Council of the
European Union

Brussels, 4 August 2022
(OR. en)

11669/22

COMPET 635
MI 600
IND 308

NOTE

From:	Trio Presidency
To:	Working Party on Competitiveness and Growth (High Level)
Subject:	Criticial raw materials

Delegations will find in Annex a Trio Presidency note on Critical raw materials, in view of the meeting of the Working Party on Competitiveness and Growth (High Level) on 7 September 2022.

Note on Critical Raw Materials

Securing the EU's access to critical raw materials ("CRM") is essential for the industrial transition of strategic economic sectors such as e-mobility, aerospace, renewable energies, digital industries, health, agriculture, security and defence. Currently, the supply for many CRMs is heavily concentrated in one or only a few countries, among them potentially unreliable partners. For example, China supplies above 90% of EU refined rare earths or magnesium.

Such concentration bears risk for the EU security of supply as supply of CRMs can be used as a geopolitical leverage, for instance through export restrictions. For example, in 2010, China implemented an embargo on rare earths export against Japan and the United States. More recently, Indonesia has implemented an export ban regarding nickel. In addition, several raw materials are subject to export control restrictions and specific tariff barriers or quotas.[1]

Additionally, global competition for resources will intensify in the near future as global demand will drastically surge. To reach the goals of the Paris Agreement, the world needs 42 times more lithium, 25 times more cobalt and 7 times more rare earths in 2040 compared to 2020 (IEA 2021 report). To meet the European Green Deal and REPowerEU's objectives, the EU needs will increase as follows by 2050 (compared to 2020): 35 times for lithium; 3 times for cobalt; between 6 and 26 times for rare earth elements (KU Leuven study[2]).

[1] Methodological note to the Inventory of Export Restrictions on Industrial Raw Materials (oecd.org)
[2] https://eurometaux.eu/media/jmxf2qm0/metals-for-clean-energy.pdf

Crucially, global supply is not expected to rise accordingly, as shown by recent analysis by the International Energy Agency[3] or KU Leuven[4]. Such gaps between future supply and demand are forecasted for example for lithium and rare earths, which is likely to lead to increased prices (for example, the price of lithium has already increased by almost 10 times over the last 2 years and the price of the rare earth neodymium by 3 times[5]) as well as potentially to shortages.

The Commission has been working to mitigate these strategic dependencies and secure EU access to CRMs, mostly by implementing actions laid out in the 2020 Action Plan on CRMs[6]. In February 2022, the Commission published a staff working document[7]: "EU strategic dependencies and capacities: second stage of in-depth reviews", building on the more general analysis on strategic dependencies from May 2021[8].

Diversification of the supply chains is essential to preserve supply of CRMs. International cooperation is key in this regard. The Commission continues to negotiate strategic partnerships on raw materials value chains with resource rich and like-minded countries. Last year, the partnerships with Canada and Ukraine were concluded, and more partnerships are currently under negotiation. Via the Minerals Security Partnership, the EU is cooperating with the US and like-minded partners[9] to secure CRMs and to raise environmental, social and governance standards as well as circularity and innovation.

[3] https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions
[4] https://eurometaux.eu/media/jmxf2qm0/metals-for-clean-energy.pdf
[5] Deutsche Rohstoffagentur, Preismonitor Mai 2022, https://www.deutsche-rohstoffagentur.de/DERA/DE/Aktuelles/Monitore/2022/05-22/2022-05-preismonitor.pdf;jsessionid=DE0E1F10E2FB3B27F8B7D28A5C700E01.2_cid284?__blob=publicationFile&v=2
[6] https://ec.europa.eu/docsroom/documents/42849
[7] https://ec.europa.eu/docsroom/documents/48878
[8] https://ec.europa.eu/info/sites/default/files/strategic-dependencies-capacities.pdf
[9] In the US MSP framework, initial partners are Australia, Canada, France, Finland, Germany, Japan, Norway, Republic of Korea, Sweden, the United Kingdom, and the United States, as well as the European Commission, acting on behalf of the European.

To build up the value chains for CRMs, large investments are needed. To de-risk and crowd-in private investments where needed, the Commission has held regular workshops with promotional banks (EIB, EBRD etc.) and continued its work with the Clean Technology Materials Task Force. The industrial alliance on CRMs (ERMA) has published a report on permanent magnets, a major application for rare earths, and compiled a list of 14 bankable projects in the EU along the entire value chain, that, if implemented could provide 20% of European demands in 2030.

The Russian aggression against Ukraine has highlighted these strategic dependencies even more acutely. It has served as a warning of even larger vulnerabilities for access to key resources that the EU may face in the future. The reliance on China for several CRMs is even larger than for Russian gas and oil.[10]. Additionally, higher energy prices have a much stronger impact on the EU raw materials producers that hampers their competitiveness. It also forces the downstream sectors to increase their imports when European supply can no longer meet Member States demand. Additionally, increased energy prices have a stronger impact on the EU raw materials producers compared to other countries, further impacting our competitiveness. However, higher energy prices are a global phenomenon that impacts even China. For instance, in autumn 2021 and winter 2022, higher gas and electricity prices led the producers of magnesium to curtail or stop their production[11]. To ensure the continuity of our value chains, we need to strengthen our strategy of securing critical raw materials supplies.

Therefore, the Heads of States or Government called on the European Commission in the Versailles Declaration (11 March 2022) to secure EU supply of CRMs by means of strategic partnerships, exploring strategic stockpiling and promoting a circular economy, resource efficiency and substitution of critical raw materials by less critical inputs in manufactured products. As a response, the European Commission announced in the REPowerEU communication (18 May 2022) that it will intensify work on the supply of CRMs and prepare a legislative proposal[12].

[10] For example, China supplies 86% of the world's rare earths and 89% of the world's magnesium, and supplies more than 90% of European demands of both.
[11] Furthermore, China's power grid is deficient and has suffered many interruptions. In the framework of Winter Olympics Game in 2022, China decided to cut production from many greenhouse gas emitting industries, including raw materials and metals industries.
[12] An important aspect will be the links with other proposals such as SMEI, Waste Shipment Regulation, Duty of Care, Sustainable Products Initiative etc

The objective will be to strengthen the EU's monitoring capacity and to reinforce the EU's value chain through the identification of CRMs mining, refining, processing or recycling projects in the EU's strategic interest, based on a classification of raw materials with a clear methodology.

A recent discussion paper from Denmark suggest a typology for dependencies with different policy options for different types of dependencies. The regulatory proposal could be a useful way to legally define criteria for such a more focused list and consider possible specific measures for the raw materials covered by it.

The Commission will also ensure in its initiative a high level of environmental protection, including projects that promote a circular economy, resource efficiency and substitution. Sustainability is the driver of the EU's green and digital transition and climate neutrality objectives. Enhancing recycling, research and innovation for substitution, increased resource efficiency, circular economy measures to boost uptake of secondary raw materials will be essential. We need to ensure that new activity along the entire CRMs value chain is done as sustainably as possible.

In the medium- to long-term recycling will be a decisive factor in contributing to the EU's supply of CRMs. It is therefore important to ensure a common EU framework on recycling and the re-use of raw materials when products have reached the end of their lifespan. The massive deployment in green energy in the next years, as outlined in REPowerEU, means we will have to rely mostly on primary raw materials in the short- to medium term.

Given that the initial impetus for the intensification of the work on CRMs came from the Heads of State and Government in the Versailles Declaration, it is crucial that the High Level Group for Competitiveness and Growth provides additional impulses in a meaningful and constructive way.

To tackle these strategic dependencies, several Member States have reacted with domestic measures, for example by increasing monitoring capacity or setting up their own funds to support projects designed to increase the supply of CRMs. This group could provide a good setting to discuss what can be done and to further coordinate the European answer to this crisis. Together, we are better able to do what it takes to secure Europe's future supplies for CRMs.

Points for discussion:

– What are the key bottlenecks for availability of critical raw materials in your Member State? What actions are you undertaking/do you intend to undertake to ensure the recycling, the uptake of recycled content, and re-use of products which have reached the end of their lifespan?

– Which specific regulatory measures could be helpful to secure EU supply of CRMs? Are there any particular areas you would like to see covered by the regulatory proposal on raw materials?

– How should the regulatory proposal on raw materials assure consistency with other relevant regulatory proposals that are being negotiated or will be negotiated in the near future?