CALL FOR EVIDENCE

CRITICAL RAW MATERIALS ACT PUBLIC CONSULTATION

A response from Hydrogen Europe to the European Critical Raw Materials Act proposal

Policy Recommendations

Hydrogen Europe is herewith presenting several policy recommendations to the attention of the European Commission, to be considered as an input from the EU hydrogen industry for the upcoming Critical Raw Materials Act.

1) **A clear state of the art.** The clean hydrogen sector is rapidly growing, and one can notice that companies, associations, projects and major initiatives are putting forward relevant estimates on needs and criticalities for a secured foresight of hydrogen development activities. Unfortunately, information is often scattered, hard-to-retrieve and not reliable for the whole range of stakeholders. Hydrogen Europe is asking for a unanimous and harmonised state of the art related to critical raw materials for the hydrogen sector. The European Commission should put forward a clear baseline of studies, evidence, approaches and best practices that could clearly define hydrogen industry’s benchmarks by type of materials and related quantities, as to result in accountable data for the sector’s needs and a blueprint to design ambitious follow-up solutions.

2) **An EU-secured access.** Covid-19 and the Russian invasion of Ukrainian territory highlighted the vulnerabilities of European supply chains for a large amount of imported goods, most notably critical raw materials. Strong market positions on certain materials are a major threat for EU industrial ambitions, as allowing third countries to act as gatekeepers would ultimately undermine the development of the European clean hydrogen sector. The hydrogen industry advocates for an EU approach capable of ensuring encompassing, sustainable, responsible and reciprocal free trade agreements (FTAs) with those countries, while exploring the possibilities for establishing ties with new actors in the near Neighbourhood and the international landscape.

3) **Resilience and EU capabilities.** Besides focussing on external partners and supply chains, it would be important to build resilient supply chains, as appropriate for each critical material, by maximising the benefit of internal capacities for mining, refining and processing of critical raw materials into the advanced materials needed for hydrogen technologies. This will help to reduce EU’s reliance on external, yet reliable and diversified, suppliers. Other than a clear regulatory framework and political backing for ramping up and acceleration of “Made in Europe” materials production, attention will have to be paid to supporting the industry in its very ambitious investments. A concrete vision for public support should be also provided for the hydrogen sector and should be linked to advanced materials and components demonstrating a significant less usage of critical raw materials. This measure will enable a strong mobilisation of investments from private actors in this field, which has been marginalised in the previous decades.
4) **Enhancing circularity.** Another key element of the upcoming CRMs Act will be the major role of recycling those materials and components, with a prominent accent on circularity. The EU has an unchartered potential in these kinds of activities, and thus it should be endorsed through a joint vision. Hydrogen Europe asks the European Commission to enhance its works on reassessing the regulatory framework on waste, while promoting recycled content requirements for selected product categories containing critical raw materials (and fluoropolymers), ensuring durable & dismantling-friendly designs & enforcing the development of a market for end-of-life (EOL) products, to close materials loops.

5) **R&I for reducing dependencies.** A vast array of products developed in Europe, require materials that are renowned for their scarcity and, consequently, their prices. Often, those materials supplies are currently linked to international gatekeepers that can exert strong leverage on the markets and generate negative externalities for the development of the EU clean hydrogen sector. For this, the European Commission should ensure a concrete framework and the adequate financing of R&I activities aiming at reducing EU’s dependencies, with the objective to ensure a competitive ratio of CRMs/MW of European electrolysis/fuel cells installed capacity, for instance. A stronger focus on the advanced materials which are key to increase performance and durability of hydrogen technologies while reducing the load of critical raw materials would be the way forward. These efforts on efficiency should go hand in hand with the development of world-class dismantling, recycling and refining technologies for the recovery of these critical raw materials. Here, application of those new materials and technologies in real-life demonstration projects should be supported to accelerate their implementation in industrial processes.

6) **Need for a holistic view.** As critical raw materials and rare earths are very present in every aspect of our lives, sectoral competition is becoming harsher, especially for energy-related technologies. The European Commission should ensure more efficient and comprehensive analysis of the different critical raw materials in various value chains of different sectors, through a coherent holistic approach. This exercise would help the identification of overlaps and bottlenecks for the different supply chains; Hydrogen Europe strongly advocates for an impactful prioritisation of CRMs supply for technologies that could have a strong impact on decarbonising our economy and impacts on the EU sovereignty, such as clean hydrogen.

7) **Sustainability matters.** Sustainability should be at the core for the upcoming CRMs Act. Hydrogen Europe asks the European Commission to establish standards and certification schemes linked to all critical raw materials activities, such as mining, refining, processing and recycling. Furthermore, an EU-approach on imports of CRMs and key derived products should also be designed, as to ensure the full sustainability and the respect of social and environmental practices for materials, rare earths and components that will ultimately reach Europe: this will help creating a global level playing field for sustainability, while reducing competitive advantages that international partners may have in this sense.