

CONSULTATION RESPONSE

Response to the “Call for evidence for an impact assessment”: European Critical Raw Materials Act

The Bellona Foundation welcomes the call for evidence on the Critical Raw Materials Act (CRMA) and the opportunity to provide information and recommendations on how to ensure supply of critical raw materials (CRMs) while addressing the potential for adverse social and environmental impacts.

This response has three core messages, each elaborated below:

1. Reduced demand and increased circularity should be the first priorities in covering the need for critical raw materials
2. More sustainable mining practices in Europe are key to a more sustainable supply of critical raw materials
3. All seabed mining activity should be avoided until the risks are fully understood

The Bellona Foundation recognises that raw materials are at the core of the transition to a sustainable, net-zero carbon society. Large-scale deployment of renewable energy production as well as the electrification of transport and industry are necessary steps towards this goal. This in turn implies a huge increase in demand for key metals and critical raw materials, such as Copper, Cobalt, Lithium, Graphite and Rare Earth Elements. While these materials are essential for the transition to a sustainable society, they do not come without environmental costs. Extraction and processing lead to significant, sometimes devastating, environmental consequences in the form of pollution and land degradation. Bellona is committed to mitigating these environmental consequences by working for innovation and improved technology, circular economy, and better value chain management.

The following sections of the consultation response outline our recommendations.

REDUCED DEMAND AND INCREASED CIRCULARITY SHOULD BE THE FIRST PRIORITIES IN COVERING THE NEED FOR CRITICAL RAW MATERIALS

Resource extraction and processing is responsible for half of total greenhouse gas emissions and more than 90 % of biodiversity loss globally¹. The fundament for combating these environmental problems is a reduction in the need for new resource extraction. Accordingly, the CRMA needs to focus both on policies that may reduce the demand for new materials and on policies to increase the lifetime and circularity of existing materials. The former can include a signal towards setting binding material footprint reduction targets, as described in the consultation response from the European Environmental Bureau. For the latter, there is a strong need to

1 European Commission: A new Circular Economy Action Plan (2020)

increase circularity for many CRMs. Many CRMs have recycling rates close to zero². In order to move these materials upward in the Waste Hierarchy, the CRMA must:

- Ensure that circularity measures apply to all products containing CRMs including imports.
- Update the EU Extractive Waste Directive to strengthen exploration and documentation of CRMs in secondary deposits and waste streams, including that Member States create an open database reporting data on extractive waste facilities.
- Set product design requirements, including on product longevity and recycled content.
- Increase support for EU research and innovation funding on recycling, substitution and material recovery technologies for CRMs.

MORE SUSTAINABLE MINING PRACTICES IN EUROPE ARE KEY TO A MORE SUSTAINABLE SUPPLY OF CRITICAL RAW MATERIALS

While reduced demand and increased circularity are essential for a more sustainable supply of CRMs, it will not be sufficient. Mining will be necessary to cover the need for CRMs in the foreseeable future. This is especially true for minerals related to green technology, where the need is expected to multiply over the coming years. Thus, it is crucial to develop more sustainable mining practices. The CRMA should scale up investment and action on the following measures:

- Underground mining should be incentivised as opposed to open-pit mining³.
- Alternative mining practices, such as geothermal mining.
- Avoiding the use of hazardous chemicals.
- Electrification of mining equipment should be supported to decarbonise the sector. There have been rapid developments in the construction sector, where the availability of zero emissions equipment has increased greatly over the last few years⁴. A similar development should be encouraged for the mining sector.
- Circular policies should focus on creating a market for mining tailings and similar waste. Tailings deposits are one of the major environmental issues related to mining, but there is a large potential for utilisation. For instance, the company Saferock has developed technology for producing a low-carbon alternative to Portland cement based on tailings from the Titania mine in Norway.

ALL SEABED MINING ACTIVITY SHOULD BE AVOIDED UNTIL THE RISKS ARE FULLY UNDERSTOOD

MAJOR KNOWLEDGE GAPS MAKE SEABED MINING UNACCEPTABLE ACCORDING TO THE PRECAUTIONARY PRINCIPLE

- There are large knowledge gaps regarding deep-sea ecosystems, and both exploration and extraction

2 European Commission: Study on the review of the list of Critical Raw Materials (2017)

3 Underground mining normally has a much lower environmental footprint than open-pit mining. See for instance "Guidebook for evaluating mining project EIAs" (Environmental Law Alliance Worldwide, 2010)

4 For further information, see: <https://bellona.org/projects/zero-emissions-construction-sites>

activity on the seabed would risk causing large and irreversible damage. Seabed mining should not be supported in any way until the risks are fully understood – this would be a breach of the precautionary principle set out in article 191 of the Treaty on the Functioning of the European Union: “[i]f a given activity might cause harm to the public or the environment and if there is still no scientific agreement on the issue, the policy or action in question should not be carried out”.

- A range of actors including the United Nations Environment Programme, the World Economic Forum, and the High-level Panel for a Sustainable Ocean Economy, have concluded that there is a need for greater knowledge of the environmental impacts before seabed mining can be properly assessed. The call for a moratorium on deep-sea mining⁵ has been signed by actors such as Google, BMW, Philips, Samsung SDI, Volvo, Volkswagen, Renault Group, and Northvolt.
- Mining activities will almost always have adverse environmental impacts. We welcome the ambition of the CRMA to address this problem. Advocates for seabed mining often use the impacts from traditional mining as an argument to support seabed mining. Such claims are fundamentally flawed however, given the major knowledge gaps. The environmental impacts from seabed mining can potentially be much worse than those related to mining on land.

RAW MATERIALS ARE KEY FOR THE GREEN TRANSITION, BUT SEABED MINERALS WILL NOT BE ABLE TO CONTRIBUTE

- The largest increase in the demand for raw materials related to the green transition is expected during the next 10-15 years. Today, it normally takes more than 10 years to open a mine on land, where the knowledge base already exists. In order to responsibly open a mining project on the seabed, significantly more time will have to be expected – to close the knowledge gaps related to deep-sea ecosystems as well as those related to methods and technology for extracting and processing the minerals. After closing these gaps, the conclusion might even be that seabed mining cannot be undertaken in a responsible way. Seabed minerals will arrive too late, or not at all, and cannot contribute to covering the material demand of the green transition.

5 For further information on the moratorium, see https://www.savethehighseas.org/moratorium_2022/


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