

## Norway to mine part of the Arctic seabed

On 9 January 2024, the Norwegian Parliament (Stortinget) endorsed the government's proposal to allow exploration for the possible extraction of seabed minerals on the Norwegian continental shelf. Extraction licences for businesses will require further parliamentary approval. The aim is to mine important critical raw materials that are increasingly needed for the green and digital transitions, and the defence and aerospace sector. However, these developments have raised concerns in the country and beyond, as the practice risks hurting the deep-sea ecosystem, the fishing industry and coastal communities.

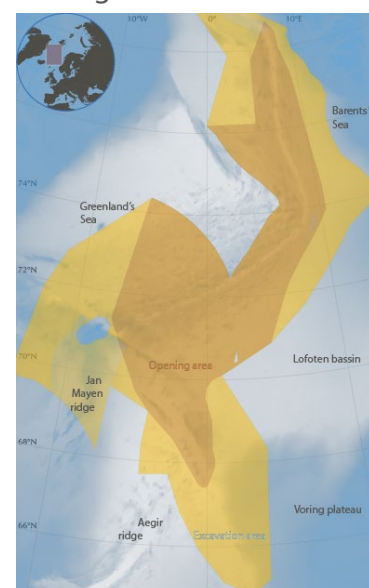
### Critical minerals and deep seabed mining

Certain raw materials, such as lithium, nickel, cobalt, manganese and graphite, are critical to sustain the green and digital transitions, and for the defence and aerospace sectors. Demand for these [critical raw materials](#) (CRMs) has been increasing in recent years and is [expected](#) to continue to do so. On land, the mineral deposits of transition-critical materials are [concentrated](#) in just a few countries, making their global availability dependent on trade relationships and vulnerable to supply disruptions that may result from export restrictions, political instability or natural disasters. Some of those elements, however, are also found in the deep seabed, i.e. the seabed at ocean depths greater than 200 metres, which covers about two-thirds of the total seafloor. As a result, [deep-sea mining](#), the process of extracting and often excavating mineral deposits from the deep seabed, is increasingly [being considered](#) as a potential solution to the expected global shortage of CRMs. The Council and Parliament reached a provisional agreement in November 2023 on [an EU CRMs act](#) aimed at ensuring the EU's access to a secure, resilient and sustainable supply of CRMs. By 2030, the EU should be able to extract the materials needed to produce at least 10 % of its consumption of strategic raw materials. [Recital 17](#) states that 'in line with the precautionary principle the Commission cannot grant the strategic status to a deep sea mining project before the effects of deep-sea mining on the marine environment, biodiversity and human activities have been sufficiently researched, the risks are understood and technologies and operational practices are able to demonstrate that the environment is not seriously harmed'.

### Recent developments in Norway

On 9 January 2024, the Norwegian Parliament endorsed the government's proposal to open about 280 000 km<sup>2</sup> of ocean areas between [Jan Mayen](#) island and the [Svalbard](#) archipelago, and offer companies the possibility to prospect there (for exploitation licences, the government will [again](#) have to obtain approval from the Parliament, following a possibly [long](#) exploration period). This decision follows a government-sponsored [survey](#), which found substantial amounts of [metals](#) and minerals, including iron, copper (>14 %), zinc (3 %) and cobalt (<1 %), but also [rare earth elements](#) (e.g. lithium and [scandium](#)) in the deep seabed. Those minerals were found in [polymetallic sulphides](#), some 3 000 metres deep. Extraction of minerals from the seabed in Norway would likely [involve](#) cutting and crushing the rocks before bringing them to the surface. Norway's decision to mine the deep seabed is [believed](#) to stem from two factors: (i) reducing the country's dependence on [China](#) for the supply of critical minerals needed to build electric vehicle batteries, wind turbines and solar panels; (ii) developing new exportable commodities, given that its top export, offshore [oil and gas](#), is expected to decline gradually.

Figure 1 – Exploration and mining area



Source: [Norwegian offshore directorate](#).



## Concerns and reactions

The deep sea is a [vast habitat](#). [Tens of thousands](#) of species have been found in the deep ocean, and some experts estimate that there could be [millions more](#). [Several studies](#) on deep-sea mining financed by the EU (through its [framework programmes](#) for research and innovation) show that our current understanding of the functioning and recoverability of the deep-sea ecosystem is still very limited, and that there is considerable uncertainty about the effects of mining on these processes. Experts fear that disturbing these habitats through seabed mining could severely alter the ecosystem, resulting in catastrophic and permanent consequences for the ocean's biodiversity. Mining operations could harm organisms in various ways, including: (i) [direct contact](#) with heavy mining equipment on the seabed ([sediment plumes](#)); (ii) [warm mining wastewater](#) (overheating and poisoning); (iii) [noise and light pollution](#) (feeding and reproduction of species); (iv) [habitat removal](#) ([polymetallic nodules](#)). Apart from the specific seabed areas, however, there are fears that the practice may impact the wider fishing industry, as waste discharge from mining vessels could spread over [large distances](#), and [threaten](#) open ocean fish and invertebrates. Furthermore, the facilities to process and ship these materials could affect [coastal communities](#).

Lastly, the ocean is considered to be the world's largest carbon sink, absorbing [around 25 %](#) of all carbon dioxide emissions. Microscopic organisms play a critical role in this context, helping to sequester carbon in the deep sea and reduce emissions of other planet-warming gases, such as methane, from seabed sediments. The alteration of the seabed ecosystem following mining activity [may impact](#) the ocean's carbon cycle and reduce its ability to help mitigate global temperature rise.

As a result, reactions, both inside Norway and beyond, were mixed. The proposal was [welcomed](#) by Norway's offshore oil and gas industry, which said that deep-sea mining could provide alternative jobs as petroleum activities wind down. However, the Norwegian [Environment Agency](#) was of the view that the impact assessment presented by the Ministry of Petroleum and Energy does not provide a decision-making basis for allowing mineral extraction at sea. Moreover, it does not contain assessments of whether, where and how it is possible to conduct mineral operations in a sound and environmentally sustainable manner. Similarly, the Norwegian [Institute of Marine Research](#) thought that the exploratory campaign had gaps in hydrography, occurrence of species, habitat and ecosystems and that, as a result, it was not possible to assess the effects of exploration or extraction of deep-sea minerals in the area in question. Other experts are concerned that the decision may contribute to [legitimising](#) the deep-sea mining industry. On 9 January 2024, several NGOs, including [WWF](#) and [Greenpeace](#), criticised the decision of the Norwegian Parliament.

## The position of the EU and the European Parliament

In its [resolution](#) of 6 October 2022 on 'momentum for the ocean: strengthening ocean governance and biodiversity', the European Parliament reiterated its call for the Commission and the Member States to support an international moratorium on deep seabed mining.

In its [biodiversity strategy](#) for 2030 and the joint communication on the EU's [international ocean governance](#) agenda, the Commission notes that it will seek win-win partnerships with resource-rich countries, but at the same time advocates for prohibiting deep-sea mining until: the scientific gaps are properly filled, it can be demonstrated that no harmful effects arise, and the necessary and effective environmental protection provisions are in place in the exploitation regulations. Similarly, while in 2022 the EU and Norway [agreed](#) to explore enhanced cooperation on raw materials and batteries with regard to integrating the materials and battery value chains, Agriculture Commissioner Janusz Wojciechowski, speaking at the European Parliament plenary on 17 January 2024, [told MEPs](#) that the Commission remains committed to prohibiting deep-sea mining until it is demonstrated that no harmful effects arise.

Separately, a number of members of regional and national parliaments, as well as the European Parliament, sent a [letter](#) to the Norwegian Parliament in November 2023 urging MPs to oppose the government's proposal.

Following the [plenary debate](#) held on 17 January 2024, Members of the European Parliament are due to vote on a motion for a resolution on Norway's decision to advance seabed mining in the Arctic during the February I plenary session.