

CRITICAL RAW MATERIAL CHARTER

Benefits of critical raw materials

**Why critical raw materials are crucial for
the EU's economy and competitiveness**

**Brussels,
September 2018**



Dear Readers

The CRM Alliance and its members are pleased to present the CRM Alliance "Charter on Critical Raw Materials Policy". This Charter aims at promoting Critical Raw Materials and providing recommendations on future actions and objectives.

Critical Raw Materials are those raw materials which are economically and strategically important for the European Union. They are key enablers in maintaining Europe at the cutting edge of innovation and are used in environmental technologies, transport, consumer electronics, health, defence, space exploration, aviation and much more due to their unique combination of physical properties which guarantee unmatched reliability and high-performance. These materials are essential to Europe's Economy and to all its industrial and manufacturing sectors.

This charter outlines the core actions that the European Union should take on Critical Raw Materials and seeks to constitute a guidance for policy-makers on future actions.

The Charter features a total of 10 principle that the CRM Alliance deems necessary to implement in order to ensure the continued supply of CRMs, essential to Europe's economy, green transition and to drive future innovation.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Martin Tauber", with a stylized, flowing script.

Martin Tauber

President of the CRM Alliance

A handwritten signature in blue ink, appearing to read "Maurits Bruggink", with a stylized, flowing script.

Maurits Bruggink

Secretary General of the CRM Alliance



CRM Alliance Secretariat has developed a “Charter on Critical Raw Material Policy”. This charter outlines core actions that the European Union should take on Critical Raw Materials and seeks to guide policy-makers on further action.

The aim of the Charter is to promote Critical Raw Materials and provide recommendations to the EU and the wider stakeholder community on how Critical Raw Material policy should develop in the upcoming decades.

CONTEXT

The charter features a total of 10 principles that the CRM Alliance deems fundamental to ensure the continued supply of these materials, essential to Europe’s economy and to drive future innovation.

Each principle identifies challenges associated with CRMs and potential solutions to implement.

PRINCIPLE 1 Sustainable Sourcing

PRINCIPLE 2 Expediting Permitting Processes

PRINCIPLE 3 Increase Recycling Initiatives

PRINCIPLE 4 Common Framework for Investment in CRM Production

PRINCIPLE 5 Specific CRM Policy Initiative

PRINCIPLE 6 Supply Chain Approach

PRINCIPLE 7 Global Free and Fair Trade

PRINCIPLE 8 Market based approach towards Substitution of CRMs

PRINCIPLE 9 Awareness Raising Initiatives

PRINCIPLE 10 R&D on New Technologies

CONCLUSION

The CRM Alliance deems all of the above principles of fundamental importance in order to develop a strong and robust CRM policy that will benefit the economic and national security interests of the EU and its leadership in future innovation.

01 SUSTAINABLE SOURCING

An efficient transformation of the Economy from a linear concept to a circular concept starts at the beginning of the economic cycle:

Sourcing of critical raw materials.

Improving the conditions and incentives for sustainable access of sourcing of CRMs will aid in guaranteeing supply of these materials in the EU.

Challenges

- High investment costs, difficulties in obtaining social acceptance and complex permitting procedures.
- Generation of waste and large tailings.
- Difficulties in identifying and addressing environmental impact.

Solutions

- Facilitating access to known or undiscovered mineral deposits in the EU.
- Predictable and stable mining investment climate i.e. using EU funds, EIB, etc.
- Other alternative solutions: automated mining, mining of small deposits, alternative mining, etc.

02 EXPEDITING PERMITTING PROCESSES

The European Union is heavily dependent on third country imports for many CRMs. In order to reduce this dependency, the EU should take advantage of the geological deposits featured on its territory by enhancing primary production of these materials.

To do so, Member States need to adopt a clear and coordinated permitting framework in order to expedite permitting and mining processes.

Challenges

- High costs of exploration projects due to complex and expensive permitting processes.
- Transparency regarding the permitting procedures as well as the level of permitting fees, royalties, etc. is not always sufficient.
- Lack of fast-track procedure for critical materials.

Solutions

- Coordination and implementation from a bottom-up approach of minerals policies at different levels (EU, Member States, regional, local).
- Good governance - Strengthening the exchange of best practices in the area of mineral policies.
- Commission intervention to facilitate and expedite permitting procedures – Fast track.

03 INCREASE RECYCLING INITIATIVES

In order to reduce the EU's dependency on third country imports, the European Union is implementing a more circular economy based on the principle reduce, re-use and recycle. Through the enhancement of recycling initiatives,

CRMs are maintained in the EU's economy for as long as possible.

Secondary production of CRMs, coupled with the enhancement of primary production, would reduce the EU's dependency on third states.

Challenges

- CRMs are difficult to recycle due to the long-lasting life of the final product they are generally embedded in and due to the extremely high costs associated to recycling procedures.
- Policy-makers do not recognize that for some CRMs and in certain applications recycling is not an option, technically and/or economically.
- EU funded CRM recycling studies/projects often focus on CRMs that cannot be recycled and/or replicate passed conclusions and results.

Solutions

- Development of cost-effective, resource and energy efficient, and environmental solutions for recycling and recovery of CRMs from products and other waste and recycling streams when possible and economically viable for industry.
- Development of new innovative technological solutions for recovery of technology metals from complex end-of-life products.
- Improving the economic incentives to recycle CRMs when technically and economically feasible.

04 COMMON FRAMEWORK FOR INVESTMENT IN CRM PRODUCTION

A Common Framework for Investment in CRM Production should be developed at EU level in order to foster the general production of CRMs

thus guaranteeing their supply and use in existing and future applications

Challenges

- High costs connected to general primary and secondary production of CRMs.
- Excessive EU and national legislative burden for Producers.
- Competition from third countries.

Solutions

- Incentivize producers to implement new and sustainable production of CRMs.
- Incentivize secondary production of CRMs and reduce EU dependence on third States.
- Develop new production projects in the EU.

05 SPECIFIC CRM POLICY INITIATIVE

The development of a Specific CRM Policy initiative focusing exclusively on the issues associated to CRMs and their applications would enable the development of tailored-CRM projects, the implementation of new technologies and boost primary and secondary production. Moreover, a specific CRM Policy would avoid overregulation and incoherence of EU legislation on CRMs.

Challenges

- The EU has developed a series of projects and initiatives mostly focusing on raw materials.
- These initiatives, except a few, do not address the specific issues concerning CRMs.
- EU policy does not focus on preserving existing CRM production.
- Overregulation and incoherence of EU legislation concerning CRMs.

Minimizing the adverse regulatory burdens that impede advancement or the continued availability of CRMs.

Solutions

- A specific CRM policy initiative would allow the development of tailored projects and initiatives that can address the specific issues linked to CRMs as well as guarantee a coherent approach towards CRMs.
- A specific CRM policy will allow to implement new technologies and instruments for sustainable mining and boost secondary production while remaining sensitive to the specific needs of the EU industry and the critical applications of CRMs.
- A specific CRM policy will enable the EU to react swiftly to unfair competition and dumping of CRMs by third countries.

06 SUPPLY CHAIN APPROACH

A Common Framework for Investment in CRM Production should be developed at EU level in order to foster the general production of CRMs thus guaranteeing their supply and use in existing and future applications.

Challenges

- EU policies impacting CRMs do not consider the overall impact on global, regional and local supply chains.
- Lack of involvement of downstream users in developing the CRM list and policies impacting CRMs.

Solutions

- Holistic approach to policy making.
- Involvement of the entire supply chain in policy making.

07 GLOBAL FREE AND FAIR TRADE

The EU should support principles of both free and fair trade of CRMs guaranteeing a level playing field for all actors through the elimination of tariff and non-tariff barriers.

Industrial Sector Policies should incorporate and highlight the economic and strategic importance of CRMs and their values to future innovation and competitiveness.

Challenges

- Ensuring free and fair trade of CRMs.
- WTO dispute settlement system is slow and outdated.

Solutions

- Fair and unrestricted access to critical raw materials by improving supply partnerships for EU companies.
- Ensuring a level playing field of all actors present in the trade of critical raw materials commodities.

08 MARKET BASED APPROACH TOWARDS SUBSTITUTION OF CRMs

CRMs have unique properties and therefore should be promoted. The use of these substances translates into high performing products and a more competitive industry in Europe.

Government policies should embrace and promote these substances and leave substitution to natural selection in a competitive market.

Challenges

- Substitution is not a viable option for CRMs due to their unique properties and economic significance, in particular, in high-tech applications requiring high standard performance and specification (often critical for safety).
- Lack of knowledge of the critical applications of CRMs and their properties.
- Substitution is a complex process, which can have unintended consequences for global value chains.

Solutions

- Raising awareness on the uses of CRMs and consequences attributable to regrettable substitution.
- Investing in new recycling technologies to improve the recycling rates for CRMs.
- Substitution should be industry driven and based on a market approach.

09 AWARENESS RAISING INITIATIVES

Most people are unaware of the importance of CRMs and how they are used in their everyday life. This lack of knowledge negatively affects how the initiatives concerning CRMs are perceived.

Awareness raising initiatives on CRMs and their applications would facilitate the dissemination of a better understanding of CRMs and their applications, hence a better knowledge of the associated initiatives.

Challenges

- Lack of knowledge of what CRMs, their importance for critical applications and where they are used.
- Lack of coordinated campaigns on the importance of CRMs and their mining at the national, local and regional level.
- Non-alignments of Member States' national critical lists and the EU CRM List.

Solutions

- Transparency on CRMs' availability in the EU and on their positive and negative impacts in the economic/industry sector.
- Industry led initiatives for increasing public awareness of the benefits and potential costs of the CRMs supply.
- Initiatives to obtain public acceptance and gain trust throughout the production cycle, in particular with reference to environmental and social aspects.

10 R&D ON NEW TECHNOLOGIES

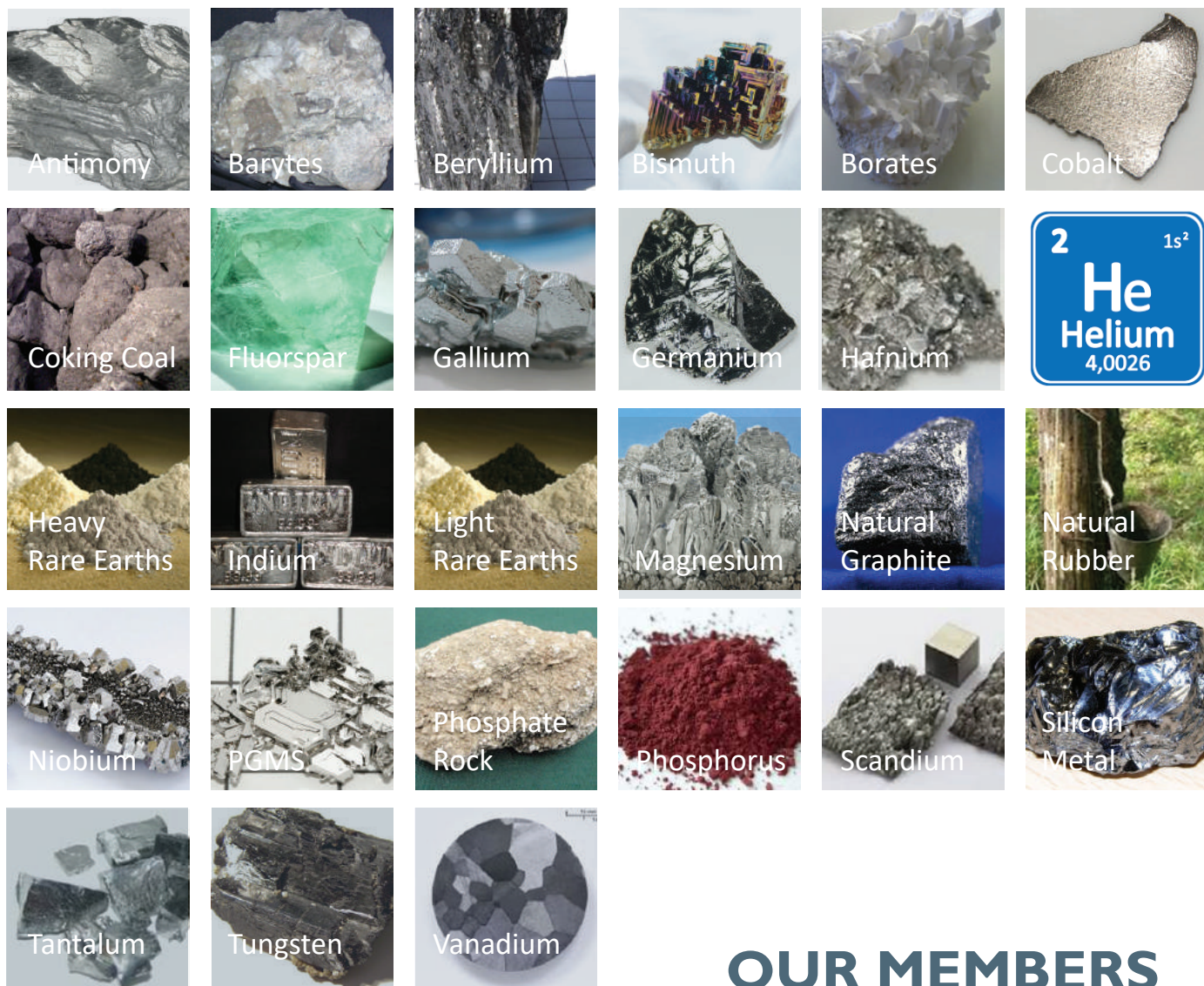
Research and development in the area of CRMs should be coordinated in order to avoid duplication and resource loss

Challenges

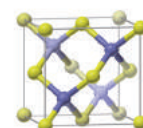
- Research and development in the area of CRMs is fragmented and projects involving EU funds generally lack industry participation.
- Funding programs at the EU level are complex and costly.
- Overlapping and non-coordinated research projects.

Solutions

- Improvement of coordination and collaboration to streamline efforts to avoid duplication and resource loss.
- Develop a CRM Institute at EU level similar to the CMI in the U.S.
- Focus on funding on recovery technologies and on how CRMs can develop new applications: from civil to life saving technologies.



OUR MEMBERS





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