreversible environmental harm, considers that the EU should not support the development of this industry but should, rather, invest in sustainable alternatives, and specifically in a transition to sustainable consumption and production, as called for in SDG 12 under Agenda 2030";*

European Parliament Resolution of 9 June 2021 on the EU Biodiversity Strategy for 2030: [Bringing nature back into our lives](#) (2020/2273 INI) outlines the European Parliament's position on deep sea mining as follows:

*Article 184. Highlights that the deep sea is believed to have the highest biodiversity on Earth and provides critical environmental services, including long-term carbon sequestration; points out that deep-seabed mining is highly likely to cause inevitable and permanent biodiversity loss; **stresses that the precautionary principle must apply to the emerging deep seabed mining sector**; recalls its resolution of 16 January 2018 on international ocean governance and calls on the Commission and the Member States to promote a moratorium, including at the International Seabed Authority, on deep-seabed mining until such time as the effects of deep sea mining on the marine environment, biodiversity and human activities at sea have been studied and researched sufficiently and deep seabed mining can be managed to ensure no marine biodiversity loss nor degradation of marine ecosystems; emphasises the need for the Commission to cease funding for the development of seabed mining technology in line with a circular economy based on minimising, reusing and recycling minerals and metals;*

The European Commission and EU Member States are currently debating whether to take a common EU position at the ISA. Civil society organizations such as the Deep Sea Conservation Coalition will be calling on them to adopt the position recommended by the European Parliament.

### The World Bank

The World Bank report, “[Pacific Possible: Precautionary Management of Deep Sea Minerals](#)”, promotes the application of a precautionary approach in deep sea mining. It regards as crucial that preventative options include “no development.” The report emphasizes the necessary role of strong regulations, institutions with the technical capacity to monitor and report, transparency, and stakeholder engagement in defining and implementing a precautionary approach.

It is notable that these pre-requisites for meaningful precaution are currently lacking.

Moreover, the World Bank does not include deep sea mining in its [Climate-Smart Mining Initiative](#). It has emphasized the need for “[climate-smart mining practices](#)” in the minerals-intensive energy transition, noting that “significant challenges will likely emerge if the climate-driven clean energy transition is not managed responsibly and sustainably.”

### Marine Scientist statement to the G7

Dubbed “[Seven Asks for the G7](#)”, the scientists’ statement includes a list of seven actionable steps central to addressing climate change and supporting the health of oceans and human wellbeing. The first of these steps is to ban the destructive extraction of ocean resources. It stipulates imposing a precautionary freeze on all deep sea mining until it can be proven that its techniques do not harm the ocean.

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<sup>1</sup> An Investor Perspective on the Green Energy Transition and Mining (Web Panel). <https://www.youtube.com/watch?v=mBI2VN8S2Eo>

<sup>2</sup> Foreword, Fauna & Flora International (FFI). 2020. An Assessment of the Risks and Impacts of Seabed Mining on Marine Ecosystems. FFI: Cambridge U.K. Available from: [www.fauna-flora.org](http://www.fauna-flora.org)

<sup>3</sup> The widely cited standard of the precautionary principle, Principle 15 of the 1992 Rio Declaration, reads: “In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

<sup>4</sup> Responsibilities and Obligations of States with Respect to Activities in the Area, Advisory Opinion, 1 February 2011, p. 46, para 131

<sup>5</sup> *Ibid*, para 159

<sup>6</sup> Article 208 of UNCLOS; UN 1982



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