

CRITICAL RAW MATERIALS ACT CONSULTATION POSITION PAPER

Brussels, April 2022

European Aluminium, the voice of the entire aluminium value chain in Europe, welcomes the Critical Raw Materials Act (CRMA) as a long-overdue first step towards acknowledging the need for a full value chain approach in realising Europe’s strategic resilience and sustainable growth. The Act has taken a step forward in **identifying strategic raw materials by considering their importance for the twin transition and defence sectors, as well as projected global supply/demand imbalances.**

Table 1. Strategic and critical raw materials used in the technologies in scope.


























Supply Risk	Raw material														
1.2	Aluminium	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Table 11. Strategic, critical, and non-critical raw materials used in the aerospace and defence sector, and their applications

Supply Risk	Raw material	Technologies				Defence applications						
												
1.2	Aluminium	•	•	•	•	•	•	•	•	•	•	•

JRC, Supply chain analysis and material demand forecast in strategic technologies and sectors in the EU – A foresight study, 2023

As we enter the next steps of the legislative process, we invite the EU institutions and all stakeholders to consider the following set of key enablers to safeguard Europe’s industrial base, achieve the aims of the Green and Digital transitions and allow for a long-term sustainable growth of the aluminium sector:

1. **Add aluminium to the list of “Strategic Raw Materials”**
2. **Additional considerations for aluminium and its importance as a Strategic Raw Material**
3. **Involve industry stakeholders in the European Critical Raw Materials Board**
4. **Ensure complementarity with the Net Zero Industry Act**
5. **Promote more ambitious circular economy provisions**
6. **Boost investments by gearing up new financing mechanisms**

1. Aluminium should be added to the list of ‘Strategic Raw Materials’

In order to support the twin transition by promoting a sustainable and robust aluminium production in Europe, aluminium should be added to the list of “Strategic Raw Materials”. Aluminium’s crucial role as a ‘Strategic Raw Material’¹ is widely recognised in the accompanied [Impact Assessment](#) and [JRC Foresight Report](#) (see infographic on page 1). In the recent [JRC report](#) for the product priorities under the Ecodesign for Sustainable Products Regulation, aluminium was identified for its importance in the EU’s efforts for strategic autonomy and in addition, while a recent [report](#) by the OECD² identified aluminium as a raw material critical for the green transition.

Since 2021, primary European aluminium production has **plummeted by 50%**, and if the issue remains unaddressed, this could have significant implications for both jobs and future investment plans and the overall decarbonisation efforts of the EU.

Although the global supply of aluminium is expected to keep pace with its rising demand, primary aluminium production in the EU has been curtailed at an alarming rate over the last two years. We must consider that more than ¾ of the global aluminium production is located in non-market economies, in countries which cannot be considered as trust-worthy or like-minded trade partners with the risk that supplies are interrupted due to political interventions. Furthermore, the increased imports result in increased carbon leakage as the European average CO2 footprint is three times lower than average footprint of aluminium produced with power based on coal, for example as prevalent in China. Ultimately this constitutes a paradox considering the objectives of the EU Green Deal. The increasing demand for aluminium is driving more imports from third countries, as European producers are facing challenges in remaining competitive due to the energy crisis and uneven trade conditions.

1.2 Additional considerations for aluminium and its importance as a strategic raw material for Europe

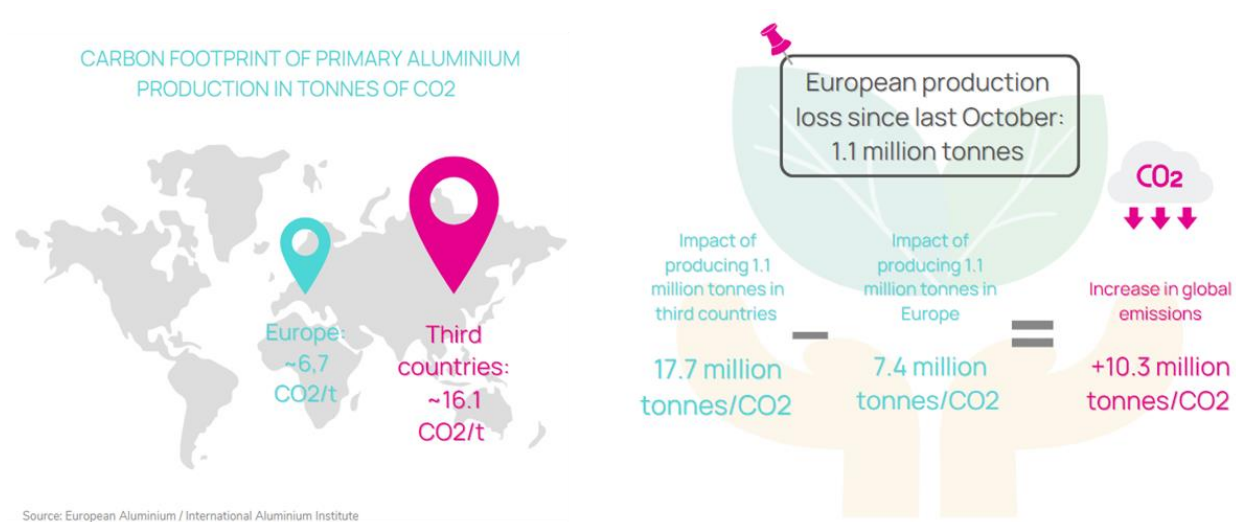
To maintain its forward-looking approach and guarantee an appropriate degree of strategic independence based on high environmental and social standards, the consideration of aluminium as a Strategic Raw Materials should also reflect on the following factors:

- **The risk of carbon leakage for a metal producing industry in Europe to assess the overall outlook of potential future import dependencies.** Unfortunately, carbon leakage is already a documented reality in the aluminium sector. Over the past 15 years, European primary aluminium production has increasingly been displaced by production in third countries, leading to a large net increase in global emissions. Once production capacity is lost, it is often too late to re-establish a vibrant production in the EU, as illustrated in the case of magnesium at the

¹ The EU energy transition will lead to a 30% increase in aluminium demand by 2040. KU Leuven, Metals for Clean Energy, 2022, <https://eurometaux.eu/media/jmxf2qm0/metals-for-clean-energy.pdf>

² The OECD Report (2023) “RAW MATERIALS CRITICAL FOR THE GREEN TRANSITION” identified aluminium for its importance in five green technologies (please refer to the Annex for the detailed list)

end of 1990s³. Realising the objectives of the EU Green deal through high-carbon imports⁴ of material is a paradox requiring additional scrutiny from policy makers.



At the same time approximately 1 million tonnes⁵ per year of aluminium scrap leaves Europe, representing a further lost opportunity to create strategic material value chains within the EU and the efforts to lower the carbon footprint of products by recycling.

- Strategic Autonomy: Assessing global supply and demand trends without considering the reality of what percentage of global production is occupied by non-like-minded third countries will cause unfavourable dependencies and undermine Europe’s strategic autonomy.** China holds a dominant position in the global primary aluminium production market, accounting for close to 60% of production on average from 2016-2020⁶. Any market or policy changes in China can lead to unexpected disruption in the global supply, whose impact could be significantly amplified if the supply was highly dependent on a single unreliable country.

2. Involvement of industry stakeholders

The CRM Act should provide clear guidance and measures to strengthen existing European raw material value chains, while facilitating European access to raw materials globally, fostering domestic investments in the EU and advancing the transition towards a circular economy by incentivising recycling. To achieve these goals, it is essential for industry stakeholders to be actively involved in the European Critical Raw Materials Board. Industry representatives can provide valuable feedback on the practicality and feasibility of proposed legislation, sharing their expertise and knowledge on best

³ European Aluminium, Call on EU policymakers to address imminent supply shortage of Chinese magnesium, 2022 – [link](#)

⁴ European Aluminium, Aluminium: the base metal for the green transition, 2023 – [link](#) “Satisfying the projected increased demand for aluminium via imports instead of producing in Europe would generate at least an additional 40 million tonnes of CO₂, yearly”

⁵ European Aluminium, Circular Economy Action Plan, 2020 – [link](#)

⁶ SCREEN2, Aluminium and bauxite factsheet, 2023 - [link](#)

practices and any potential challenges (e.g. additional administrative burdens that the reporting could potentially impose), shaping realistic and effective measures that support economic growth and job creation.

3. Complementarity with Net Zero Industry Act

The complementarity between the Net Zero Industry Act (NZIA) and the CRMA must be clarified. The NZIA is a first step towards promoting sustainable growth and supporting European industrial initiatives to decarbonise their operations through practical and effective measures. It is crucial to ensure that there is complementarity between the NZIA and CRMA in order to maximise their collective impact. Restricting NZIA support to raw materials not covered by the CRMA undermines the objective of re-shoring existing manufacturing capacity of clean technologies to Europe and will only accelerate raw material dependencies. European Aluminium recommends including aluminium in the scope of the CRMA. The two acts are naturally complimentary in the sense that the CRMA covers production, refining and imports of raw materials, whereas the NZIA covers manufacturing of clean technology based on several materials covered by the CRMA. Such an explicit clarification would ensure a full value chain approach and reduce Europe's material dependencies.

4. More ambitious circular economy provisions

Harnessing the circularity potential of materials will serve to boost the supply of recycled materials in Europe, which will in turn offer benefits for people and the planet. The focus on recycling is fundamental and should be strengthened with the following provisions:

- Using the provisions on permanent magnets as inspiration for other streams that could follow a similar approach should aim to valorise end-of-life material streams and support more efficient collection, sorting and pre-treatment systems. Harnessing the potential of the circular economy, will results in reducing import dependency, increasing resource efficiency and reducing products' carbon footprint.
- Transparency in reporting obligations related to circularity should be assessed as part of the overall need to better monitor scrap flows and utilisation.
- The 15% recycling benchmark mentioned in art.2 par. (2) point (a)(iii) should only cover "preparation for recycling" stage with additional measures supporting development of collection, sorting and pre-treatment capacity and not all intermediate recycling steps as mentioned in the article to avoid cases of double counting.

5. Boost investments by gearing up new financing mechanisms

Boosting investment will allow for greater economic resilience and increased private-public funding which will in turn speed up the delivery of related projects. European competitive soft funding and risk-reducing mechanisms are necessary to create a level playing field within the EU and beyond. The idea of a European Sovereignty Fund is fully supported by the European aluminium industry and can be an important complement to IPCEI and other platforms. In addition, private investments should be encouraged and facilitated by State Aid support for projects that contribute to EU sovereignty in raw materials production, supply chain resilience and circularity.

ANNEX

Table 2.1. List of critical raw materials for green technologies

Sorted by the number of green technologies in which the raw material is applied

Material	Li-ion battery	Fuels cells	Wind energy	Electric traction motors	Photo-voltaic	Number of technologies
Aluminium	x	x	x	x	x	5
Copper	x	x	x	x	x	5
Iron ore	x	x	x	x	x	5
Borates		x	x	x	x	4
Germanium and other*	x	x	x		x	4
Cobalt	x	x	x			3
Rare earth elements	x	x	x	x		3
Lead	x		x		x	3
Manganese	x	x	x			3
Molybdenum		x	x		x	3
Nickel	x	x			x	3
Chromium		x	x			2
Lithium	x	x				2
Natural graphite	x	x				2
Selenium	x	x				2
Silver		x			x	2
Tin	x				x	2
Titanium	x	x				2
Arsenic		x				1
Cadmium					x	1
Gold		x				1
Magnesium		x				1
Palladium and platinum		x				1
Phosphorus	x					1
Zinc					x	1
Zirconium		x				1
Iron ore and steel products**			x		x	

Note: * "Germanium and other" is a group of materials including germanium, niobium, vanadium, gallium, indium and hafnium. **Iron ore and steel are not on the original list of Bobba et al. but have been included in the analysis because of their intense use in some green technologies such as for example wind and solar energy.

Source: Based on Bobba et al. (2020^[8]).

Source: OECD, *Raw materials critical for the green transition, 2023* ([link](#))