

## Towards an EU Critical Raw Materials Act

### Concept note to the European Commission

#### I/ Vision

Tomorrow will be «low carbon and digital ». But it will also be **highly intensive in the demand on critical raw materials**. A **new geopolitical landscape** will progressively replace the «oil and gas triangle» paradigm of Saudi Arabia, US and Russia. In parallel, the EU intends to **reinforce its autonomy and is committed to become carbon neutral by 2050**. In order to achieve these challenges and to avoid new dependencies, and given the tensed geopolitical situation, **the EU should get prepared right now for this historical transition**.

**The EU Critical Raw Materials (CRM) Act** would make it possible to effectively mobilize the means to succeed, and should be based on **three pillars: building, incentivizing and consolidating**. Other materials deemed as strategic could be considered in that mechanism, at a later stage.

#### II/ Explanatory Memorandum

**Several actions have already been launched at EU level**. The European Commission has launched the raw materials action plan in September 2020, updated the list of 30 critical raw materials, received action plans from the European Raw Materials Alliance (in particular, one action plan already published for rare earths and another one on the way for energy storage and conversion), presented its proposal for a regulation and launched IPCEIs on batteries, launched a HL WG on magnesium with Member States following supply crisis to redevelop EU production (objective: 15% of world production by 2030) and communication on EU principles for sustainable raw materials in September 2021. These initiatives come in addition to the ones taken in each member State.

**Nevertheless, this is not enough. Since then, the world situation has drastically changed. Challenges ahead are huge and must be tackled now** as the EU is lagging behind China that controls 50% of the **battery** materials supply chains and produces 90% of the **permanent magnets**, and the USA. By 2030, Europe must build a capacity of 600 to 800 GWh for **electric vehicles**. But it will source 70% to 80% of its needs from outside its territory and in fast growing markets: 2030 demand will be \*2 (Cu), \*3(Ni, RE), \*4(Li), with high risks of supply disruptions. This will have a huge impact on the overall market dynamics and on supply chains. On some important raw materials, the EU source is only emerging and is not self-sufficient by far<sup>1</sup>.

In addition, according to a recent study from KU Leuven on clean-energy metals needed to reach EU's 2050 climate neutral target, Europe faces a critical shortage of these metals and needs to decide urgently how it will bridge the supply gap or risk new dependencies on unsustainable or illiberal producers. By 2050, the study highlights that 40 to 75% of these needs could be covered thanks to recycling but this requires clear policy decisions from the EU, rapid investments in infrastructures as well as more and more mandatory recycled content.

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<sup>1</sup> Like in the Aerospace and Defence industry, Russia and former satellites represent 40% of the world's Aerospace titanium supply which is a key material for new generation aircrafts (aerostructure and engine). While US have similar capacities and China is investing.

**Industry is the cornerstone of the transition.** Just for the automotive industry, **the industry needs therefore to invest 150 B€, 50% in Gigafactories, 50% in refining, pre-CAM and CAM.** It also needs to **count on resilient business models and reliable sourcing**, recycling having a significant impact only from 2030 onwards. And this is true for a large number of industrial sectors, from aerospace defence to electronics, from health to energy, all of which will need high-performance raw materials in the future.

Last but not least, the tense geopolitical period (covid and Ukraine crisis) we are living in encourages the EU to **redefine its partnerships and supply strategies, so that European manufacturers in the raw materials sector develop differentiating technological innovations including recycling, meeting the highest ESG standards, that will ensure Europe's international competitiveness.** The triptych **“Mining/Refining/Recycling”** should also be guiding the EU action on critical raw materials which are fundamental to reach its strategic autonomy and climate and energy ambitions.

In order to achieve decarbonization and autonomy goals (semi-conductors shortage could also be partially answered by an EU Critical Raw Materials Act), a new political commitment is needed. An **EU Critical Raw Materials Act** should consist of a mix of **political regulatory and funding levers with the EU industrial base as the cornerstone**, that are necessary to create a level playing field, maintain competitiveness of the EU industry and protect the European industry and European consumers.

The EU Critical Raw Materials Act should follow the path and get inspiration from the already launched and proposed Acts as the Data Act or the EU Chips Act, together with the strategies as the EU strategy for COVID-19 vaccines. It will thus propose a **proven methodology, offering flexible and incentive-based instrument** that creates a **de facto EU solidarity** in the defence of strategic economic and industrial interests.

This way, the proposed EU Critical Raw Materials Act should be based on **three pillars: building, incentivizing and consolidating:**

1. It should first **build thanks to the development of a long term adequate legal and political framework** to set up a real Critical Material policy.
2. In parallel, the EU and Member States should **incentivize the transition thanks to financial and funding reforms and actions as well as Innovation.**
3. Last but not least, the EU should **consolidate its trade policy to improve or develop international raw material alliances.**

### III/ Exploring areas of work

#### 1. **“Building”: development of an adequate political commitment and legal framework**

##### *Political commitment*

- As stated in the **Versailles Summit Declaration and the Strategic Compass, Council conclusions should draft a clear reference to the EU Critical Raw Materials Act. The impact of EU legislative proposals on critical raw materials should in particular be assessed.**
  - ✓ **Environmental risks** are very high in particular in the supply chain of nickel, cobalt and lithium. Addressing those risks properly **requires significant investments** in environment pollution prevention and in the implementation of responsible extraction techniques.
  - ✓ **The EU future legislation** must then guarantee that operators using poor environmental standards will **not undermine the competitiveness of responsible mining operators.**

- ✓ The work of the Council, the Commission and the Industrial Forum **on tools to address strategic industrial dependencies** should also be brought to a successful conclusion. A specific tool to address them should be proposed, in particular for **critical raw materials**.
- ✓ **Energy transition and identified weaknesses in international industrial flows** could lead EU to :
  - Analyse in-depth value chains and identify relevant alternatives or backup solutions wherever necessary
  - Identify and progressively roll out securing stocks at the proper levels of the value chain – incentivized by adequate EU funding
  - Consider the opportunity of an improved strategic industries set-up across EU : a way to progressively re-industrialize wherever needed and secure EU independence and safety net options.

### *Legal and regulatory levers*

- **Battery Regulation proposal:** the European Commission could encourage the co-legislators to complete the discussion with a clear focus on strengthening Europe as an industrial location, with
  - ✓ a **clear labelling for « green/responsible mining »** (Necessary convergence process with industry on the proper standards based possibly on IRMA/ICMM)
  - ✓ a clear measurement of the CO2 content and an incentive to avoid export of strategic materials outside the EU thanks to recycling in Europe.
- **Permanent Magnets:** similarly to batteries, permanent magnets and related rare earth elements, are the next frontier to address. The EU needs to scale-up its recovery and recycling capacities and infrastructures. Further to the ERMA initiative, a **regulatory framework based on the principle developed for the battery regulation** (meaning covering the whole value chain) is needed, including obligations on recycling and exploitation of the concept of urban mining.
- **Raw material shortage :** in order to address this risk, Member states should be encouraged to **support European offers from outside the EU ready to supply the European market and to (re)allow and facilitate mining permits on EU soil.**
- **Circular economy :** the Commission should encourage, through adequate legislative instruments, the emergence of new business models related to circular economy and promote the prolongation of the lifetime of products through remanufacturing or other techniques. Other EU policies (substances, safety of products...) shall not impede the uptake of these new business models.

## **2. “Incentivizing”: financial investments and funding opportunities**

- Have a strong political incentive to route private financial liquidity to upstream projects, **including outside of Europe** and in a timely manner, to be part of the ongoing race between countries for access to raw materials.
- **Taxonomy (2<sup>nd</sup> delegated act):** commit as soon as possible to **incentivize investments** through criteria recognising the substantial contribution of environmentally **responsible mining, processing, and recycling activities** to EU Green Deal objectives and support to include industrial activities in relation to circular economy (Product-as-a-service and other circular use- and result-oriented service models, remanufacturing...).
- **Market-based funding mechanisms should be designed**, among which :
  - ✓ **A private/public Fund** like the French initiative under exploration for a « critical metal fund ». Such a tool can combine a mix of equity, quasi-equity, loans and guarantees to support all project stages
 consistently with other existing tools, such as
  - ✓ The Venture fund « InnoEnergy »
  - ✓ The ERMA and its investment channel
  - ✓ The EIB and EBRD.

- **IPCEI**: various IPCEI -eg like in the Batteries IPCEI- should **include responsible investments in key raw materials mining value chain**, where market failures need to be addressed.
- **Innovation**: Critical (Raw) Materials can find, beyond existing tools, new ways for discovery, extraction, processing, alloying, that can lead to positive breakthrough in the downstream industries and industrial/market advantages, possibly including environmentally friendly techniques, both positive for EU growth and strategic independence. Adequate financing would help triggering, reinforcing and leading in these new pathways.

### 3. “Consolidating”: trade & international raw material alliances

- **Launch** within the legislators and the Commission, in close link with industrial sector, **a reflection on supplies and the resilience of global value chains** (choice of partners), in particular by re-evaluating our trade preferences and free trade agreements with our closest partners in the light of sanctions against Russia and Belarus and with a purpose to replace a dependency by another.
- **Develop** as soon as possible **international sustainable raw material alliances** with relevant partner countries by providing (legislative proposal possible):
  - ✓ political support for private-sector engagement (i.e. Commissioners’ visits with business delegations),
  - ✓ support through development cooperation instruments for government authorities and local companies on the ground,
  - ✓ financing instruments such as guarantees for European companies.
- **Promote diversification with relevant third markets** :
  - ✓ by reducing trade policy barriers,
  - ✓ European raw material interests must therefore be reflected in EU trade policy and (energy/industry) foreign policy, especially with like-minded partners.
- **Prevent “sustainability leakage”** : guaranteeing high level of social and environmental performance for the EU industrial base by ensuring that least performant operators in terms of sustainability criteria from third countries **do not undermine the competitiveness of responsible European operators**.

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