Critical Raw Materials Procurement and Recycling Project

Summary of the Contributions Received in Response to the Call for Input of 1 April 2025

Background

Raw materials play a crucial role in modern technologies and are essential for achieving the European Union's ("EU") key policy objectives, including strengthening the competitiveness of European industries. The Critical Raw Materials Act[1] (the "CRMA") aims to ensure that the EU has a secure and sustainable supply of raw materials. For that purpose, the CRMA establishes a list of 34 critical raw materials ("CRMs") that are both important economically and present a high supply risk. The CRMA qualifies 16 of these CRMs also as strategic raw materials ("SRMs") because of their relevance for the green and digital transition, as well as defence and space applications.

The Communication on the Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation published on 26 February 2025 ("CID"), announced that the Commission would carry out a fact-finding exercise aimed at assessing the need for greater industry cooperation in the procurement, recycling, and re-use of CRMs.

In this context, the Commission launched a call for input on 1 April 2025 to assess whether and how competition law could support such cooperation. It was focused on 14 CRMs selected based on their importance in key sectors for the EU industry, including clean tech, the green transition and defence.[2] The call for input also invited market participants to share information on specific cooperation projects and engage with the Commission with a view to finding the best way to implement these projects in compliance with EU competition rules. The call for input was publicised on DG Competition's website, X, and LinkedIn. The call for input closed on 31 May 2025.

The call for input was published in English, but participants could reply in any of the 24 official languages of the EU. Contributions were submitted in English, French and German.

Overview of the contributions received

In total, the Commission received **44 written contributions** in response to the call for input. Among the respondents, there were 27 companies, 12 business associations, 2 academic/research institutions, 1 advisory firm, 1 trade union, and 1 professional association. They represented the interests of the industry at each stage of the CRM value chain and covered all 14 of the CRMs selected by the Commission for the purpose of the call for input.

Several contributions were relevant for our general understanding of issues faced by the industry, and pointed to specific areas where guidance might be needed.

---

[1] Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020.

[2] The 14 CRMs selected were aluminium, beryllium, cobalt, copper, gallium, germanium, graphite, lithium, manganese, nickel, platinum, rare earth elements (REEs), titanium, and tungsten.

The main topics addressed by the respondents to the public consultation were (i) access to finance, (ii) administrative and regulatory issues, and (iii) joint purchasing, including (iv) joint sourcing via offtake agreements, and (v) the application of competition rules to certain sustainability cooperation projects.

The results of the consultation described in this summary may not be representative of the views of all market participants

1. Challenges faced by the critical raw material industries

1.1. Overview of CRM supply chains

At the beginning of every CRM supply chain are (i) extraction (including mining) and primary processing of CRMs (including smelting), primarily concentrated in a few countries, followed by (ii) refining and intermediate processing into industrial-grade materials. These processed materials are then used to manufacture applications such as batteries, electronics, renewable energy systems, defence applications and other high-tech products, which are then distributed to end-consumers. In addition, there is a "secondary market" for procuring CRMs extracted from industrial scraps.

In the following, extraction and primary processing of CRMs is considered "upstream", refining and intermediate processing is considered "midstream" and all subsequent steps on the supply chain, including recycling, are qualified as "downstream".

1.2. Common challenges to all levels of CRM supply chains

The feedback received emphasised the complexity of CRMs' supply chains in Europe. Stakeholders have raised concerns on systemic vulnerabilities affecting both the procurement and recycling of CRMs. A key issue shared by several companies across the value chain is the overdependence on single supply sources located in third countries. Since suppliers of raw and refined materials are mostly located outside the EU, the European industry is exposed to the risk of sudden supply chain disruptions caused by geopolitical tensions and price volatility. Investors might therefore be reluctant to invest in European initiatives, especially at the refining, processing, and recycling stages, which must have an uninterrupted access to the CRMs. A number of respondents also complained about the regulatory requirements which create unnecessary barriers even within the EU (e.g., for transport of waste or scrap within the internal market).

1.3. Challenges for producers of refined metals

Upstream and midstream in the value chain, European companies are directly exposed to the vulnerabilities described above. Smelters and refiners are often price takers when they purchase raw materials ores or concentrates. These producers are heavily dependent on imports of CRMs, as most of the extracting (for smelters) and smelting (for refiners) take place outside of Europe. At the same time, they cannot diversify their sources or reduce their dependency by simply switching suppliers. Indeed, respondents note a high concentration of market power in a few suppliers located outside of Europe, in particular in China, and the European purchasers have little to no alternative suppliers. For some CRMs, the pool of potential suppliers is de facto limited by considerations other than price, such as grades and technical specifications. This is because the same raw materials used in the manufacturing of metal or chemical products have different grades, purities, or compositions requirements to be processed further down the supply chain.

In parallel, downstream, the secondary market for CRM procurement from industrial scraps faces challenges in maintaining sufficient scrap volumes within Europe. Several companies voiced their concerns about leakage of copper and aluminium scrap outside the continent.

1.4. Challenges for manufacturers and recyclers of batteries

Regarding battery manufacturing and recycling, respondents mentioned having difficulties in obtaining sufficient investments for scaling their operations and in maintaining recyclable material within Europe. Companies downstream of the supply chain face the strong competitive pressure of players from third countries benefiting from state subsidies or engaging in dumping practices. Battery manufacturers and recyclers stressed the need for substantial capital investments to bridge the technological and know-how gap with third country players, as regards complex metallurgical processes. This is because, despite some emerging initiatives to create recycling or refining facilities in Europe, processing of black mass[3] and recovery of complex CRMs like nickel, lithium, and REEs currently occurs in China.

Several factors contribute to this situation. First, there are no major European companies with the technical knowledge and capacity to recover and process CRMs used for batteries. For years, they left the treatment of these complex materials to Asian companies that now have both the know-how expertise and the capacity to deal with global streams of input for their recycling process ("feedstocks") at very low prices. Second, the upstream vulnerabilities of the supply chain, described above in sections 1.2 and 1.3, directly impact the European recyclers' ability to build up projects. In the context of battery manufacturing, these vulnerabilities include the dependence on Chinese suppliers for battery components, exposing the supply chain to geopolitical tensions, and the need to adapt to swift technological evolution on battery chemistry (e.g., nickel-manganese-cobalt (NMC) batteries are currently being replaced by Lithium-Iron Phosphate (LFP) batteries). Third, these recyclers need more feedstocks to make their investments profitable, yet end-of-life batteries or sometimes industrial scrap are still exported outside the EU.

According to the respondents to the call for input, recycling of CRMs could benefit from collaboration either horizontally or vertically, e.g., by developing a circular economy optimised for the reuse or recycling of CRMs in Europe. No respondent indicated that EU competition rules might be hindering their ability to compete or innovate in Europe. At the same time, several respondents indicated their interest in further clarification of these rules in relation to specific projects.

2. Views on cooperation

2.1. Joint purchasing

Joint purchasing[4] is the main form of cooperation that was discussed by the respondents, as 16 of the contributions addressed this topic. The call for input yielded mixed views on jointly purchasing CRMs. Some were supportive of the initiative subject to conditions, while others expressed some reservations.

---

[3] Black mass refers to the crushed, powdered mixture of active materials recovered from spent lithium-ion battery cathodes during the recycling process. It usually contains valuable metals like lithium, cobalt, nickel, manganese, and other compounds used in the battery electrodes.

[4] Respondents sometimes referred to the creation of a joint purchasing mechanism or demand aggregation mechanism.

Respondents who supported the use of joint purchasing agreements recommended that the Commission carefully **assess the suitability of this tool for different CRMs** and make sure it will not lead to market distortions. Several responding companies stressed the difficulty of using joint purchasing among purchasers that likely have different requirements in terms of grades and specificities. For example, some companies in defence or battery manufacturing purchase CRMs with grades and specifications tailored exclusively for their needs, while almost no other companies use the same requirements. In their view, it is therefore difficult to aggregate demand when buyers' needs do not match. Participants also stressed the importance of ensuring that commercially sensitive information is not shared between competitors when engaging in joint purchasing.

The reservations against the creation of a joint purchasing mechanism mainly concerned those CRMs that are already **traded transparently**, in particular those raw materials which are traded as commodities on the London Metals Exchange (LME), such as aluminium, cobalt, copper, zinc or nickel, or for lithium for which benchmark pricing are publicly available. For aluminium/bauxite, a few respondents indicated that there is a well-established production system in Europe and underlined the risk that joint purchasing could put pressure upstream of the value chain and send misleading signals to the market about the actual demand.

In short, respondents invited the Commission to consider the concrete impact of joint purchasing on each CRM's supply chain to determine its appropriateness.

2.2. Joint negotiation of offtake agreements

Stakeholders active in copper, graphite (battery grade) and tungsten indicated that they face challenges in securing reliable, long-term access to these raw materials. Respondents noted that in these markets supply is limited, making the procurement of these raw materials more difficult. Financing, in particular, for new mining projects, often relies on large offtake commitments exceeding what a single buyer can commit to.

To address these issues, respondents suggested using **joint offtake agreements**. By combining their demand, offtakers would be able to commit to the purchase of larger volumes, negotiate better prices and terms or access rights to the raw materials. According to respondents, joint offtake agreements would also de-risk financing for new mining projects or support import of raw materials (ore or concentrates) from suppliers outside Europe.

2.3. Legal clarity on cooperation projects promoting sustainability or recycling

Several respondents called for greater legal certainty on the application of EU competition rules to certain sustainability projects. These respondents were mostly active in battery manufacturing. Their view is that greater cooperation across the steps of the value chain or across sectors could be beneficial to strengthen Europe's battery industry.

First, for some respondents active in recycling, **guidance on how to cooperate horizontally** could support the development of **recycling facilities, technological innovation,** or how to increase vertical cooperation or integration to **create circular material loops** (i.e. open or closed loops for the reuse, repair, remanufacturing or recycling of products using raw materials). Other recyclers asked for more clarity on the types of efficiencies that may be taken into consideration for horizontal or vertical cooperation and pointed to some gaps in the respective guidelines.

Second, some companies specifically asked for guidance on the application of the horizontal guidelines[5] to sustainability agreements if companies want to **cooperate in the early stages of projects prior to commercialisation,** e.g., to conduct joint feasibility studies, launch pilot projects, or create and test new technologies. In their view, the horizontal guidelines are unclear on the application of individual exemption criteria (Art. 101(3) of the Treaty on the Functioning of the European Union) to early-stage collaborations where the environmental benefits are long-term or system-wide, but not immediately quantifiable. Specifically, these companies asked for greater clarity on how to provide evidence of efficiency gains and how they will benefit a fair share of consumers. The same respondents requested further guidance on **research and development and technology partnerships** aimed at decarbonising the industry. They indicated that they have difficulties in practice in ensuring compliance with the safe harbour of the horizontal block exemption regulation on research and development[6], and especially with avoiding unnecessary exchange of sensitive commercial data.

Conclusion

This call for input to the industry resulted in meaningful feedback on the ongoing challenges faced at various stages of the respective value chains. The Commission (DG Competition) will continue engaging with the industry to explore whether and how it could offer guidance on these issues.

Further insights on these topics will be welcome at the dedicated mailbox: COMP-RAW-MATERIALS@ec.europa.eu

[5] Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01).
[6] Commission Regulation (EU) 2023/1066 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements.