

Position Critical Raw Materials Act

To: The European Commission

From: Svemin – the Swedish Association of Mines, Mineral and Metal Producers

Matter: EU Critical Raw materials legislation

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Svemin is the industry organization for mines, mineral and metal producers in Sweden. Svemin represents approximately 60 companies with roughly 15,000 employees in mineral production, exploration and technology. Member activities occur throughout Sweden. The exploration activities as well as the active metal mines are predominately located in northern Sweden and the area of Bergslagen in central Sweden, while the limestone deposits are mainly found on island of Gotland.

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Summary

Svemin welcomes the EU Commission initiative to propose a Critical Raw Material Act (CRM Act) to increase the European security of supply for critical and strategic raw materials. Both the external and internal dimensions are important in securing the supply of metals and minerals. Svemin focuses primarily on the internal dimension and sees the following perspectives as important to include in the upcoming CRM Act.

A European raw materials legislation should:

- **Call for member states to identify strategic raw materials as complement to the Critical Raw Materials List.** The EU methodology to define the criticality of raw materials might miss out on the materials that are of *strategic* importance to the EU or individual Member States' industries, and also miss the materials that might become critical in the twin transition, as well as from a security policy perspective. CRMs are also most often constitute by-products of base metals and iron and, hence, that regulatory measures should not be restricted to only CRMs. Therefore, a *wider definition of strategic materials defined at Member State level needs to be an addition to the current definition in order not to risk new strategic dependencies* to avoid shifting bottlenecks from one material to another.
- **Strengthen the attractiveness for exploration in Europe and de-risk the early stages of the mining value chain.** Stimulate the development of an increased domestic supply of CRMs and strategic raw materials by creating a pipeline of investable projects. This knowledge-building phase of mining is associated with high business risk, and only one out of approximately 1 000 exploration projects becomes a mine. Mineral deposits of economic value (ores) are rare, hard to find, capital intensive to explore and unlike most other industrial establishments, mines cannot be relocated. Europe only attracts around 3 % of all the investments going into exploration worldwide, which is a bottleneck to secure future domestic supply of CRMs. There should be no restrictions on which minerals to search for in the exploration phase.

- **Set EU objectives for increased domestic production of CRMs and other strategic metals and minerals for all stages of the value chain** (exploration, extraction, refining and recycling). Recycling is increasingly important as the demand for metals increases. However, recycling will only be able to cover a small part of the increasing demand expected until 2050. The vast majority of metals required still need to come from primary sources. It should, however, be up to the Member States to deliver on the objectives depending on their geological and industrial potential.
- **Call for Member States to step up efforts to map the mineral potential, designate areas of national or community interest for the extraction of metals and minerals and to make their own minerals strategies.** Member States should designate areas of national or community interest for the extraction of minerals and metals. Ensure that these areas are taken into consideration when Member States plan for land use, within physical planning for urban development or infrastructure as well as within river basin management and nature conservation planning. An early-stage validation of these designated areas will de-risk further investments needed to continue development of exploration projects into mines. The list of areas should be updated at regular intervals and reported to the EU COM to ensure a common knowledgebase of important mineral deposits for Europe's future security of supply. Euro Geosurveys (EGS) and national geological surveys are relevant actors to compile the data as an input to Raw Materials Information System.
- **Acknowledge that mining projects may qualify as projects with Imperative Reasons of Overriding Public Interest (IROPI) in line with the terminology used for REPowerEU.** This would give a possibility to take mining activities into due consideration in permitting processes or comparable administrative processes where the intended land use may conflict with the objectives of EU legislation.
- **Initiate an investigation of the EU legislation that regulate the use of land and water to identify inconsistencies or obstacles in the EU legislation for developing the raw material value chain.** The investigation should include the EU legislation on land use, river basin management and nature conservation, and assess whether there are adequate opportunities to balance competing interests.
- **There is no need for special treatments in terms of permitting of certain selected projects.** The emphasis should rather be on encouraging each Member State to make general adjustments in the national permitting processes to make them more predictable, streamlined and efficient.
- **Sustainable mining operations are key for a sustainable raw material supply.** The EU principles for sustainable raw materials align the understanding of sustainable raw materials extraction. The principles build upon existing EU legislation concerning sustainability and refer to internationally agreed sustainable raw materials extraction and processing initiatives. **It is important to uphold a clear distinction between sustainability standards and binding legislation.** Companies must be free to choose between different sustainability standards, such as TSM, ICMM and IRMA.
- An EU raw materials agency/governance structure could contribute to achievement of strategic raw material supply. EU COM should encourage Member States to develop/update their mineral strategies and to call for member states to identify strategic raw materials as a complement to the CRM List. **Mineral policy governance should remain primarily a national competence.**
- **Secure sufficient research funding for the entire mineral value chain, and for both basic and applied research.** Functional instruments such as ERAMIN must be maintained and developed.

Background

The President of the European Commission Ursula von der Leyen announced in the State of the Union on September 14, 2022, that the European Commission will put forward a **European Critical Raw Materials Act**. The backdrop is not only that the need for many raw materials will increase substantially as Europe strives towards its climate goals but also the geopolitical situation being more insecure. This has already proven to negatively affect access to critical raw materials (CRM). Ursula von der Leyen exemplified by stating that *“Lithium and rare earths will soon be more important than oil and gas. Our demand for rare earths alone will increase fivefold by 2030. And this is a good sign, because it shows that our European Green Deal is moving fast.”*

- **Svemin, representing the Swedish mining cluster of active mining companies, mineral exploring companies and global mining technology providers, welcomes this initiative.**

The Nordic mining cluster is already today leading in Europe in producing sustainable metals needed in the green transition, such as low carbon copper and zinc, iron and steel with the aim to be fossil free already 2035.

The Nordic mining cluster is also a world innovation leader in underground mining technology with companies like Epiroc, Sandvik and ABB.

The Nordic mining cluster is ready to contribute to strengthening the supply of sustainably produced raw materials needed for the green transition, base metals, iron, precious metals and CRMs.

Potential for increased sustainable domestic sourcing from the Nordics

The Swedish bedrock alone holds more than half of the substances on the 2020 list of Critical Raw Materials, but until today none of them are mined. The Nordic bedrock (Sweden, Finland, Norway and Greenland) together holds a potential for all the metals and minerals on the Critical Raw Materials list. In a study performed in 2021 by the Nordic Geological Surveys together¹ the conclusion was that:

“In mineral-richness, the Nordic bedrock can be compared with the most mineral-rich areas of the world, such as Canada, the USA, Brazil and Australia, and can supply almost all of the critical raw materials defined by the EU”

and also that:

“In addition to creating sustainable economic growth and employment, the Nordics can ensure Europe and the rest of the world access to critical raw materials produced with high sustainability, ethic and environmental standards.”

Together with interesting mineralization's in other parts of Europe, there is a substantial potential to develop a significantly increase domestic supply of CRMs within Europe. There would still be a need for imports, but a domestic production would make the supply of CRMs more resilient and more sustainable.

¹ [The Nordic Supply Potential of Critical Metals and Minerals for a Green Energy Transition | Nordic Innovation](#)

- **A European raw materials legislation should set EU objectives for increased domestic production of CRMs and other metals and minerals needed for the green transition for all stages of the value chain (exploration, extraction, refining and recycling). It should, however, be up to the Member States to deliver on the objectives depending on their geological and industrial potential.**

The value chain of mining starts with exploration

Exploration is the heart of the mining sector and the more exploration activities that is undertaken, the stronger the supply potential will become. But it takes time. This knowledge-building phase of mining is associated with very high business risk, as it is capital demanding and only one out of approximately 1 000 exploration projects becomes a mine and delivers production revenues. Moreover, Europe only attracts around 3 % of all the investments going into exploration worldwide which is an obvious bottleneck to secure future domestic supply of CRMs.

- **Therefore, a European raw material legislation needs to strengthen the attractiveness for exploration in Europe and de-risk the early stages of the mining value chain.**

Critical Raw Materials are by-products

The security of supply of CRMs can be significantly improved by locating new mineral resources, by better understanding of the abundance and distribution of CRMs in existing ore deposits and by developing processes to recover them from the primary ore. Also, it is fundamental to understand that most CRMs are linked to carrier metals such as copper, zinc, iron and gold. The main economic value lies in the extraction of the primary ore. CRMs most often constitute by-products. Extracting critical metals as by-products is not only resource effective, the production will also be less sensitive to the volatile markets often associated with CRMs and less sensitive to market manipulation.

Restricting any regulatory measures to only CRMs is therefore counterproductive as the market around exploration focuses on venture capital to finance extraction of primary ores and most exploration expenditure globally is directed towards copper and gold. Thus, the economic feasibility relies on the extraction of the primary ore.

COM to ensure a common knowledgebase of important mineral deposits for Europe's future security of supply.

- Ensure that these areas are taken into consideration when Member States plan for land use, within physical planning for urban development or infrastructure as well as within river basin management and nature conservation planning. They should be considered in all plans and similar instruments based on EU law, such as river basin management plans and Natura 2000 management plans, and when Member States develop national restoration plans according to the upcoming Nature Restoration Law.
- Although high environmental standards always should be required, acknowledge that mining projects in these areas may qualify as imperative reason of overriding public interest (IROPI) within the meaning of Article 6(4) and Article 16(1)(c) of Directive 92/43/EEC (the "Habitats Directive") and Article 4(7) of Directive 2000/60/EC (the "Water Framework Directive") and should be taken into due consideration as such in permitting processes or comparable administrative processes where the intended land use may conflict with the objectives of EU legislation.

Identify legal obstacles to domestic production of strategic raw materials

When a deposit is found and a mine is proposed, there will always be competing interests. Many of these competing interests are protected under EU law, especially conservation interests.

Environmental legislation often allows for some derogations and a balancing of different public interests against each other, but in some cases the protection is absolute, and it is not possible to make derogations. Such absolute environmental protections can be particularly problematic for mining, since mineral deposits, unlike most other industries, cannot be relocated. If a mineral deposit is located right below a body of water or a protected habitat, the mining company cannot choose an alternative place for their industrial establishment. The choice is between opening or not opening a mine on the place where the mineral deposit is located.

- **Against this background, the European Commission should take this opportunity to further investigate EU legislation that regulate the use of land of water in order to identify inconsistencies or obstacles in the EU regulatory frameworks, especially the EU legislation on land use, river basin management and nature conservation, to assess whether there are adequate opportunities to balance competing interests.**

National Permitting

The most important factors to increase the domestic supply of CRMs are the components mentioned above; objectives of increased domestic production, adequate opportunities to balance competing interest and, with respect of high environmental requirements, possibilities to make derogations.

It will almost certainly not streamline the permitting process if EU regulate how national permitting for mining projects processes should be set up. This is an issue that must be dealt with at the national level.

- **There is no need for special treatments in terms of permitting of certain selected projects. The emphasis should rather be on encouraging each Member State to make general adjustments in the national permitting processes to make them more predictable, streamlined and efficient.**

Increase the knowledge base of EU's mineral wealth

To attract investments in exploration, Member States need to showcase the minerals potential of their respective country. Today Europe fails to attract investments in exploration, this is in part due to incapacity to balance different land use, but also due to lack of knowledge regarding Europe's mineral wealth.

- **The CRM Act should strongly encourage Member States to step up their efforts to map the mineral potential and to make their own minerals strategies. Eurogeosurveys could be a relevant actor to compile the data and reporting as an input to Raw Materials Information System.**

Research and Innovation

Significant investments in research and innovation will be needed for the mineral and mining industry to succeed in increasing the EU's level of self-sufficiency and secure a sustainable supply of metals and minerals. Targeted effort is needed to support the sector throughout the value chain starting with ore geology and exploration, to sustainable mining, processing and minerals extraction, refining and recycling. Research should also target environmental aspects such as biodiversity, water and waste management, as well as aspects regarding safe and attractive workplaces. Available public funding is needed to support both basic and applied research. Existing instruments such as the pan-European network ERA-MIN must be maintained and developed. The research community in the minerals and metals sector is still small in the EU, even though some parts of the value chain, such as mining technology, are globally at the forefront in its fields. To increase the EU's security of supply – no part along the value chain can be left behind.

- **Secure sufficient research funding for the entire mineral value chain, and for both basic and applied research. Functional instruments such as ERAMIN must be maintained and developed.**

Sustainability performance and standards

Sustainable mining operations are key for a sustainable raw material supply. It is important to uphold a clear distinction between sustainability standards and binding legislation. Sustainability standards are not comparable to detailed technical standards which harmonize technical solutions. Sustainability standards normally consist of a set of principles which steer companies' behavior on a wide set of topics such as environmental impact, community and stakeholder involvement, occupational health and safety, biodiversity etc. They are often implemented through companies' management systems where they serve as guiding principles, driving continuous improvement on sustainability.

The EU principles for sustainable raw materials² align the understanding of sustainable raw materials extraction (from exploration to post-closure) and processing operations in the EU and define the general direction towards the Sustainable development goals. The principles build upon existing EU legislation concerning sustainability and refer to internationally agreed sustainable raw materials extraction and processing initiatives. If a legal requirement regarding sustainability standards is introduced, companies must be free to choose between different sustainability standards. There are several widely recognized standards for the mining sector, such as the Mining Association of Canada's globally recognized Towards Sustainable Mining (TSM), the ICMM's Mining Principles, and the IRMA Standard for responsible mining. All standards have their benefits, and disadvantages and EU legislation should not point out one standard that all actors must follow.

² European Union, 2021. EU Principles for sustainable raw materials

Projects assigned as “Project of Common Interest” need to align with EU principles for sustainable raw materials and be able to demonstrate transparency regarding their sustainability performance according to one of the internationally recognized ESG standards.

- **Sustainable mining operations are key for a sustainable raw material supply. It is important to uphold a clear distinction between sustainability standards and binding legislation. Companies must be free to choose between different sustainability standards. There are several widely recognized standards such as TSM, ICMM and IRMA.**

Governance

Mineral policy governance should remain primarily a national competence. However, the EU COM should encourage Member States to develop/update their mineral strategies and to call for Member States to identify strategic raw materials as a complement to the CRM List. Strategic reserves should be the prerogative of the Member States based on national security considerations and industrial structures.

In order to utilize the geological mineral potential of the Member States the EU COM should urge Member States to increase geological mapping and knowledge base of areas with mineral potential. This will increase the interest of exploration and investments in Europe.

EU raw materials agency/governance structure

An EU raw materials agency/governance structure could contribute to achievement of strategic raw material supply. It could help to better provide the needed services and support the data exchanges between national agencies. It could also facilitate to avoid data-silos and support adequate monitoring for the Single Market on raw materials. However, mining policies should remain a primarily national competence. The agency/governance could be tasked to promote EU raw materials projects, with a particular focus on the development and production of raw materials within the EU. This must go hand in hand with a mandate to inform about and increase the public standing and acceptance of the EU mining industry. It is important to avoid an increased administrative burden on companies and/or collection of sensitive business information.

- **Mineral policy governance should remain primarily a national competence. EU COM should encourage Member States to develop/update their mineral strategies and to call for member states to identify strategic raw materials as a complement to the CRM List.**

Recycling

To meet the growing demand for metals; recycling, reuse, and other circular methods are an important part of the future. Many metals and minerals are very well-suited to the circular economy as they are elements that can be recycled without any significant loss of quality. It is, therefore, only natural for the sector to contribute to the realisation of this on a larger scale. However, recycling is far from sufficient in itself to meet the increasing demand.

Maximised recycling will only meet approximately 15-26 per cent of the demand for primary metals by 2050.³ This is because there will be insufficient volumes of minerals in the cycle and many products will be used for a long time and will, therefore, be unavailable for recycling for some time. For example, it will take until 2100 before recycling can account for half of the amount of rare earth elements that we expect Europe, and the world will then need. Mining will therefore need to expand and develop in parallel with recycling to ensure that the growing demand is met.

There is a substantial potential in improving the collection and recycling of metals and minerals, including metals critical to innovation from electronic waste, and in recovering metals currently lost within the various material streams. The mining companies in Sweden are currently investigating ways to manage resources more efficiently and develop circularity on an industrial scale, both for environmental, climate, and economic reasons and to reduce dependence on importing, inter alia, critical raw materials. The mining company LKAB have plans to extract more metals from mining waste in order to utilise resources more efficiently. However, there are technical difficulties in recycling certain metals.

More research and the development of resource-efficient, carbon-neutral processes are needed in this respect, all of which would enable both an increase in the yield of recycled metals and the extraction of additional elements that end up in slag, dust, and mud. Increasing recycling also requires additional knowledge, technological developments, and amended policy instruments as well as coordination of different actors, infrastructure, market instruments, and incentives.

- **Recycling is becoming increasingly important as the demand for metals increases. However, recycling will only be able to cover a small part of the increasing demand expected until 2050. The vast majority of metals required will need to come from primary sources.**

For further questions:

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³ World Bank (2020) Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition.