Deep-sea mining: International Commitments

The 1982 United Nations Convention on the Law of the Sea establishes the legal framework for deep-sea mining related activities in the international area of the ocean. It gives the International Seabed Authority responsibility for taking measures “to ensure the effective protection of the marine environment from the harmful effects” of deep-sea mining (Article 145).

To this end, it states that the International Seabed Authority (ISA) should adopt appropriate rules, regulations and procedures for:
- “the prevention, reduction and control of pollution and other hazards to the marine environment;
- the prevention of interference with the ecological balance of the marine environment;
- the prevention of damage to the flora and fauna of the marine environment.”

Moreover, the ISA is obliged to “act on behalf of” and “for the benefit of” humankind “as a whole”. Since the adoption of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, there have been many developments in international policy relevant to protecting the marine environment and biodiversity from the impacts of activities such as deep-sea mining and deep-sea fishing:

Political commitments

- The 1992 United Nations (UN) Conference on Environment and Development, often called the Earth Summit, formulated the precautionary principle. This states that: “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” (Principle 15 of the Rio Declaration).
- Also in 1992, the Convention on Biological Diversity (CBD) established the conservation of biological diversity and the sustainable use of its components as objectives of the Convention (Article 1).
- The 2002 World Summit on Sustainable Development’s Johannesburg Plan of Implementation called on States to “Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction” (Paragraph 32).
- In 2006, UN General Assembly Resolution 61/105 called for States to “protect vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices, recognizing the immense importance and value of deep-sea ecosystems and the biodiversity they contain” (Paragraph 80).
Subsequent resolutions adopted by the UN General Assembly, including Resolution 77/118 adopted in 2022, reafirm this call to action.

- In 2011, the Seabed Disputes Chamber of the International Tribunal for Law of the Sea, in its Advisory Opinion on seabed mining, described the precautionary approach as “an integral part of the general obligation of due diligence of sponsoring States, which is applicable even outside the scope of the Regulations” (Paragraph 131).

- In 2012, at the UN Conference on Sustainable Development (Rio+20), countries committed to protect and restore the health, productivity and resilience of the ocean and marine ecosystems, to maintain their biodiversity and enable their conservation and sustainable use for present and future generations. They further made calls for “urgent actions that effectively reduce the rate of, halt and reverse the loss of biodiversity” (The Future We Want, Paragraphs 158 & 188).

- In 2015, 196 states adopted the Paris Agreement with the goal of limiting global warming to 1.5 degrees Celsius. A healthy ocean plays a vital role in climate regulation and mitigation, through absorbing 25% of the CO2 and 93% of the heat generated by greenhouse gas emission.

- In 2015, the adoption of the UN 2030 Agenda for Sustainable Development laid out 17 Sustainable Development Goals (SDGs). SDG 14 commits States “to conserve and sustainably use the oceans, seas and marine resources for sustainable development”, with target 14.2 committing States to “by 2020 sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience and take action for their restoration, to achieve healthy and productive oceans”. Further, SDG 12 contains a commitment “to ensure sustainable consumption and production patterns” and SDG 8 commits States to “endeavor to decouple economic growth from environmental degradation”.

- In 2019, the Intergovernmental Panel on Climate Change released a Special Report on the Ocean and Cryosphere in a Changing Climate which noted numerous climatic hazards for the deep sea, including loss of biodiversity and impacts on the water column and seafloor key for ecosystem services like carbon sequestration.

- The 2020 Leaders’ Pledge for Nature saw 95 countries and the European Union committing to “halting reversing biodiversity loss by 2030”. The Pledge emphasized that “the interdependent crises of biodiversity loss and ecosystem degradation and climate change - driven in large part by unsustainable production and consumption - require urgent and immediate global action”.

- In 2021, the Glasgow Climate Pact, resulting from COP26, emphasized the “importance of protecting, conserving and restoring nature and ecosystems, including [...] marine ecosystems”, to act “as sinks and reservoirs of greenhouse gases” (Paragraph 21).

- In 2022, at the UN Ocean Conference, through the Declaration titled “Our Ocean, Our Future, Our Responsibility”, Heads of State and Governments committed to “halting and reversing the decline in the health of the ocean’s ecosystems and biodiversity and to protecting and restoring its resilience and ecological integrity,” and “the need to enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the UN Convention on the Law of the Seas”, in order to restore harmony with nature (Paragraph 7 and 10).
In 2022, Decision 15/24 on the conservation and sustainable use of marine and coastal biodiversity adopted by the 15th Conference of Parties to the CBD encourages Parties and governments “to ensure that, before deep seabed mineral exploitation activities can take place, the impacts on the marine environment and biodiversity are sufficiently researched and the risks understood, the technologies and operational practices do not cause harmful effects to the marine environment and biodiversity, and appropriate rules, regulations and procedures are put in place by the International Seabed Authority, in accordance with the best available science and traditional knowledge of Indigenous peoples and local communities with their free, prior and informed consent, and the precautionary approach and ecosystem approaches, and consistent with the UN Convention on the Law of the Sea” (Paragraph 16).

In 2023, the historic new treaty for the conservation and sustainable use of Biodiversity Beyond National Jurisdiction (BBNJ) was agreed and will establish the legal mechanisms to better protect and sustainably use biodiversity in the deep ocean upon ratification.

The treaty applies to the Area1 and the high seas. It will enable the creation of international marine protected areas and will establish global standards and guidelines for environmental impact assessments for areas beyond national jurisdiction. The treaty’s preamble reads “Desiring to act as stewards of the ocean in areas beyond national jurisdiction on behalf of present and future generations by protecting, caring for an ensuring responsible use of the marine environment, maintaining the integrity for ocean ecosystems and conserving the inherent value of biodiversity of areas beyond national jurisdiction”. Deep-sea mining is not compatible with any of these goals.

Recent reports on the state of the ocean and biodiversity

In 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released a ground-breaking report warning that a million species face extinction, many within decades, unless action is taken to reduce the intensity of drivers of biodiversity loss".
The Deep Sea Conservation Coalition (DSCC) was founded in 2004 to address the need to prevent damage to deep-sea ecosystems and the depletion of deep-sea species on the high seas from bottom trawling and other forms of deep-sea fishing. The DSCC is made up of over 100 non-governmental organizations (NGOs), fishers organizations and law and policy institutes, all committed to protecting the deep sea.

Further information:
info@deep-sea-conservation.org | deep-sea-conservation.org

**Recommendations**

Scientists have warned that biodiversity loss would be unavoidable if deep-sea mining as currently envisioned is permitted to occur. They have warned that most mining-induced loss of biodiversity in the deep sea is likely to be permanent, nearly impossible to mitigate, and that the notion that “offsets” can compensate for biodiversity loss in the deep sea is scientifically meaningless.

ISA member States have repeatedly committed, through the 2030 SDGs and other instruments, 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.

In September 2021, participants at the IUCN World Conservation Congress voted overwhelmingly in favor of Resolution 122 calling for a moratorium on deep-sea mining and a reform of the ISA. Forty-four States or State agencies and over 500 NGOs supported the call.

In light of these commitments, States should agree that a moratorium on deep-sea mining needs to be in place unless and until it can be demonstrated that the marine environment can be effectively protected from mining activities and that mining would not lead to the loss of biodiversity, cause the degradation of deep-sea ecosystems, or compromise the ecological integrity and resilience of deep-sea and open ocean ecosystems.

**References**

The Area refers to the vast expanse of the seafloor and ocean floor in areas beyond national jurisdiction, commonly known as the “Area”. It encompasses approximately 50% of the Earth’s surface and is regulated by the ISA.
