



An initiative of the European Union

# CLUSTERS MEET REGIONS

# KITTIILÄ | 25 · 27

FINLAND | APRIL 2023

A SUSTAINABLE APPROACH  
TO RAW MATERIALS

## EUCLUSTERS MATCHMAKING EVENTS

#SingleMarket30





# WELCOME BACK



# Agenda

<b>Session II:</b>	<b>Responsible Mineral Raw Material Production in Europe - The Importance of the Regional Ecosystems and Clusters</b>	
<b>13:00 – 13:20</b>	<b>Keynote speech</b>	<b>Green Deal Industrial Plan for Net-Zero Age</b>
<b>13:00 – 13:20</b>	<b>Roundtable Dialogue</b>	<b>Putting the Green Deal Industrial Plan into practice in the regional concept</b>
<b>14:30 – 14:40</b>	<b>Concluding remarks</b>	
<b>14:45 – 17:00</b>	<b>Matchmaking</b>	
<b>15:00 – 17:00</b>	<b>Policy Roundtable</b>	
<b>18:00 – 21:00</b>	<b>Taste from East and North Finland</b>	<b>Green Transition Gala 2023</b>

# Session II: Responsible Mineral Raw Production in Europe – The importance of the Regional Ecosystem and Clusters

**Facilitator: Jukka Teräs**, CEO Norrum Oy

**Keynote speech – Green Deal Industrial Plan for the Net-Zero Age: ensuring secure and sustainable supply chains for EU's green and digital future**

- **Jakub Boratynski**, Director Networks & Governance, DG GROW, European Commission

**Roundtable dialogue – putting the Green Deal Industrial Plan into practice in the regional context:**

- **Sari Tasa**, Senior Advisor, Ministry of Economic Affairs and Employment, Finland
- **Luís Martins**, President of the Board, Cluster Portugal Mineral Resources, Portugal
- **Dessislava Chalamova**, Programme Director, Industrial Cluster Srednogorie, Bulgaria
- **Jakub Boratynski**, Director Networks & Governance, DG GROW, European Commission



Keynote speech

# Green Deal Industrial Plan for the Net-Zero Age: ensuring secure and sustainable supply chains for EU's green and digital future

## Jakub BORATYNSKI

Director Networks & Governance  
DG GROW, European Commission



# Critical Raw Materials & EU climate ambitions



Become climate-neutral by 2050



Protect human life, animals and plants, by cutting pollution



Help companies become world leaders in clean products and technologies



Help ensure a just and inclusive transition



# Critical Raw Materials & EU industrial policy



## EUROPEAN INDUSTRIAL STRATEGY (March 2020)

- Raw materials identified as essential for the green transition
- set-up of **European Raw Materials Alliance** announced



## EU INDUSTRIAL STRATEGY UPDATED (May 2021)

- Supporting **Europe's Open Strategic Autonomy** through dealing with dependencies, including raw materials
- Various actions to support raw material projects identified: IPCEI, RRF, Horizon Europe, Strategic Partnerships, etc.



### Task Force 3

**Support the analysis of strategic dependencies**

## INDUSTRIAL FORUM

- Thematic workshops on strategic dependencies, including **raw materials**
- Securing the access to CRM must be a key priority if we wish to achieve green transition
- Security of CRM supply will rely on **diversification of the supply chains** including through **strategic partnerships** with likeminded partner countries



# Why CRITICAL Raw Materials?



- paramount to achieve the green & digital transitions of EU industry

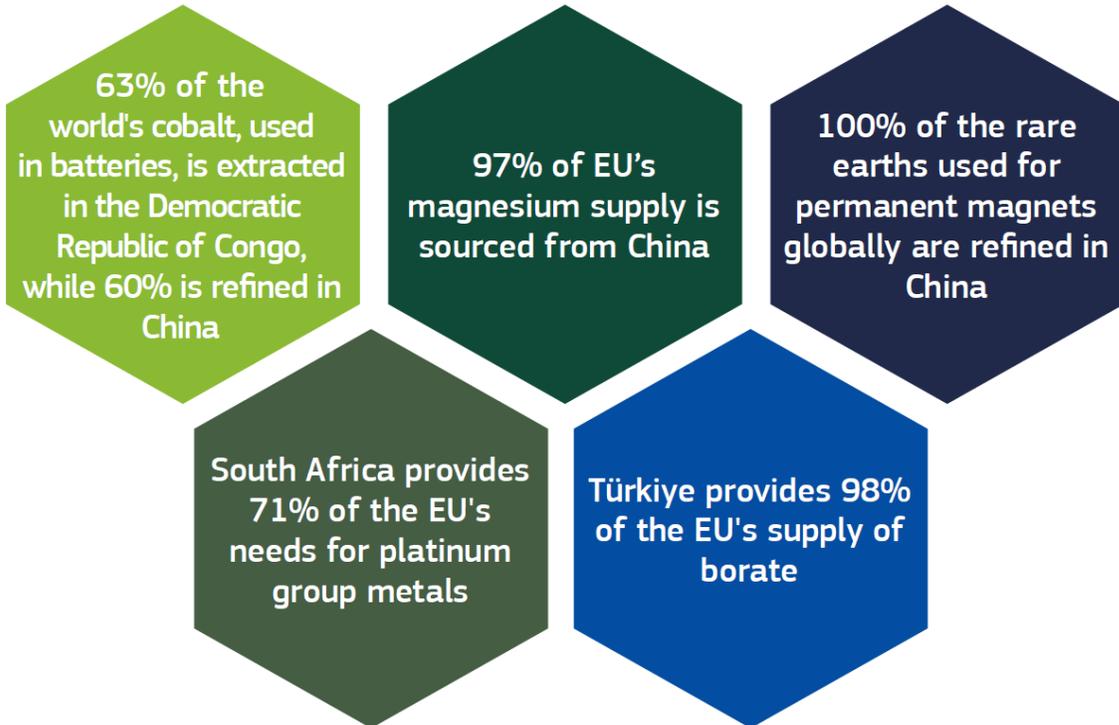


- essential to enhance EU long-term competitiveness



- key to ensure an EU open strategic autonomy

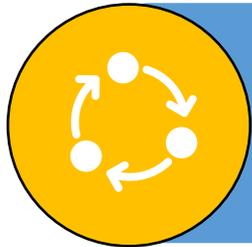
# An inconvenient truth...



		Projected increase in global demand:
<b>Rare Earths</b> (wind turbines)		x5.5 by 2050
<b>Nickel</b> (batteries)		x15 by 2040
<b>Lithium</b> (electrical vehicles)		x57 by 2050
<b>Platinum Group Metals</b> (hydrogen fuel cells)		x970 by 2050

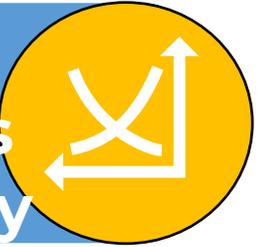
# European Critical Raw Materials Act

*Ensuring a secure and sustainable supply of critical raw materials for the Union*



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

Improve CRM circularity and sustainability



# CRMA: setting 2030 benchmarks for raw materials



## EU EXTRACTION

At least **10%** of the EU's annual consumption for extraction



## EU PROCESSING

At least **40%** of the EU's annual consumption for processing



## EU RECYCLING

At least **15%** of the EU's annual consumption for recycling



## EXTERNAL SOURCES

Not more than **65%** of the EU's annual consumption of **each strategic raw material at any relevant stage of processing** from a single third country

# Critical & Strategic Raw Materials : who are they?

34 raw materials defined as critical by their high

- Economic importance
- Supply risk

... based on a regular assessment of available data in an established [methodology](#)

- Antimony
- Arsenic
- Bauxite
- Baryte
- Beryllium
- **Bismuth**
- **Boron**
- **Cobalt**
- Coking Coal
- **Copper**
- Feldspar
- Fluorspar
- **Gallium**
- **Germanium**
- Hafnium
- Helium
- **Heavy Rare Earth Elements**
- **Light Rare Earth Elements**
- **Lithium**
- **Magnesium**
- **Manganese**
- **Natural Graphite**
- **Nickel – battery grade**
- Niobium
- Phosphate rock
- Phosphorus
- **Platinum Group Metals**
- Scandium
- **Silicon metal**
- Strontium
- Tantalum
- **Titanium metal**
- **Tungsten**
- Vanadium

# CRMA: strengthening the value chain through Strategic Projects



Identifying **Strategic projects** across the whole SRM value chain: extraction - processing - recycling

Selected by the Commission upon advice from the European Critical Raw Materials Board based on:

- Contribution to security of supply
- Sustainability
- Technical feasibility
- Cross-border benefits in EU/ Economic and social benefits in third countries

## Benefits

- **Priority Status** in national + EU law: for administrative & judicial procedures
- **One-stop-shop approach**
- **Permitting - Legal time-frames**
  - Extraction: 24 months
  - Processing & Recycling: 12 months
- Provisions to facilitate and timely deliver **environmental assessments and authorisations without weakening environmental and social protection**
- **Enabling conditions to implement Strategic Projects**
  - The Critical Raw Materials Board provides coordination and advice to secure remaining financing
  - Provisions to facilitate the conclusion of off-take agreements

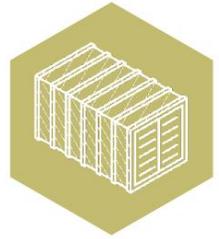


# CRMA: risk monitoring and mitigation

- Monitor **supply risks** of CRM
- **Stress tests** by the Commission with Member States
- Alerts to MS/relevant authorities in case of risk
- **Company risk preparedness**
- **Strategic stockpiling**: information gathering and coordination
- Voluntary joint purchasing



# CRMA: developing win-win partnerships with reliable partners



## Critical Raw Materials Club

Establish a raw materials alliance with partners to strengthen supply chains and diversify sourcing



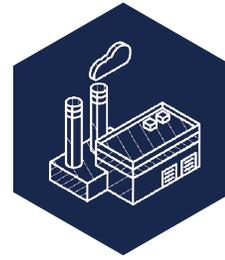
## Strategic Partnerships on Raw Materials

Expand our network of strategic raw materials partnerships



## Trade and Investment Agreements

Leverage and expand our trade agreements as regards raw materials extraction, processing and trade



## Global Gateway

Support critical raw material supply projects, including on infrastructure, connectivity and sustainability



## Enforcing Trade Rules

Continue to combat unfair trade practices, especially when they concern trade investment in or access to critical raw materials



# CRMA: promoting a more sustainable & circular Critical Raw Material economy

Requiring Member States to step up efforts to recover critical raw materials from waste products and mining waste

Increasing the share of recycled critical raw materials in manufacturing

Improving the recyclability of rare earth permanent magnets in specific products and technologies on the EU market

Increasing efforts to mitigate any adverse impacts with respect to labour rights, human rights and environmental protection

Recognising certification schemes to increase the sustainability of the critical raw materials placed on the EU market

# Until the Critical Raw Materials Regulation is adopted...

a lot can be achieved by using the existing tools and instruments



# CRM & skills: existing opportunities to seize

## *EIT Raw Materials training actions*

- ❑ Introduce society as a whole to the importance and relevance of raw materials and incite interest in topics related to raw materials
- ❑ Equip talent with technical knowledge, including ESG (Environmental, Social, Governance) standards, required by the raw materials industry today
- ❑ Foster entrepreneurial and innovation skills, knowledge and attitudes needed for the entre- and intrapreneurs of tomorrow



## *EU Pact for Skills*

- ❑ aims to get public and private organisations together and encourage them to make concrete commitments to upskilling and reskilling adults
- ❑ Public authorities and stakeholders from mining industry are welcome to join the Pact



**CRMA to launch a Raw Materials Academy**



# EIT, ERMA & Raw Materials Summit



- set up in 2015 to advance Europe's transition into a sustainable economy
- overarching mandate is to support securing the supply of critical raw materials to the European industry by driving innovation along the raw materials value chain
- leads and manages the European Raw Materials Alliance (ERMA)



Establish an agile and inclusive stakeholder consultation process



Support EU industrial policy to mitigate regulatory and financing bottlenecks



Set up a Raw Materials Investment Platform (RMIP) to help leverage investment in a pipeline of key projects



Foster a deeper strategic awareness, including public acceptance of and forward-looking perspective on the role of raw and advanced materials in the transition to the Green and Digital Economy

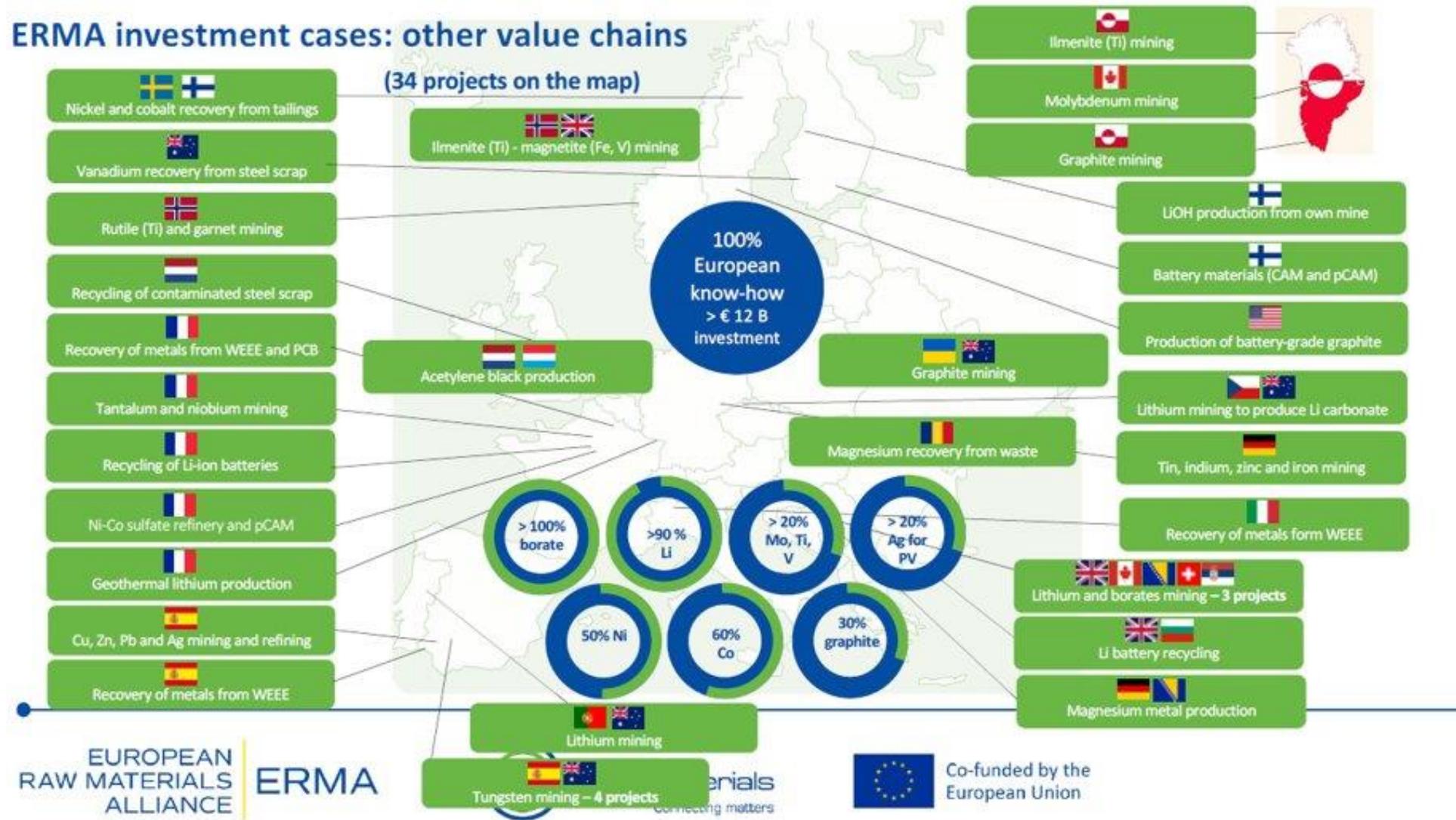
**RAW  
MATERIALS  
SUMMIT**

**SAVE THE DATE**

15 - 17 MAY 2023  
THE EGG, BRUSSELS



# ERMA investment cases: other value chains



 [www.clustercollaboration.eu](http://www.clustercollaboration.eu)

