

# Backgrounder

GREENPEACE

## Deep sea mining: a dive into the latest threat to the oceans

### Context

In March, the International Seabed Authority (ISA) — an international body comprised of 167 member states and the European Union — met to negotiate potential regulations regarding mining the seafloor of the high seas — areas beyond any nation’s jurisdiction. The meeting ended with no clear conclusion about whether approvals for deep sea mining could be granted [as early as July](#). ISA discussions resumed [July 10th](#), running through to the end of the month. On the first day, the government of Canada — a member of the ISA — [announced](#) support for a moratorium on deep sea mining in the high seas. Greenpeace, along with our supporters, allies, and a growing number of [scientists](#), [Pacific Peoples](#) and [global governments](#) have called for a stop to deep sea mining.

### What is deep sea mining?

Deep sea mining is an emerging, extractive industry seeking to remove mineral deposits from the deep ocean’s seabed. The Clarion-Clipperton Zone (CCZ) in the Pacific Ocean is the main geographical location that prospective miners are targeting due to the [abundant presence](#) of polymetallic (sometimes just called ‘manganese’) nodules – potato-sized mineral deposits loaded with copper, nickel, manganese and other ores. Mining companies are targeting metals such as nickel, copper, cobalt and manganese — materials used in electronics and currently only mined on land.

Deep sea mining would involve large machines being lowered to the ocean floor to scoop, dredge or cut deposits from deep ocean ecosystems, including [hydrothermal vents](#), [seamounts and abyssal plains](#). The mined material would then be pumped up to a ship for processing, through up to several kilometres of tubing. Some of the waste (consisting mostly of sediments, mineral debris and seawater) would then be [pumped back into the water](#), a few hundred metres below the surface.

### What are the concerns with deep sea mining?

- Deep sea mining risks [severe and irreparable harm](#) to deep sea ecosystems. The practice involves the removal of seafloor habitat and organisms, and the release of sediment plumes, which could smother habitats for kilometres around the mining site.
- The mineral deposits that companies seek to mine have [taken millions of years to form](#) and provide an important habitat for marine life. For example, nodules found 4,000 metres deep in the Pacific Ocean are [where the ghost octopus lays its eggs](#). Deep sea





ecosystems are fragile, and the unique organisms they house are very slow-growing and therefore much [less likely to recover from disturbance](#).

- In May, a review of environmental surveys found that more than [5,000 previously undiscovered species](#) make their home in the Clarion-Clipperton Zone.
- Recent tests of deep sea mining gear resulted in reports of [technical failures, a pollution incident and flawed scientific monitoring](#).
- Noise and light [pollution](#) from the machines could affect whales and other marine creatures.
- The frontrunner deep sea mining corporation The Metals Company has admitted to investors and publicly that deep sea mining will have an impact on target ecosystems, and have acknowledged the lack of certainty about the scope of the impact in their [SEC filings](#).<sup>1</sup>
- Deep sea mining could risk Pacific island communities' livelihoods and jeopardize food security. [Scientists have warned](#) that "communities that rely on fish stocks for subsistence could be particularly vulnerable to the impacts of seabed mining."
- The oceans already bear the brunt of the converging planetary crises: [biodiversity](#), [climate](#) and [pollution](#), and allowing another extractive industry to threaten marine life is [counter](#) to global conservation goals.

### What is Greenpeace's position on deep sea mining?

Greenpeace believes the deep ocean must remain permanently off-limits to the mining industry and that deep sea mining can never be sustainable and is a destructive, [unnecessary](#) and [neocolonial](#) industry. At the ISA meeting in July, Greenpeace is calling for global governments to support a moratorium and block the approval of mining licenses. Instead of mining more vulnerable ecosystems, Greenpeace supports a rapid transition to a

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<sup>1</sup> Exact language on [pp. 11, 41-42](#). It is illegal for companies to lie or mislead investors in their filings with the SEC, which is the primary U.S. securities regulator.

**Relevant sections:** "Nodule collection operations in the CCZ are certain to disturb wildlife in the operating area and may impact ecosystem function. The nature and severity of these impacts on CCZ wildlife are expected to vary by species and are currently subject to significant uncertainty. ... Accordingly, impacts on CCZ biodiversity may never be, completely and definitively known. For the same reasons, it may also not be possible to definitively say whether the impact of nodule collection on global biodiversity will be less significant than those estimated for land-based mining for a similar amount of produced metal."

[slow circular economy](#) that prioritizes resource efficiency, recapture and reuse of materials, collaborative innovation and rethinking the way we use materials as a society.

### Growing support to stop deep sea mining before it starts

- To date, more than [750 scientists and policy experts](#) have called for a pause on deep sea mining. As of July, [18 states](#) have expressed their support for a precautionary pause, moratorium or full ban on deep sea mining in the high seas, including [leaders of four Pacific states](#) that launched a moratorium alliance last year. Indigenous leaders representing [56 groups](#) from 34 countries publicly called for a total ban on the industry.
- A number of industry [investors](#), including [Maersk](#), have withdrawn support from mining companies, and major car and technology companies, such as BMW, Google and Samsung, have [committed not to source any minerals from the seabed](#), backing the call for a moratorium. Three major UK banks have [ruled out](#) funding deep sea mining. And after a [new study](#) found that climate change will drive future tuna populations into the CCZ, a number of seafood industry groups, including the Global Tuna Alliance that accounts for a third of global tuna sales, have [called for a pause](#) on deep sea mining.
- A majority of the members of the [International Union for the Conservation of Nature](#) voted in support of a moratorium, and the [United Nations Environment Programme Finance Initiative](#) has urged investors to transition away from the industry. The UN High Commissioner for Human Rights also [called for a moratorium](#) on deep sea mining.

### State of the deep sea mining industry

A [handful of corporations](#) largely based in the Global North and their government partners are pushing the ISA to greenlight the practice. Canada-based The Metals Company is a significant and [active player](#) in the industry. To date, [31 exploration contracts](#) have been issued by the ISA, sponsored by a total of 14 countries, which work with contractors that can be private companies, state-owned companies or research institutes.

### Where does Canada's federal government stand?

Canada is a member of the ISA Council and Assembly. Canada [declared](#) an “effective moratorium” on deep sea mining in domestic waters earlier this year, and on July 10th announced [support](#) for a moratorium in areas beyond national jurisdiction, and that it will not support the provisional approval of a submitted plan of work for deep sea mining.

### What's next at the ISA?

The ISA manages any human activities related to minerals in the international seabed “[for the benefit of humankind as a whole](#),” and is required under the UN Convention on the Law of the Sea “[to ensure effective protection for the marine environment from harmful effects](#)



[which may arise from such activities.](#)” Some reports raise concern over a [lack of transparency](#) at the ISA and [suggest](#) mining companies are colluding with the authority to obtain a greenlight for deep sea mining in July.

In the summer of 2021, the president of Nauru together with The Metals Company’s subsidiary Nauru Ocean Resources Inc., triggered a [“2-year rule”](#) that says that if any member country notifies the ISA that it wants to start deep sea mining, the organization will have two years to adopt full regulations, known as the Mining Code. The ISA’s deadline to adopt full regulations ends this July.

The ISA Council is meeting again from July 10-21 and the full Assembly from July 24-28. Global governments will once again have the opportunity to support a moratorium and red light mining applications submitted this year.

**ENDS**

**For more information, please contact:**

Brandon Wei, Communications Officer, Greenpeace Canada  
[brandon.wei@greenpeace.org](mailto:brandon.wei@greenpeace.org), +1 778 772-6138