



Critical Raw Materials in the EU

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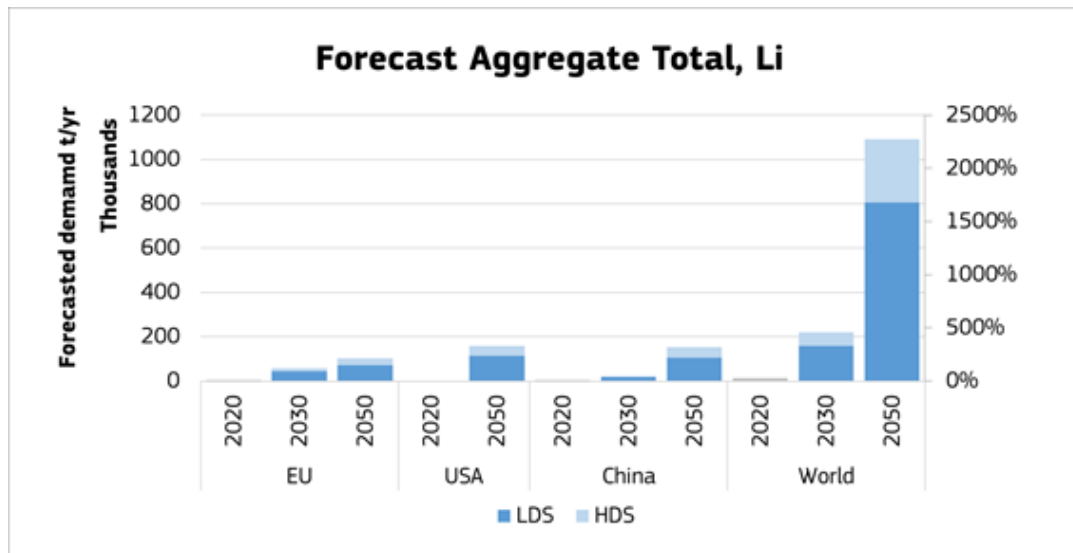
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Entrepreneurship and SME's (DG GROW).*

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Raw materials for the green and digital transition

- Driven by the **twin transition** and defence needs, significant **growth in CRM demand**, with risk of global supply/demand imbalance



Demand forecasts aggregated for lithium (2023 Foresight Report)

Lithium demand for batteries in the EU is expected to **grow by 12 times by 2030** and **by 21 times by 2050**.

- EU is heavily dependent on third country supply for CRMs that are key for strategic technologies
- Strategic dependencies and risk of supply chain disruption

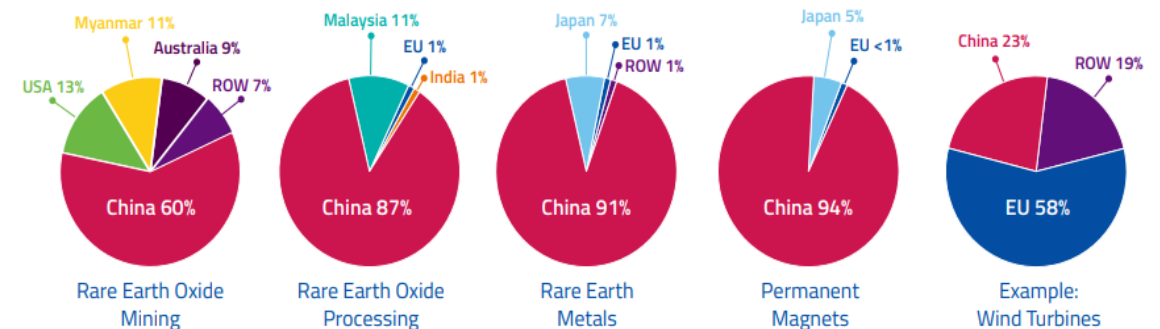
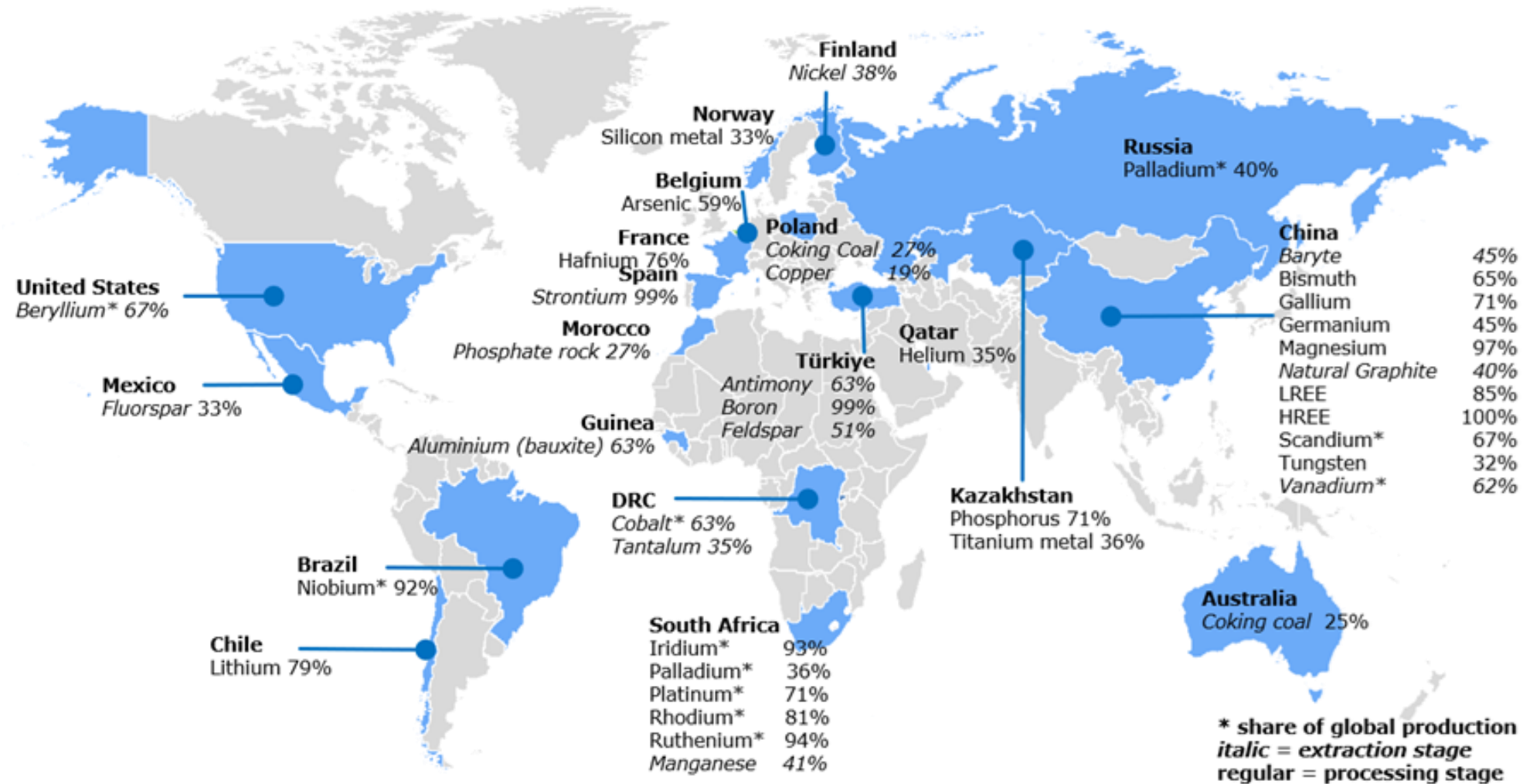


Fig. 3: From rare earths mining to wind turbine manufacturing: estimated market shares in 2019. Sources: Team analysis and Roskill 2018; Adamas Intelligence 2019; Peteves 2017; Carrara et al. 2020; IEA 2021; USGS 2021.

Source: European Raw Materials Alliance (ERMA)

Dependencies in the EU supply of Critical raw materials



3 Source: "European Commission, Study on the Critical Raw Materials for the EU 2023– Final Report"

EUROPEAN CRITICAL RAW MATERIALS ACT

March 2023



The EU is aiming to ensure a secure and sustainable supply of critical raw materials for Europe's industry.

WHY?



Critical raw materials are needed for the **green and digital transitions** as well as for defence and space



To enhance our **long-term competitiveness**



To maintain our **open strategic autonomy** in a fast-changing and increasingly challenging geopolitical environment

Setting Priorities

Defining critical and strategic raw materials

CRM

Whole EU economy, based on :

- supply risk
- economic importance

SRM

SRM are a subset of CRM:

- Key for strategic technologies (green, digital, defence and space)
- Forecast demand risks outstripping supply
- Difficulty to scale up production

2023 Critical Raw Materials (*Strategic Raw Materials in italics*)

aluminium/bauxite	coking coal	<i>lithium</i>	phosphorus
antimony	feldspar	<i>LREE</i>	scandium
arsenic	fluorspar	<i>magnesium</i>	<i>silicon metal</i>
baryte	<i>gallium</i>	<i>manganese</i>	strontium
beryllium	<i>germanium</i>	<i>natural graphite</i>	tantalum
<i>bismuth</i>	hafnium	niobium	<i>titanium metal</i>
<i>boron/borate</i>	helium	<i>PGM</i>	<i>tungsten</i>
<i>cobalt</i>	<i>HREE</i>	phosphate rock	vanadium
		<i>copper</i>	<i>nickel</i>

SETTING 2030 BENCHMARKS FOR STRATEGIC 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

BUILDING EUROPEAN CAPACITIES

✓ UNFC



Identifying **Strategic Projects** in the Union and third countries that intend to become active in the extraction, processing or recycling of strategic raw materials. They would benefit from streamlined and predictable permitting procedures in the Union and coordination of support to improve access to finance



Speeding up permitting for all critical raw material projects with a one-stop-shop contact



Developing national exploration programmes to **boost knowledge on European critical raw materials resources**

✓ UNFC

IMPROVING RESILIENCE

✓ UNFC



Monitoring critical raw materials and stress testing strategic raw materials supply chains by pooling EU and Member State expertise



Mitigating the risk of strategic raw materials supply disruptions by coordinating the development of national **strategic stocks**, requiring audits of large companies' supply chains and facilitating the joint purchasing



Expanding the **network** of strategic raw materials partnerships **with third countries**



Creating a **Critical Raw Materials Club** with interested countries globally to strengthen supply chains and foster sustainable investment and trade



Strengthening the WTO and enhancing the network of Free Trade Agreements and Sustainable Investment Facilitation Agreements



Using the Global Gateway for soft and hard infrastructure for projects along the raw materials value chain, support connectivity to lower the risk of investment abroad and combatting unfair trade practices related to raw materials

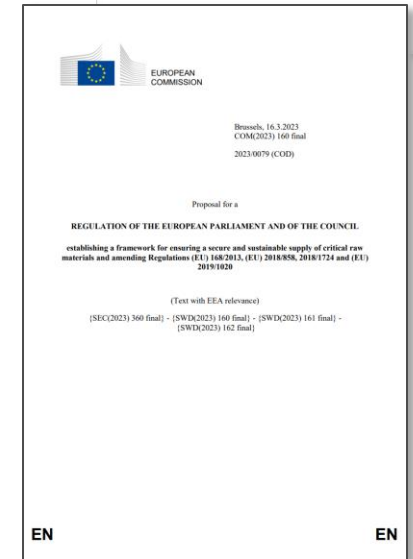
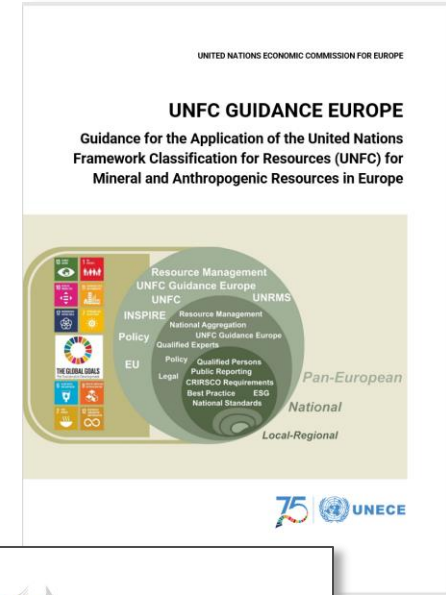
PROMOTING A MORE SUSTAINABLE AND CIRCULAR CRITICAL RAW MATERIALS ECONOMY

✓ UNFC



Deploying UNFC in the EU

- Work with EGRM
- UNECE project to support development and implementation of UNFC and UNRMS in the EU and beyond 2020-2024
 - Network of practitioners - trainings
 - UNFC Guidance Europe 2022
- EU database of CRM projects (CRM Action Plan 2020)
- Geological Service for EU (GSEU) 2022-2027
- Future Availability of Secondary Raw Materials (Futuram) 2022-2026





Raw Materials Week
13-17 November 2023

Save the date!

<https://www.eurawmaterialsweek.eu>