Sustainable supplies of critical raw materials crucial for EU industry

Several critical raw materials such as indium are needed to produce photovoltaic panels ©CHARLY TRIBALLEAU / AFP

MEPs want Europe to be less dependent on the imports of critical raw materials that are crucial for its strategic industries.

To become climate neutral, energy-efficient and more competitive in the digital age, the EU will need more critical raw materials such as lithium and cobalt to manufacture batteries and electric engines. These technologies allow for the development of strategic sectors: renewable energy, electric cars, and digital technologies.

The green and digital transitions will also drive increased demand for critical raw materials (by 2050, EU demand for lithium could be up to 21 times the level in 2020).
Global supply chains that were already stretched were hit further by the Covid-19 pandemic, leading to shortages of critical raw materials in Europe and leaving the industry facing challenges in securing access to resources.

The Russian war on Ukraine and an increasingly aggressive Chinese trade and industrial policy mean cobalt, lithium and other raw materials have become a geopolitical issue.

Reversing EU dependence on imports

The EU faces bottlenecks and vulnerabilities along the supply chain due to its heavy reliance on imports from single sources and the shrinking number of suppliers. China currently produces 86% of the world’s rare earth supply. The EU imports 93% of its magnesium from China, 98% of its borate from Turkey and 85% of its niobium from Brazil.

In September 2023, Parliament adopted its position on critical raw materials legislation, calling on the EU to increase its processing capacity along the value chain and be able to produce at least 40% of its annual consumption of strategic raw materials by 2030.

MEPs want the EU to diversify supply sources of critical raw materials and reduce its reliance on a few non-EU countries. They want less red tape, more innovation and an increased role for substitute products along the value chain.

They also want support for smaller companies, economic incentives for companies to invest and produce in Europe, more research and development of alternative materials and more environmentally friendly mining and production methods.

The report proposes that the EU secures strategic long-term partnerships with non-EU countries. Such partnerships must include knowledge and technology transfer, training and upskilling for new jobs.

Recycling raw materials in the EU

Raw materials that can be recycled from older products are known as secondary raw materials. MEPs want to promote the recycling and recovery of critical raw materials from mining, processing and commercial waste streams to ensure reliable, secure and sustainable access to them and increase the deployment of substitute raw materials. They also want dedicated recycling targets for critical raw materials, with a robust monitoring framework.
Learn more about the importance and benefits of a circular economy

The raw materials sector provided almost 3.5 million jobs in the EU in 2017. Moving towards a more circular economy could create a net increase of 700,000 jobs in the EU by 2030.

Background

Parliament’s adoption of its position comes after the European Commission presented the Critical Raw Materials Act in March 2023, setting benchmarks for domestic capacities, such as for extraction or recycling, by 2030.

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- Waste management in the EU: infographic with facts and figures
- E-waste in the EU: facts and figures (infographic)
- The impact of textile production and waste on the environment (infographic)
- How to promote sustainable consumption
- Ecodesign rules to ensure sustainable products on EU market

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European Commission page on critical raw materials
European Raw Materials Alliance
At a glance: Critical Raw Materials Act (September 2023)
Council infographic
Major EU suppliers of critical raw materials and their governance