



EUROPEAN CLUSTER
COLLABORATION PLATFORM

On the way to sustainability: Raw Materials & Circular Economy

Summary



EU Clusters Talks
5 April 2023, 8:30 – 9:45 CET

An initiative of the European Union





On the way to sustainability: Raw Materials & Circular Economy

The European Cluster Collaboration Platform organised this EU Clusters Talk on 5 April 2023, 8:30 – 9:45 CET, to discuss the new Critical Raw Materials Act, existing circular approaches and good practices, and necessary actions for circular economy.

Agenda of the meeting

Moderation: Jennifer Baker

1. News from the European Cluster Collaboration Platform
Marek Przeor, Team Leader - Cluster Policy, DG GROW, European Commission
2. Video From Our Own Correspondent: Good examples from the MINE.THE.GAP project
3. Critical Raw Materials Act
George Mörsdorf, Policy Officer - Energy Intensive Industries and Raw Materials, DG GROW, European Commission
4. Panel debate
David Fitzsimons, Director, Remanufacture Council
Emmanuel Katrakis, Secretary General, European Recycling Industries' Confederation (EuRIC)
Sari Tasa, Senior Specialist, Ministry of Economic Affairs and Employment (Finland)
Wolfgang Reimer, Managing Director, Geo Competence Centre Freiberg
5. Funding opportunities
Nina Hoppmann, team member of the European Cluster Collaboration Platform

Key messages

- We need horizontal design improvements to extend the life cycle of products.
- For recycling, we should prioritise the products where we find critical raw materials.
- Mining and recycling activities need to be competitive for the companies. High energy prices and (infra-)structural issues have a negative impact. Boosting the EU re-industrialisation is a challenge but needed not to lose companies to other countries.
- Legislation needs to be coherent and reduce the bureaucratic burden on the SMEs.
- We need an in-depth analysis of our value chains to understand the risks. We are still missing data to improve remanufacturing and recycling.



1. News from the European Cluster Collaboration Platform

Marek Przeor, Team Leader - Cluster Policy, DG GROW, European Commission

After the introduction by moderator Jennifer Baker, Marek Przeor spoke about the “Clusters meet Regions” event for EU-Ukrainian business collaboration, which took place in Kosice, Slovakia, on 28-29 March 2023. At the event, Prime Minister of Slovakia Eduard Heger highlighted that collaboration is our future and the future is collaboration. Prime Minister of Ukraine Denys Shmyhal spoke about the reconstruction of Ukraine, which will be a huge task for the 21st century.

The main takeaway from the discussions is that the best help for Ukraine is to do business with Ukraine. Marek Przeor emphasizes that Ukrainian clusters and companies need to be quickly integrated into the EU value chains. At the event, the Ukrainian Cluster Alliance signed a joint statement for collaboration with the national cluster associations of Czech Republic, Lithuania, Poland, Romania, and Slovak Republic.

2. Critical Raw Materials Act

George Mörsdorf, Policy Officer - Energy Intensive Industries and Raw Materials, DG GROW, European Commission

The Critical Raw Materials act seeks to establish a **framework for ensuring a secure and sustainable supply of critical raw materials to Europe**. George Mörsdorf explains that the EU is heavily dependent on third country support for critical raw materials (CRM) that are key for strategic technologies. The four pillars of the act are: strengthen all stages of the European CRM value chain, improve EU capacity to monitor and mitigate risks of disruption to CRM supply, diversify EU CRM imports to reduce strategic dependencies, and improve CRM circularity and sustainability.

Among the CRM, there is a set of strategic raw materials (SRM) that are key of needed technologies for the twin transition and for space and defence. George Mörsdorf highlights the 2030 benchmarks for those SRM set out in the CRM Act:

- EU's **extraction** capacity cover at least 10% of the EU's SRM consumption
- EU's **processing** capacity cover at least 40% of the EU's SRM consumption
- EU's **recycling** capacity cover at least 15% of the EU's SRM consumption

The Commission will select so-called strategic projects across the SRM value chain that can contribute to the security of supply and that are sustainable, technically feasible, and offer cross-border benefits. Those projects will have priority status in EU and national law.

Furthermore, the Critical Raw Materials Acts set out the monitoring of supply risks of CRM, stress tests by the Commission with Member States, alerts in case of risk, company risk preparedness, strategic stockpiling, and voluntary joint purchasing.

Circularity and sustainable choices are the cornerstones for environmental protection. Actions include national measures on CRMs circularity, maximising potential from (closed) extractive waste facilities, massive recycling of permanent magnets, recognition of certification schemes on the sustainability of



CRMs, and information requirements on the environmental footprint of CRMs placed in the EU market. George Mörsdorf closes with presenting the Critical Raw Materials Boards as the governance model for the actions.

3. Panel debate

The discussion among the panellists focuses on the life cycle of products, product design, recycling, competitiveness of SMEs, and preparedness.

David Fitzsimons says that the **demand for critical raw materials is growing dramatically**, which is why we need to speak about **more mining and refining**. He states that we tend to overlook the life cycle of the products where critical raw materials are being used. We should extend the life of the products before the materials are being returned into recycling. We need **horizontal design improvements**, e.g., through eco-design for sustainable products.

The speakers welcome the target of 15% **recycling**, which is very ambitious. Emmanuel Katrakis describes the Critical Raw Materials Act as a wakeup call to look at our supply chains. While recycling cannot solve all problems, recyclers could extract more critical raw materials from products than is being done today. For that, we need to **prioritise the products** where we find critical raw materials and make sure that we have the right policy instruments, for which the targets set in the CRM Act are welcomed. We need a **life cycle thinking** so that materials can be better recovered. In addition, **collection of waste**, e.g., of e-waste, should be improved through legislation and the economics of the activity. The benefit for the environment is currently not factored into the price. **Incentives or targets** could pull the demand from the value chain. Sari Tasa adds that Finland is studying the recycling possibilities of materials that are not so easy to recover. She emphasises that companies need a predictability of the incoming material and that we need to secure a constant flow of materials in Europe. David Fitzsimons welcomes especially the initiative to increase the recycling rate for **magnets**, which entail many rare earths, as the market will not deliver rate on its own.

Talking about **competitiveness**, Emmanuel Katrakis sees difficulties for recycling critical raw materials to be economically competitive, which is why incentives are helpful. Sari Tasa explains that Finland has a national circular economy strategic programme, which looks at an economic push and pull. The markets in which we need to be competitive are global. Companies that make heavy investments need to be able to rely on a stable operating environment in the long term. Wolfgang Reimer adds that other challenges are the high energy prices in the EU and the volatility of energy. We lack infrastructure and face strong resistance from the public, which needs to be addressed. Emmanuel Katrakis agrees that the global situation, including the war in Ukraine, disruptions in global supply chains, the US Inflation Reduction Act, require an answer from Europe. The CMR Act is an important step forward, but it is not sufficient. We must tackle some structural issues, energy crisis and prices.

Wolfgang Reimer says that **legislation needs to be coherent** and should not put more burden on the SMEs. He receives the feedback that many SMEs are struggling with meeting the different legislations. He shares the opinion that the Critical Raw Materials Act stays on a rather institutional level and expresses his concern about the permitting time frames and how those should be implemented, foreseeing **more bureaucratic burdens for the SMEs**. He stresses that the emphasis should not only be placed on priority projects. We need to keep an entire mining value chain alive and maintain the



mining infrastructure. Furthermore, he emphasises that mining and recycling is a business to generate an **income**. We need a response to **boost the EU re-industrialisation**, otherwise companies will move to places with cheaper energy and better conditions in permitting and legislation.

Emmanuel Katrakis explains that, apart from the CRM Act, there are many **other building blocks** for critical raw materials, e.g., for recycling to recover more materials. We need to ensure consistency between the different legislations for recovery policies, chem-centred legislation, eco-design, and waste shipment, and the **right calibration between the level of requirements and the targets**. Sari Tasa adds that we need to take into account the **time spans** of this industry, as they have very long processes. One of the issues in Finland is the location of the mines in the north and of the industry in the south, which translates into costs. We could look into **funding** that could be provided to mines and landowners to see how to utilize wastes from the mines. Strategic projects could generate competitive advantages for Europe, as the results could also be used in other countries.

David Fitzsimons says that it will take more than 10 years to do an **in-depth analysis** across Europe to understand the risks. We are **missing data**, e.g., 30% of the end-of-life passenger vehicles fall out of the system. Remanufacturing businesses have much **knowledge** about the life cycle of products **which could be fed back into the design process** and to the policymakers. He gives the example that many of their member are remanufacturing products with flat panel displays, as it is economically not viable to recover indium from the flat panel displays.

4. Funding opportunities

Nina Hoppmann, team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Nina Hoppmann shares the following examples of funding opportunities:

1. [Recycling technologies for critical raw materials from EoL products](#); Deadline: 20 April 2023
2. [Technologies for processing and refining of critical raw materials](#); Deadline: 20 April 2023
3. [Innovative technologies for sustainable and decarbonised extraction](#); Deadline: 20 April 2023
4. [New processes for upcoming recycling feeds \(Batt4EU Partnership\)](#); Deadline 18 April 2023
5. Opportunities for SMEs: Calls from Euroclusters; published on [European Cluster Collaboration Platform](#)
6. Different funding mechanisms suited for EU-Ukrainian cooperation, including [Interreg](#), [Business Bridge](#), [Erasmus for Young Entrepreneurs-Ukraine](#), [Funding for Research and Innovation](#), [EU4Business](#), EIT [Manufacturing](#), EIF [Funding for Investments and interregional collaboration](#), and [Financing for the Private Sector](#)