

AUSTRIAN ACADEMY OF SCIENCES

European Academies



Deep-Sea Mining: **Irreversible Damage or Essential Resource?**

Presented by Charlotte Dietrich, EASAC

Summary

Rising demand for minerals, driven partly by green technologies, has increased commercial interest in Deep-Sea Mining (DSM). EASAC challenges the narrative that DSM is essential for the energy transition, arguing it's misleading. Forecasts suggest terrestrial reserves and significantly improved recycling (potentially covering 40-77% of clean energy metal needs by 2050) could meet demand, especially considering technological innovation. DSM poses severe environmental risks, including the destruction of unique, slow-recovering deep-sea habitats and biodiversity over vast areas, impacts from sediment plumes, noise, and light pollution. Major knowledge gaps remain regarding deep-sea ecosystems and the full impact of mining. EASAC advocates for prioritizing the circular economy, exploring recycling fully, and developing robust scientific standards and regulations before considering any exploitation.

Multilateral partners



Partners for the Side Event at the 29th Session of the International Seabed Authority







Impacts

- Instructive NGO and Press Briefing \rightarrow Initiated partnerships (Blue Climate Initiative & deep sea conservation coalition) and a large worldwide media echo
- Contacts to government representatives \rightarrow Increasing numbers of countries joined the call for a Deep-Sea Mining Moratium (e.g. Sweden)
- Cited in letter signed by 50 MEPs to Norway urging them to halt plans for Deep-Sea Mining in Arctic Waters (19 Nov 2024) \rightarrow Norway suspends plans for commercial-scale DSM on 2 Dec 2024



Facilitators and barriers:

- Growing public interest in the topic coupled increasing media attention (e.g. Last Week Tonight by Jon Oliver)
- Clear call to action by scientists, universities, academies ● and similar institutions sending a clear message to the

Prof. Dan Kammen (University of California, Berkely, I.), Jeanne Everett (Blue Climate Initiative, m.) and Former EASAC Environment Programme Director Mike Norton (r.) at the 29th Session of the International Seabed Authority in Kingston, Jamaica

media

\rightarrow Puts governments and politicians under pressure

Heavy lobbying from industry in favour of DSM (e.g. The Metals Company)

Side event – Scientific Advice Mechanism Conference 2025 27 May 2025, Vienna, Austria