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CECIMO Position Paper on European Critical Raw Materials Act

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CECIMO welcomes the announced legislative proposal, the European Critical Raw Material Act (CRMA)¹ as an important initial step towards developing competitive and resilient digital future and green transition of industries. Additionally, CECIMO expresses its support for the release of the first list of Strategic Raw Materials (SRMs) and the updated list of Critical Raw Materials (CRMs), which now includes six new materials, among which Copper and Nickel are considered primary for Machine Tools manufacturing.

The global supply chains have demonstrated their vulnerabilities during the COVID-19 pandemic and Russia's invasion of Ukraine. These events have underscored the European Union's heavy reliance on third countries for critical materials. To mitigate this risk, we strongly support regular revisions of the list of Critical Raw Materials within EU industrial sectors and ongoing collaboration between policymakers and industry stakeholders, facilitating a comprehensive evaluation of industry's specific requirements.

Based on the legislative proposal and a recent CECIMO study "CECIMO's Study on Critical Materials and Components," we seek to emphasize the strategic significance of certain critical raw materials for our sectors: Machine Tools and Additive Manufacturing.

CRITICAL RAW MATERIALS FOR MACHINE TOOLS AND ADDITIVE MANUFACTURING

- **Copper, Germanium, Nickel, Arsenic, Silicon Metal, Tantalum, Tungsten**, for the production of electrical components (semiconductors).
- **Bauxite** for the production of Aluminium.
- **Boron** for the steelmaking and production of High-Speed Steel (HSS).
- **Chromium** for coating e.g. of wear-resisting surfaces.
- **Nickel, Lithium, Cobalt, Manganese** in production of batteries, aluminium alloys and steelmaking (manganese).
- **Vanadium, Titanium, Cobalt, Fluorspar, Hafnium, Beryllium** in production of technical/mechanical components (gears, bearings, cutting tools).
- **Nickel, Titanium metal, Tungsten, Niobium, Heavy Rare Earth Elements (dysprosium, terbium, and erbium), Light Rare Earth Elements (lanthanum, cerium, and neodymium)** contribute to the additive manufacturing processes of machine tool component production, especially but not restricted to lasers and laser system.
- **Feldspar, Light Rare Earth Elements** in production of ceramics used in machine tools.

In the manufacturing of machine tools, various technical components, including gears, bearings, and cutting tools, play a crucial role in ensuring the functionality and operation of these machines. However, the significance of electrical components becomes even more pronounced in the production of machine tools, particularly due to the increasing demand and disruptions in the supply chain. These electrical components, which encompass motors, switches, semiconductors, circuit boards, and wiring systems, necessitate materials with exceptional electrical conductivity, such as **copper, aluminium, and a range of alloy compositions**.

RECOMMENDATIONS

1. The Commission together with the industrial stakeholders should **adopt a sector-based approach and ensure regular updates of the CRMs list** to better align with the distinct raw material demands and varying priorities across different industrial sectors. Europe must ensure that the identification of CRMs remains relevant to the evolving needs of industries and their efforts towards digitalisation and environmental sustainability. In this regard, the study published by the Joint Research Center “Supply chain analysis and material demand forecast in strategic technologies and sectors in the EU” is a step in the right direction. It is therefore necessary to carry out regular investigations and analysis and update the list of critical raw materials at least every three years in order to follow technological and market changes.

2. **Remove different specifications for strategic raw materials** as they have wide-ranging strategic applications beyond batteries. Additionally, **include Aluminium** as a strategic material in the list based on the Commission's Impact Assessment and Strategic Foresight Report, highlighting its increasing demand for energy transition (30% additional demand by 2040), declining EU production, and the growing influence of China and Russia. Furthermore, we propose to consider **adding Zinc** to the list for its significant role in clean energy technologies and as a primary commodity for accessing other critical raw materials like germanium and gallium.

3. **Foster close collaboration with industries** in the implementation of the CRMA to gain a comprehensive understanding of specific dependencies within Europe and its future demand needs. This collaborative approach will facilitate the development of more precise and impactful policies, ensuring swift action can be taken in response to disruptions.

4. **By removing obstacles** that hinder the acceleration of permitting processes and industrial operations, Europe can facilitate the swift implementation of projects, particularly those involved in extraction, processing, and recycling of Critical Raw Materials.

5. **Diversification for raw materials** through the establishment of free trade agreements and strategic partnerships. In this regard, the EU shall expedite the ratification of agreements with some of the resource-rich countries such as Mexico, Chile, Mercosur etc.; prioritise negotiations with countries like Australia (reserves of lithium, rare earth elements), Indonesia, Democratic Republic of Congo, South Africa etc.; and provide funding opportunities for European mining projects abroad. In line with these efforts, CECIMO fully supports the recent announcements of negotiations between the United States and the EU for a targeted Critical Minerals Agreement.

6. **Strengthen the circular economy** to enhance the accessibility of secondary raw materials. European Machine Tool Industries are already integrating recycled materials including recycled metals (such as steel and aluminium), plastics, and other reusable resources, into their business models. The EU must ensure that its policies and investments will address the availability, cost and quality of the recycled materials so that they meet the appropriate performance standards just like primary raw materials.

7. **Article 23 “Company Risk Preparedness”**: introduces supply chain auditing every two years, which imposes an unnecessary administrative burden on large manufacturers of strategic technologies utilising strategic raw materials. In the Article 20, the member states are already required to identify key market operators within the critical raw materials value chain and to monitor their activities through regular and proportionate surveys. Therefore, the Commission must clarify the criteria for selecting companies for audit and avoid imposing administrative burdens for companies (deleting the paragraphs 23.2 and 23.3).

8. **Minimise the disclosure of sensitive information for companies and safeguard trade and business confidentiality**. This becomes particularly crucial during stress tests, which evaluate a company's resilience under adverse conditions. Therefore, it is vital to gather the necessary information while also respecting the confidentiality and sensitivity of trade secrets.

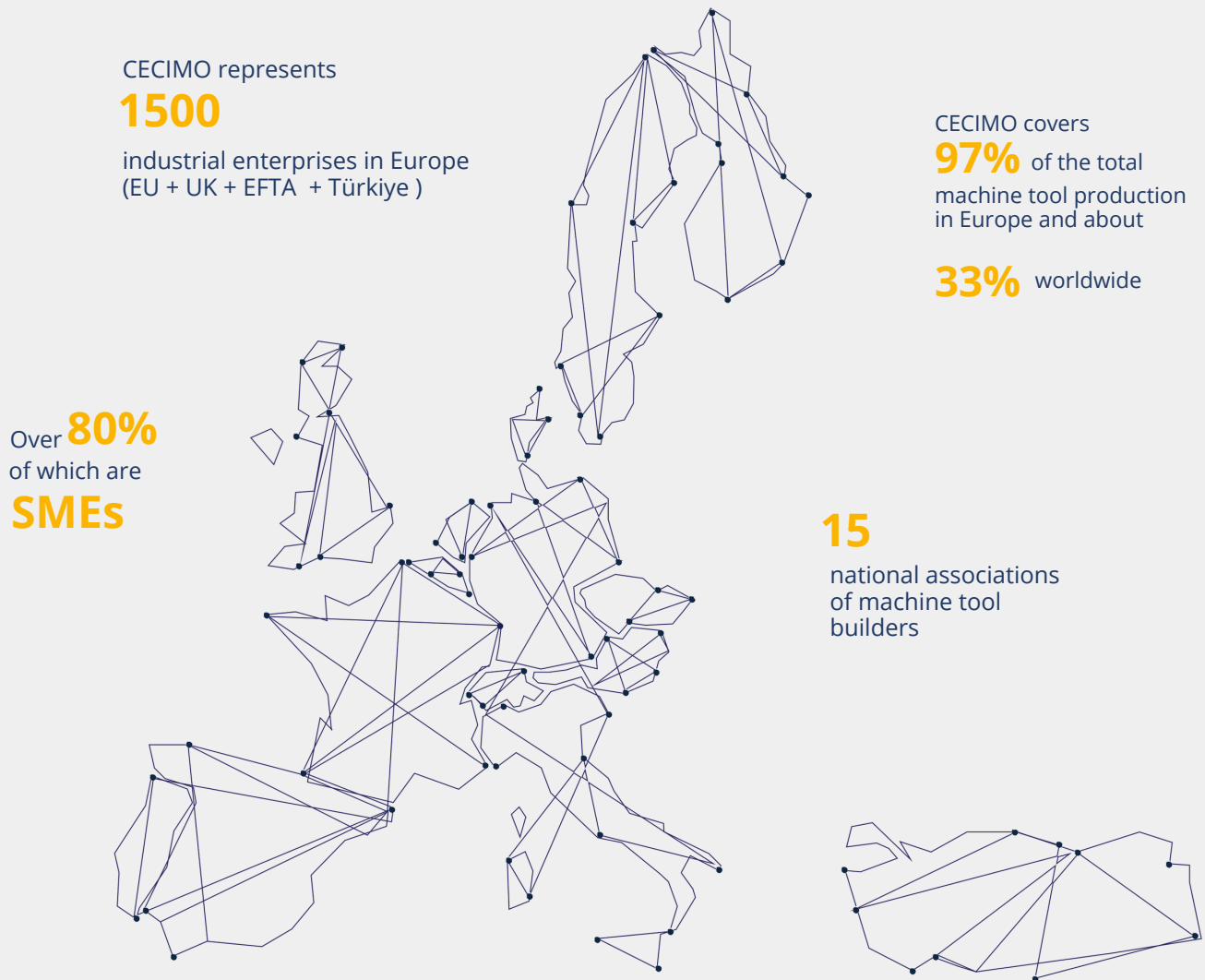
CECIMO will actively monitor market developments related to specific metals and raw materials that our manufacturers consider important, even though they are currently not facing significant supply problems or shortages (such as zinc, brass, chromium, etc.). By closely tracking these developments, CECIMO aims to stay informed and prepared for any potential shifts in the availability and accessibility of these materials.

REFERENCES

[1] European Commission, 2023 proposal for “European Critical Raw Materials Act”
https://single-market-economy.ec.europa.eu/publications/european-critical-raw-materials-act_en

[2] Joint Research Centre, 2023 “Supply chain analysis and material demand forecast in strategic technologies and sectors in the EU – A foresight study”.
<https://publications.jrc.ec.europa.eu/repository/handle/JRC132889>

CECIMO is the European Association of the Machine Tool Industries and related Manufacturing Technologies. We bring together **15** national associations of machine tool builders, which represent approximately **1500** industrial enterprises in Europe (EU + UK+ EFTA + Turkey), over **80%** of which are SMEs. CECIMO covers **97%** of the total machine tool production in Europe and about **1/3** worldwide. It accounts for approximately **150,000** employees and a turnover of around **25.1** billion euros in 2022. More than three quarters of CECIMO production is shipped abroad, whereas half of it is exported outside Europe.



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