

Securing sustainable raw materials supply in Europe.

IndustriAll Europe's recommendations for 'Critical Raw Materials Resilience'

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Introduction

Mineral raw materials¹ are today more crucial than ever in Europe to face the ecological and digital transition. They are vital for key industrial and strategic value chains in Europe as they are essential for the manufacture of the green technologies that will enable Europe to meet its climate objectives. The raw materials sector provides about 350 000 jobs within the EU, and there are more than 30 million jobs in downstream manufacturing industries that depend on reliable and unhindered access to mineral raw materials².

But Europe is currently highly dependent on other countries for some key mineral raw materials. This dependency, a source of supply insecurity, weakens industries. As mentioned in the European Commission's foresight study³ and also reported in the EESC opinion on 'Critical Raw Materials Resilience'⁴, "the EU represents less than 5% of world production of mineral raw materials. For example, China alone provides 66% of the finished Li-batteries. The EU provides less than 1%. The EU produces less than 1% of the world's fuel cells and 1% of the raw materials for wind energy. China has a quasi-monopolistic position in terms of components for photovoltaic (PV) devices. The EU provides 1% of silicon-based PV assemblies. 44 materials are relevant for the robotics industry, with the EU producing only 2% of them and China supplying 52%". Therefore, a coordinated approach on a European level is needed, to plan strong policies which anticipate the future changes which will occur for the European industries and sectors engaged in the ecological and digital transitions, while securing the social and environmental conditions of supply.

Trade unions have long been calling for a stronger EU strategy on raw materials to move towards greater independence through the sustainable exploitation of their own resources, as well as security of supply through a joint and fair external agenda⁵. The EU raw materials strategy must be in line with the UN SDGs and the 2030 Agenda, domestically as well as internationally. Increasing sustainable activities in the domestic extractive industries and optimising secondary raw materials via the completion of a circular economy will create industrial growth, jobs, tax revenue and export income. Furthermore, delivering on environmental, labour and human rights, as well as a gender-sensitive approach for production and recycling, import and export, should lead to a more socially responsible supply than in other parts of the world. For that to be done, all actors have a role to play.

¹ Raw materials cover a large range of materials with specific and different problems to address. This paper will mainly focus on mineral resource, based on the definition described in the Extractive Waste Directive (2006/21/EC) : " 'mineral resource' or 'mineral' means a naturally occurring deposit in the earth's crust of an organic or inorganic substance, such as metal ores, industrial minerals and construction minerals, excluding energy raw materials and water".

² Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability [COM(2020) 474 final], EESC Opinion, March 2021.

³ "European Commission, Critical materials for strategic technologies and sectors in the EU - a foresight study, 2020"

⁴ Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability [COM(2020) 474 final], EESC Opinion, March 2021.

⁵ Over the past years, industriAll Europe has actively participated in different initiatives in order to raise this message: the Raw Materials Supply Group, EIP Raw Materials and in 2020, industriAll Europe was selected as a member of the European Raw Material Alliance.

In order to strengthen its strategic autonomy, while ensuring the sustainability of raw materials, Europe will need to have a strong and global strategy resting on four pillars: domestic extraction, circular economy, improving research and innovation to reduce dependency, and ensuring international standards and binding human rights worldwide. This document sets out industriAll Europe’s recommendations for these different pillars.

Background

The interest from the European institutions in raw materials is not new. A first expert group was created in the 1970s to address the supply of raw materials in Europe. However, the first concrete EU raw materials initiative was only launched in 2008, with the objective of reducing EU dependencies on non-energy raw materials for industrial value chains. More recently, there has been renewed political interest in this issue, mainly due to the objectives of the green and digital transitions. Indeed, access to resources is an important strategic element to make this twin transition a reality. The European Green Deal itself is also focused on the sustainable supply of all raw materials for clean and digital technologies.

In 2020, the European Commission adopted different specific initiatives linked to the European Green Deal and relevant to raw materials:

- The ‘New industrial strategy for Europe’ published in March 2020, highlighting that a secure and sustainable supply of energy and raw materials will be key to climate neutrality and digital leadership of Europe. The strategy also addresses the need to increase industry’s competitiveness and strategic autonomy regarding global competition.
- ‘The Circular Economy Action Plan’ also published in March 2020, presents different proposals for more circularity and recovery of raw materials in EU, thus creating a market for secondary raw materials, considering ethical sourcing of raw materials and the security of supply.
- A proposal for a ‘Regulation on batteries and waste batteries’ released in December 2020, setting sustainability requirements via a sustainable and circular battery value chain in Europe. The EU Battery Alliance is also very active with respect to raw materials and some announcements regarding raw materials were made in 2021, including the 15 billion Euros to secure raw material supply (mainly lithium, graphite and nickel).

In September 2020, the European Commission published a specific communication⁶ on ‘Critical Raw Material Resilience: charting a Path towards greater Security and Sustainability’, proposing a Critical Raw Materials Action Plan to increase resilience in the EU’s supply chain. This Action Plan provides ten action points “to foster transition towards a green and digital economy and, at the same time, bolster Europe’s resilience and open strategic autonomy”. The Action Plan proposes to develop financing criteria; launch research and innovation on waste processing, advanced materials⁷ and substitution of critical raw materials; to better map the potential of secondary raw materials, but also increase earth observation; to develop expertise and skills; to develop international partnership; and to promote responsible mining. The European Alliance on Raw Materials⁸ (of which industriAll Europe has become a member) was launched as a part of this Action Plan. The Commission also proposes an update of the list of raw materials which are considered as critical for the EU⁹ in terms of economic importance and risk of supply disruption.

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0474>

⁷ Advanced materials generally mean materials that have novel or enhanced properties created through the development of specific process and technology and that improve performance over conventional products and processes. For example, carbon fibre, which is lighter and stronger than other materials.

⁸ The European Alliance on Raw Materials involves different stakeholders, including industrial actors covering the entire value chain, Member States and regions, trade unions, civil society, research and technology organisations, investors and NGOs. IndustriAll Europe is also a member of “The European Innovation Partnership (EIP) on raw materials”.

⁹ This list is composed of Antimony, Fluorspar, Magnesium, Silicon Metal, Baryte, Gallium, Natural Graphite, Tantalum,

Social partners of the extractive industries¹⁰ are also very active regarding the EU initiatives on raw materials and reacted in December 2020 via a joint statement calling for “A long-term and ambitious EU raw Materials Strategy”¹¹. This statement highlights the current challenges regarding extraction of raw materials in the EU and sets out very concrete actions about maintaining and reinforcing mining activities and employment in Europe where social and environmental standards are higher than in the rest of the world.

Following these initiatives, the European Commission and the Raw Materials Supply Group endorsed, in May 2021, the “EU principles for sustainable raw materials”, applicable to the extraction and processing stages of non-energy raw materials and to the entire minerals value chains’ lifecycle, from exploration to post-closure. These cover social, economic, governance and environment principles and refer to EU legislation concerning sustainability, but also internationally agreed sustainable raw materials extraction and processing initiatives. As they are not mandatory, industriAll Europe has called to complete this initiative with a legally binding EU instrument in the form of a European Directive on Mandatory Human Rights (including workers’ and trade union rights) and environmental obligations due diligence to ensure their strong enforcement.

IndustriAll Europe has a role to play and must be at the forefront to represent industrial workers. We need an active involvement of trade unions in the elaboration and deployment of different industrial policies in order to make Europe a leading player in just and fair transitions which leave no one and no region behind. Our objective is to strengthen the social dimension and the protection of workers by our initiatives, to coordinate and support our national trade unions involved in developing regional and national strategies around sustainable supply of raw materials.

Domestic extraction: ensuring the sustainability of critical raw materials in Europe

Domestic raw materials mining and processing activities are essential in terms of controlling supply risks. There is also a potential for maintaining and creating new jobs and skills in these sectors. Mining and refining in the EU already employ 3.4 million workers, while related manufacturing accounts for 25 million jobs¹². Europe has a long tradition and strong expertise in mining, but is not at the forefront regarding critical raw materials even if the potential of local mining resources is important¹³. The European Commission identifies the reasons for this delay as a lack of investment in exploration, the diversity and burden of national procedures, and a low level of public acceptance. It is thus a matter of importance to have a strong agenda and framework outlining domestic extraction and accompanying the transitions which will occur in these sectors (decarbonisation, operations in new sites, exploitation of new raw materials...). The involvement of trade unions and workers is key.

For domestic extraction, which will help secure the supply in Europe, raw materials must be sourced in a sustainable and responsible way, respecting the environment and human rights. This means:

- **Strong social dimension: securing decent work and good working conditions, protecting workers’ rights, effective social** dialogue on the sector and company level, and involvement of trade unions in the planification of the development of the sector. Social dimension must also cover the needs for improving skills, education and training, including the support or creation of appropriate training courses and making these professions more attractive. Protecting workers in the extractive industries will require solid commitment to occupational health and safety. A strong gender equality perspective will have to drive these issues.

Bauxite, Germanium, Natural Rubber, Titanium, Beryllium, Hafnium, Niobium, Vanadium, Bismuth, HREEs, PGMs, Tungsten, Borates, Indium, Phosphate rock, Strontium, Cobalt, Lithium, Phosphorus, Coking Coal, LREEs, Scandium.

¹⁰ IndustriAll Europe, Apep, Eurocoal, Euromines, IMA-Europe, UEPG.

¹¹ <https://ec.europa.eu/social/main.jsp?catId=521&langId=en&agreementId=5698>

¹² Commission 2020 Strategic Foresight Report ([STRATEGIC FORESIGHT – CHARTING THE COURSE TOWARDS A MORE RESILIENT EUROPE](#))

¹³ For a map of Critical Raw Materials deposits in EU, see <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0474>, p.12

- **High-level environmental standards for domestic extraction harmonised on the European level via a common regulatory base**, preserving the environment, preventing pollution, preserving biodiversity and water resources, as much as possible, and in complete coherence with the reduction of CO2 emissions agreed on the European level. This also means accompanying the decarbonisation of the extractives industries.
- A dialogue with **local communities** ensuring that local communities are involved in new projects. Current EU legislation creates a series of obligations in terms of access to information and consultation of local communities. This must be promoted and better enforced.

Social acceptance around new operating sites must also be addressed with an EU-coordinated approach. IndustriAll Europe insists that the only way to achieve social acceptance is to have high European and coordinated environmental and social standards which are really enforced and sanctioned if not respected. Mineral extraction in Europe is operating at the highest environmental and social standards in the World, and re-locating some extraction sites for critical raw materials to Europe could help to avoid pollution and non-compliance with human rights in third countries.

IndustriAll Europe also wants to address raw material extraction which, if well planned and respectful of a strong social and sustainable framework, could be an **opportunity for coal and carbon intensive regions in transition**. They offer a potential for diversification and opportunities for today's and future skilled miners in these regions. It could be a good alternative to deindustrialisation, and this must be promoted in a coherent way at European level.

Mapping the mineral resources in the EU and EEA countries for raw materials must be addressed with a coordinated EU effort to ensure a better understanding, that is regularly updated. This is why industriAll Europe supports the creation of an (EU) European Agency for Geological Survey, as there is a need to collect data in a uniform way, and having an institution dealing with resources in the ground and in our economy. As access to minerals is also a strategic security issue, the agency should also assess imports and exports, as well as global supply and demand.

IndustriAll Europe demands:

- Raw materials to be sourced in a sustainable and responsible way, with a strong social dimension including workers' rights, health and safety measures, effective social dialogue and attention to skills, high-level environmental standards and dialogue with local communities.
- Support for high-level coordinated European environmental and social standards which are really enforced and sanctioned if not respected, that will increase social acceptance and the re-localisation of extractives activities, with better standards than elsewhere in the world.
- Support for and maintaining extractive and processing capacities in the EU by upholding workers and regions. EU economic support or advantages for critical raw materials domestic extraction projects exposed to unfair competition regarding social and environmental standards should be considered.
- A link between European policies around raw materials with strategies developed in the coal and carbon-intensive regions in transition.
- The creation of a European Agency for Geological Survey based on a coordinated approach on the European level regarding raw materials and the impact on the economy.

Limiting the use of primary raw materials through circular economy and recycling

IndustriAll Europe has a strong position to promote and engage Europe in a more circular economy¹⁴. A circular economy has a very positive impact on European industry by feeding the industrial production system with part of existing materials and products, keeping the value, materials and energy embedded in industrial products in use far longer. This is absolutely necessary on a planet with finite mineral resources, helps to protect nature from unnecessary interference and helps to mitigate climate change. It also increases security of supply and reduces supply dependency from third countries.

Regarding mineral raw materials, a circular economy could close the loop and create new markets for recycled raw materials. This will also lead to the possibility of huge job creation potential in the completion of a circular economy for secondary raw materials and recycling. Some studies show a potential 700 000 new jobs in 2030¹⁵. But for that to happen, there is a need for more incentive and mobilisation on European and national levels.

Recycling is one of the most promising ways of dealing with dependency on raw materials, but a lot is needed to be done to create new economic and business models to support the growth of recycling activities. The sector must integrate the entire process from collection, passing through sorting, intermediate processing, and up to its use in metal or other plants. This must be accompanied by the identification of an economically viable outlet for the recycled product. At present, the main challenge is to be able to distribute the added value so that each player in the sector can make a living from it.

The recyclability of a product, in order to re-use some of its components, must be considered at the design phase. This is why industriAll Europe calls for EU regulation to define and mandate Eco-design standards to ensure that products are also fit for the industrialised circular economy and the re-use of materials, but also designed for longevity and repairability. There is a need for strong EU commitments regarding the revision of the Eco-design Directive, through the future Sustainable Products Initiative, which will have to take this into consideration, but also include social aspects in the definition of sustainability.

Circular and recycling projects have to be considered as Important Projects of Common European Interest (IPCEIs) and Projects of Common Interest (PCI), as this sector is as critical as the energy infrastructure. Recycling also needs an affordable and sustainable supply of energy.

Recycling or re-using mineral raw materials through a circular economy requires an important focus on the health and safety of workers, including the protection of workers against the existence of dangerous chemicals.

Regarding waste, there is a clear need to review the current practices of exportation of waste outside Europe, to ensure the full implementation of the circular economy and secondary production of raw materials, while also reducing the EU's waste pollution to third countries. And furthermore, Europe will have to facilitate circularity of waste in order to create a real eco-system with a strategic autonomy. A quality recycling of end-of-life materials is preferable to exporting these same products to countries where European social and environmental standards are not respected.

Finally, industriAll Europe also underlines that workers must be involved in the design and implementation of a circular economy, in a process of anticipation of change, to contribute to a Just Transition for all workers involved in this deep transformation of industry.

¹⁴ See https://news.industriall-europe.eu/content/documents/upload/2018/9/636718239534547822_Circular%20Economy%20Policy%202016-03_EN_v3%20checked_CLEAN.pdf

¹⁵ https://circulareconomy.europa.eu/platform/sites/default/files/ec_2018_-_impacts_of_circular_economy_policies_on_the_labour_market.pdf

IndustriAll Europe demands:

- A fair and industrialised circular economy on the European level which can promote and better allow the use and re-use of mineral raw materials.
- Promotion of the triptych "Eco-design - Circular economy - Reuse-repair" as a real lever for a "new generation" industry which will create new jobs.
- Circular and recycling projects to be considered as important Projects of Common European interests (IPCEIs) and Projects of Common Interest (PCI).
- An affordable and sustainable supply of energy, coherent with the development of a circular industry.
- Eco-design standards that ensure the re-use of materials and strong commitment to social aspects in the future Sustainable Products Initiative.
- A strong attention to the health and safety of workers as well as to public health.
- A review of the current exportation of waste, support for an intra-European circularity and an improvement in the working conditions of those working in waste industries.
- Full involvement of workers and trade unions in the design and implementation of the development of industrial policies for secondary raw materials.

Research, development and innovations to reduce dependency

Secure supply of raw materials must also be supported by research into new materials and innovative technologies that can diminish, substitute, or diversify the need for raw materials. This kind of research is based on a coherent and multidisciplinary approach.

Innovation, research and development must be a key point in the EU strategy on critical raw materials. This is linked to the substitution (replacing a critical raw material with a non-critical raw material that offers similar performance), recycling or re-use of products and to waste reprocessing in order to avoid that critical raw materials end in landfills.

Regarding the circular economy, there will need to be public support and investment (from local to European level) in order to find solutions to improve the possibility of recycling and re-use of mineral raw materials, as some of them are currently very difficult to recycle or re-use.

IndustriAll Europe demands:

- A strong support of research into new materials and innovative technologies to diminish, substitute, or diversify the need for raw materials.
- Investment in activities that can foster substitution.
- More research, development and innovation supported by Europe in order to develop technologies that will better enable the re-use of mineral raw materials.

Ensuring international standards and making human rights binding worldwide

Europe has available on its soil mineral raw materials, but some of the most critical raw materials are only located in a few countries outside Europe. IndustriAll Europe is working closely with IndustriALL Global Union in this matter, to obtain decent work across the supply chain all around the world regarding the supply of mineral raw materials. In addition, industriAll Europe asks the European Commission to ensure that any raw materials strategies should also take into consideration the needs and interests of workers and people in the countries from which raw materials are to be exported to Europe. This has to be done in total commitment to the Universal Declaration of Human Rights, ILO labour standards, UN Guiding Principles for Business and Human Rights, as well as the UN Sustainable Development Goals.

Trade agreements and policy have a role to play in moving raw material extraction towards a more social and sustainable path globally. Trade agreements must integrate a strong, binding and enforceable commitment to the protection of the environment and fundamental labour standards and human rights. A more inclusive approach to trade and the sustainable development chapter should address these concerns.

On the international level, there are multiple voluntary initiatives defining principles for sustainable raw materials. This is why IndustriAll Europe demands the adherence to due diligence throughout the global supply chain, notably regarding the sourcing of critical raw materials. We demand a legally binding EU instrument in the form of a European Directive on mandatory human rights (including workers' and trade union rights) and environmental obligations due diligence as close as possible to the requirements for European domestic extraction.

IndustriAll Europe demands:

- That the European Commission takes into consideration the needs and interests of workers and people in the countries from which raw materials are to be exported to Europe, in its policy regarding raw materials, in total commitment to the Universal Declaration of Human Rights, ILO labour standards, UN Guiding Principles for Business and Human Rights, as well as the UN Sustainable Development Goals.
- An EU strategy regarding access to critical raw materials through socially responsible investments, partnership and alliances with countries outside the EU.
- The use of trade agreements as a key element in moving the extraction of raw materials towards a more social and sustainable path globally.
- A legally binding EU instrument in the form of a European Directive on mandatory human rights (including workers' and trade union rights) and environmental obligations due diligence.