CAMPAIGN FOR THE PROTECTION OF THE OCEANS & IMPLEMENTATION OF SDG 14

Protecting the Deep Seabed: A Factsheet for Parliamentarians
THE IMPACT OF DEEP SEABED MINING

The deep sea\(^1\), the world’s largest biome\(^2\), accounts for up to 90 percent of the marine environment. Though the deep sea is one of the most inaccessible areas on Earth, it plays a crucial role in regulating the planet including through the absorption and storage of immense quantities of the carbon dioxide released into the air by human activity.

The diverse species and ecosystems in the deep sea have adapted to thrive in these unique conditions, which leaves them extremely vulnerable to human disturbance. The deep seabed also holds large amounts of metal-rich deposits, many of which are commonly used in industrial and electronic applications.

The existence of these mineral deposits has sparked interest and concern on deep-sea mining (DSM), which is the process of retrieving mineral deposits from the deep seafloor. Though commercial mining has not yet begun, the International Seabed Authority (ISA)\(^3\) has currently issued 31 exploration licenses with a view to open commercial mining in the next two to three years.

The current exploration licenses cover some 1.3 million square kilometers of the deep seabed, creating the largest potential set of mining operations in existence, significantly larger than any land operation\(^4\).

Once the ISA begins issuing contracts for commercial exploitation, possibly within the next two years, it will be nearly impossible to reverse the trajectory of deep seabed mining.

The deep-sea ecosystem is already challenged by multiple environmental stressors from the impacts of climate change, pollutants, and plastics, which have created acidification, warming, deoxygenation and reduced supply of nutrients from surface waters.

The scientific community, civil society, fishing industry, and politicians have raised concerns that the risks associated with further damaging the deep-sea outweigh any potential net benefits for humankind.\(^5\) Many experts urge extreme caution, considering the inevitable and likely irreversible biodiversity loss if deep-sea mining is permitted.\(^6\)

Over the course of a 30-year license granted by the ISA, for example, each individual mining operation for polymetallic nodules\(^7\) is expected to effectively strip mine between 8,000 and 9,000 square kilometers of deep abyssal plains – an area one third of the size of Belgium.\(^8\) This would destroy most living organisms on and below the seabed. Many of the animals affected may take millions of years to recover, with even partial recovery of animals in surrounding sediment areas taking hundreds to thousands of years.\(^9\)

Despite the moratorium on deep-sea mining called for by an increasing number of political leaders, institutions, and the scientific community, vested nations and corporations are heavily lobbying for the International Seabed Authority to adopt regulations to allow the ISA to begin issuing commercial mining contracts in the international seabed area.\(^10\)
The planet stands at a unique point in history, with the rare opportunity to prevent the environmental degradation of a new frontier and possible extinction events across wide swaths of the deep sea by stopping a damaging large-scale exploitative industrial activity before it has begun.

### THE HUMAN ASPECT OF PROTECTING THE DEEP SEABED

As part of the balanced ecosystem that sustains both our planet and numerous livelihoods, deep-sea mining can have a significantly negative impact on various areas:

- **Diminished fish stocks will affect livelihoods**, particularly in societies that depend upon fish as their main source of income or protein, and the delicate global food-chain related to the oceans.

- **Damage caused to the marine ecosystem may disproportionately affect those already economically disadvantaged**, those who have already put forth efforts to protect their national waters, and those heavily vested in marine resources.

- **Marine tourism will be put at risk**, both from damage to sites of interest, and the reputational risk of deep-sea mining near iconic tourism assets. For example, much of Fiji’s adjacent international waters are rich in mineral-deposits, and are now subject to exploration licenses, putting Fiji’s Great Sea Reef and dive-tourism industry in particular jeopardy.\(^\text{11}\)

- **Disproportionate economic benefits** would provide little in the way of compensation to either the ISA member countries or as a “benefit to humankind as a whole,”\(^\text{12}\) instead producing profits for individual companies or state-owned enterprises and the countries that sponsor them at the ISA.\(^\text{13}\)

- **Barrier to achievement of Sustainable Development Goals 12 and 14**,\(^\text{14}\) by substantially expanding humankind’s “footprint” on Earth, promoting the continued unsustainable exploitation of natural resources, the degradation of ocean ecosystems, interfere the sequestration of carbon in the deep ocean, and undermining efforts to transform economies by perpetuating single-use, unsustainable consumption.\(^\text{15}\)

- **Value of the common heritage of humankind**. States members of the ISA currently lack both the scientific data and knowledge to assess whether any potential benefits of deep-sea industrial mining would offset the loss of biodiversity, destruction and degradation of ecosystems, loss of future benefits from yet to be discovered species and marine genetic resources and impacts on the broader marine environment given the diversity and vulnerability of species in areas to be permitted by the ISA.\(^\text{16}\)

- **The intrinsic value of biodiversity as life**, recognized *inter alia* in 2006 by United National (UN) General Assembly Resolution 61/105, committing States to take urgent action to protect vulnerable deep-sea ecosystems in the high seas “from destructive fishing practices, recognizing the immense importance and value of deep sea ecosystems and the biodiversity they contain”\(^\text{17}\) and the recent Leaders Pledge for Nature, United to Reverse Biodiversity Loss by 2030 for Sustainable Development.\(^\text{18}\)
In November 2021, PGA launched its partnership with the Deep Seabed Conservation Coalition, in response to concerns of PGA’s Executive Committee about renewed investment in exploration for seaded minerals by some of the ISA’s Member States.

This partnership aims to support parliamentarians who are concerned and want to take action towards a moratorium on deep-sea mining by the International Seabed Authority until sufficient scientific research has been conducted to assess whether DSM can be done without damage to this common heritage of humankind, and until the ISA Member States have undertaken organizational reforms to ensure transparency in the ISA’s obligation to act on behalf of humankind as a whole versus a selected group.
## WHAT CAN YOU, AS LEGISLATOR, DO TO PREVENT THE DAMAGE?

1. **Speak to your fellow parliamentarians and government officials about the impacts of deep-sea mining.**

2. **Share the resources provided by PGA and local NGOs with your colleagues during parliamentary meetings.**

3. **Invite experts to speak during relevant committee meetings and schedule parliamentary hearings or panel discussions where possible.**

4. **Ensure deep-sea mining is included as a topic of concern in all ocean-related discussions. For example, by proposing the addition of DSM to the agenda of meetings held on fishing, the ocean, sustainable development, marine spatial planning, and sustainable economy.**

5. **Raise the issue in international spheres, including the International Seabed Authority and the UN General Assembly, to encourage a more equitable discussion on the disproportionate costs and impacts of DSM.**

6. **Draft public statements or articles on the importance of cautiously assessing the costs of DSM, particularly with the unique opportunity to stop a damaging large-scale exploitative industrial activity before it has begun.**

7. **Reach out to the PGA Oceans Campaign team for more information or technical assistance on the above.**
ENDNOTES

1 The deep sea is broadly defined as the water column below 200 meters and the seabed beyond continental shelves.
2 A biome is a large naturally-occurring community of flora and fauna occupying a major habitat.
3 The International Seabed Authority (ISA) is the regulatory body that controls deep-sea mining in areas beyond national jurisdiction, established in 1994 by the United Nations Convention on the Law of the Sea.
5 Ibid.
6 *Deep-sea Mining: An Introduction*, Deep Sea Conservation Coalition
7 Polymetallic nodules, also called manganese nodules, lie on the sea-bottom sediment. Those of economic interest are rock concentrations of high-value metals, typically iron, manganese, nickel, copper, and cobalt.
9 Ibid.
10 *Deep-sea Mining: An Introduction*, Deep Sea Conservation
12 The International Seabed Authority’s mandate is to manage seabed mineral activities in the international area of the deep ocean “for the benefit of [hu]mankind as a whole … taking into consideration in particular the interests and needs of developing states.”
14 SDG 12: to ensure responsible consumption and production; SDG 14: to conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15 *Deep-sea Mining and the Transition Economy*, Deep Sea Conservation Coalition
16 *Deep-sea Mining: Who Stands to Benefit?*, Deep Sea Conservation Coalition
17 Ibid.
18 [www.leaderspledgefornature.org](http://www.leaderspledgefornature.org)

ABOUT PGA

Parliamentarians for Global Action (PGA) is the largest non-governmental, multi-party international network of individual legislators with approximately 1,150 members in 135 parliaments around the world that informs and mobilizes parliamentarians to advocate for human rights and the rule of law, sustainability democracy, human security, non-discrimination, and gender equality. This global network of parliamentarians acting in their individual capacity is supported by a PGA National Group structure in parliaments, which creates sustainability and ownership of issues at the national level, and by a Secretariat with relevant expertise. PGA is in general consultative status with the Economic and Social Council of the United Nations with headquarters in New York; its office in The Hague, Netherlands fosters cooperation with The Hague-based International Organizations, including the ICC.

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