

EU Critical Raw Materials Act

Executive Summary

With its proposal for a Critical Raw Materials Act (CRMA) the EU aims to diversify and secure industry's access to raw materials that are essential for delivering the green transition and protecting Europe's national security interests. Bosch highly welcomes that the EU is taking action in this regard. It is therefore crucial that the CRMA not only sets targets but also delivers concrete measures to achieve them. At the same time, it should not overburden companies with new administrative requirements and ensure all contributions required from companies are targeted and will effectively help to reach the Act's goals.

Background and Content of the CRMA Proposal

On 16 March 2023, the EU Commission published its CRMA proposal as part of the EU Green Deal Industrial Plan to strengthen Europe's competitiveness as an investment location and reduce critical dependencies. The goal of the CRMA is to ensure EU industry's access to a secure supply of raw materials that are essential for manufacturing both green tech and defence related products and to prepare for disruptions in raw materials supply chains.

The CRMA lists 34 critical raw materials (CRMs), 16 of which are defined as strategic raw materials (SRMs) based on criteria regarding their economic importance, expected future demand and supply risks.

The following EU-wide non-binding benchmarks for SRMs are set to be achieved by 2030:

- Extraction capacity at least 10% of the EU's annual consumption
- Processing capacity at least 40%
- Recycling capacity at least 15%
- Diversification of supply so that no more than 65% of any SRM is sourced from a single third country.

Furthermore, the CRMA also contains obligations for large companies manufacturing strategic technologies (e.g., EV batteries, renewable energy technologies, digital and defence equipment) to perform every two years an analysis of their SRM supply chains mapping dependencies on third countries as well as a stress test.

Moreover, since the Commission wants to prepare the ground for a large-scale European recycling of permanent magnets and the rare earths in them, products containing permanent magnets will need to meet circularity requirements and provide information on magnet recyclability and recycled content.

Bosch Position

- Bosch highly welcomes that the EU is taking action to secure the supply of critical raw materials for EU industry.
- A stable and secure supply of critical raw materials is crucial to deliver the green and digital transition, keep manufacturing of cutting-edge technology in the EU and secure the competitiveness of the EU as an investment location.
- However, the CRMA sets ambitious benchmarks for 2030 for extraction, refining, and recycling without a clear strategy or sufficient support measures to achieve them and thus risks falling short of its targets.
- In the absence of dedicated EU funding for CRM projects, financial risk reduction e.g., through investment guarantees or assured offtake-agreements should be offered to attract investments into CRM projects in the EU. In addition, EU Member States should make use of the possibilities to provide financial incentives for such projects under the Temporary Crisis and Transition Framework (TCTF).
- To secure the supply of CRMs, it is important that both mining and refining of a given material are done in the EU or in reliable third countries. Investing in either mining or re-refining capacity alone will not increase the security of supply.
- Recycling of CRMs is an important pillar to be able to meet the growing demand for these materials and secure their supply in the long-term, as well as supporting the transition to a circular economy. Since there is currently a lack of efficient recycling technologies for many CRMs, measures to support R&D of innovative recycling technologies should be introduced to speed up this development. For Lithium battery recycling for example, it is important to get the Lithium back as battery grade in industrial scale.
- Likewise, R&D support measures for material efficiency and substitution can provide an important long-term contribution to reduce the demand for CRMs and thus dependencies and exposure to supply shocks and should be included in the CRMA (e.g., reduction of Cobalt content in ferrite magnets or reduction of Iridium demand for electrolysers).
- Joint purchasing facilitated by the EU can be a helpful tool since it can increase the EU's leverage as a buyer. It might, however, be difficult in cases where CRMs are no commodities (e.g., Germanium, Gallium), since in these cases the material properties (purity, chemical composition, aggregate state, etc.) are important for further processing and requirements differ between companies.
- International agreements with reliable partner countries (bilateral and multilateral) are crucial to diversify sourcing and secure the EU industry's access to CRMs. The EU COM and Member State governments should pursue them with the highest priority.
- While the CRMA rightly identifies many raw materials of strategic importance, Copper should not be classified as an SRM. Copper is a base metal that is widely available from different sources and is being traded on functioning and transparent international markets. Treating Copper as an SRM would

lead to a wrong focus of efforts (e.g., for recycling, supply chain stress tests) that should be on the really critical materials.

Company supply chain audit:

- Making supply chains more resilient is a core interest of companies, an inherent task of purchasing and a high priority after experiences with recent supply chain shocks and amid rising geopolitical tensions. Vulnerabilities in supply chains are already addressed within company risk management in a comprehensive manner that includes, but is not limited to, the supply of SRMs. Introducing an additional mandatory internal SRM supply chain audit would not contribute to mitigating these risks but would cause additional administrative burdens and costs for companies. This is especially relevant if audits would be mandatory also for stock traded materials like copper.
- Extensive and strict audit requirements like mapping of all SRMs back to the mine are not meaningful as there are many different possibilities for dependencies along the supply chain. E.g. if a dependency exists at refinery level, a detailed analysis of where the SRMs are extracted is less relevant.
- Moreover, imposing the requirement for a SRM supply chain analysis on companies producing certain strategic technologies is not meaningful. It is difficult for manufacturers to create transparency all the way down the supply chain, especially where they do not source the concerned SRMs directly but as part of components or the production process. When only large companies manufacturing strategic products are required to investigate their supply chains, but their suppliers are excluded from this requirement, the investigation of the supply chain will not be successful.
- Since only importers of these materials or companies which procure them directly for their production can create the necessary transparency with meaningful effort, analysis and stress test requirements should focus on SRM importers only.
- All information on dependencies and stress test results must remain within the companies and not be disclosed to third parties since it could reveal weaknesses and put companies in a disadvantageous position for purchasing SRMs.

Recycling of permanent magnets:

- Establishing large-scale recycling of permanent magnets in the EU is the right approach and an important pillar to secure the supply in the long term. There is currently no (scaled) magnet recycling in the EU and often magnets are lost in steel recycling processes, meaning that recyclers currently do not recycle magnets specifically, but rather other materials deemed more valuable.
- The requirements for products containing permanent magnets that are meant to enable such large-scale recycling should strike the right balance between effectively advancing this important goal and not creating unnecessary administrative burdens for companies in its course.
- Compared to the other types of permanent magnets, ferrite magnets are widely available on the international market and their supply is not critical. Moreover, recycling of low-grade ferrite magnets is often not economically meaningful since they do not contain much SRM material. Low-grade ferrite magnets that include less than 0.5% Cobalt should thus be excluded from the recyclability requirements under the CRMA.

- A labelling of products should only be required when products contain magnets, and not in cases where they do not. Such negative labelling would create an additional burden for companies but not offer meaningful benefits in the recycling process.
- To implement the information requirements for products containing permanent magnets, existing databases and systems to publish or transmit such information from product manufacturers to recyclers should be used to minimise the additional effort for all parties involved. Relevant existing systems include the International Material Data System (IMDS), I4R Platform (established to implement the Waste of Electrical and Electronic Equipment Directive, WEEE), and the Substances of Concern In Products (SCIP) data-base.
- Detailed information such as on the location of magnets in the product, their composition, and dismantling instructions should only be accessible for recyclers, market surveillance authorities and customs authorities and not for consumers or other companies since it might allow conclusions on confidential product design. Favourably, this information should be part of the digital product passport which is soon to be introduced under the Ecodesign umbrella. The foreseen different access categories in the digital product passport will allow for targeted access to the necessary information.
- Product manufacturers should not be required to provide detailed information on dismantling processes and tools for removing magnets from products. This would not bring meaningful benefits for the recycling process as dismantlers have the specific know-how and often their own techniques, tools, and processes so that describing one possible way of how to dismantle a product or component might not even be useful to them, while creating immense efforts for the product manufacturers.
- Harmonization with other upcoming regulations that introduce circularity requirements such as the Ecodesign for Sustainable Products Regulation (ESPR) and the End-of-Life Vehicles Regulation (ELV) needs to be ensured to avoid multiple requirements for the same products. Once they enter into force, ESPR and ELV provisions should take precedent over the CRMA.
- The definition of recycled content should include post-consumer waste as well as manufacturing waste, i.e. the materials rejected during the manufacturing process, which can-not be re-used as an integral part in the same process and need to be recycled. Including manufacturing waste will accelerate the development of the necessary recycling infrastructure and a functioning EU circular economy for permanent magnets. It will also have a positive effect on the availability and prices of recycled Rare Earth Elements.
- When considering introducing minimum shares of recycled content of Rare Earth Elements in permanent magnets adequate implementation periods that take the length of production cycles into account are crucial for companies to be able to fulfil such requirements. Implementing changes in running series production is a huge effort and would require changing supply contracts, redo testing, new customer approval etc. To avoid this, implementation periods for recycled content requirements of at least 5 years are needed.

Contact details:

Political Affairs and Government Relations (abteilungsbriefkasten.ccg@de.bosch.com)