# **EU** Strategic Partnerships

How to shape secure, diverse and sustainable trade in critical minerals

## October 2023

## Summary

When it comes to critical minerals, Europe faces a triple challenge of onshoring supply, securing diverse global markets and doing all this sustainably. As the demand for minerals such as copper and lithium used in green technologies is expected to quadruple by 2040, the EU will remain dependent on the import of raw materials from third countries for a long time. Research shows that even if Europe fully maximises its mineral extraction, refining and recycling capabilities by 2030<sup>1</sup>, more than half of critical minerals still need to come from abroad. So the challenge is to source these metals resiliently - i.e. from diverse markets - and responsible, i.e. with high social and environmental standards at the core. That's where Europe's new framework of "strategic partnerships" comes in. In this paper T&E analyses the progress to date and looks at what Europe needs to do to succeed.

The key challenge today is the supply of critical raw materials (CRM) from third countries is strikingly concentrated. For instance, China remains the sole supplier of processed rare earth elements to the EU, accounting for 85%-100% as of 2023. Chile is responsible for 79% of Europe's lithium supply, while the Democratic Republic of Congo provides 63% of cobalt globally. Crucially, the vast majority of all these minerals are processed in China, which has a near monopoly in the midstream of the supply chain. The emergence of resource nationalism and export restrictions in countries such as Indonesia, China, Chile, Namibia, and Zimbabwe is another major challenge, as resource-rich nations seek to build their own minerals processing and clean tech manufacturing as they engage with external partners like the EU.

To diversify the EU's supply of critical raw materials, the EU has begun using the instrument of Strategic Partnerships to enhance cooperation with third countries. In 2021, the EU signed Memoranda of Understanding (MoUs) for a Strategic Partnership with Canada and Ukraine. In 2022, similar agreements were established with Namibia and Kazakhstan, followed by additional partnerships in 2023 with Argentina, Chile, Zambia, and the Democratic Republic of Congo. These MoUs are designed to integrate raw material value chains, identify collaborative projects, and

<sup>&</sup>lt;sup>1</sup> As of 2030, the EU would be capable of satisfying merely 9% of its demand for cobalt, 16% for nickel, and 58% for lithium through domestic resources.

advance research and development while upholding rigorous environmental, social, and governance (ESG) standards. This approach helps the EU secure its supply chain and simultaneously addresses its domestic needs and interests, promoting economic development in resource-rich countries.



But the challenge for Europe to catch up is huge. China has invested €15 billion in global minerals projects in the last few years alone. So as the EU scales its strategic partnerships, it needs to act quickly and adapt its approach to resource-rich countries to build up its unique selling point (USP). To secure Europe's critical minerals supply, the EU should support resource-rich countries' green industry plans, focusing on technology transfer, skills and responsible mining and processing practices. The approach via Strategic Partnerships can be a promising way forward if accompanied by concrete projects and investments. In this regard, what's missing is quick and long-term downstream business engagement from western car and battery makers, as well as the metals industry.

To make these partnerships a success, the EU should:

- 1. Cultivate more Strategic Partnerships, with a diverse set of partner countries and clear prioritisation of the critical minerals needed: alongside high social and environmental criteria, laser sharp focus is needed. E.g. Europe will need a lot more battery metals than green hydrogen in the next decade.
- 2. Foster local green industrial value chains and responsible sourcing practices in resource-rich countries: this includes developing processing and manufacturing activities, genuine technology transfer, local labour force upskilling, as well as capacity building activities.
- 3. Establish a robust funding framework, including fresh money via the Global Gateway initiative and a dedicated CRM fund: The EU should financially support these initiatives through guarantees, grants and loans, making projects abroad not only attractive but also economically viable and scalable. A dedicated fund is needed to de-risk projects and build technical and regulatory capacity in strategic partnership countries.
- 4. **Bring EU companies on board:** having Europe's cleantech companies on board with long-term offtake agreements, as well as support with technology and skills expertise, is paramount to the success of strategic partnerships.

Overall, addressing the north-south divide and securing sustainable mineral supply chains requires a global perspective, with many like-minded partners on board. This involves harmonising standards, ensuring their enforceability and working jointly to avoid fragmentation of initiatives.



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# 1. Introduction

The rapid transition to renewable energy, electric vehicles (EVs) and smart grids on an unprecedented scale is essential to meet climate goals, but it comes with challenges due to the significant amounts of critical metals needed. For batteries in EVs as well as the required charging infrastructure, increasing amounts of copper, lithium, cobalt, nickel as well as bauxite are needed in the upcoming decades. When it comes to these minerals, the EU remains highly reliant on international markets and imports from non-EU countries. While European industry holds expertise in the manufacturing sector, the presence in the refining and extraction industry remains weak in comparison to other regions.

Even if the end game is circularity, Europe will rely on global imports for a long time. This forces the EU to rethink its global approach towards resource-rich countries and its trade relationships. The EU needs to consider how to work towards open and diverse markets that avoid concentration, secure its trade routes with these countries and how to become an attractive partner vis-a-vis China and even the US. As protectionist tendencies and global concurrence are growing, the EU cannot rely on simply buying from a few resource-rich countries like Indonesia, Chile or DRC without further engagement. Nor can the EU afford to be naive and rely too heavily on so-called 'like-minded partners.' Previous experiences have shown that steady and reliable cooperation can quickly break down with a change of government, as seen during the Trump administration in the US.

Resource-rich countries today want to materialise their national interests - i.e. get more value from their resources mid and downstream - which is why export restrictions and higher tariffs on raw materials - unprocessed ores and processed concentrates - are on the rise. In response to this and the rising urge to secure the minerals supply to its industry, the EU has shifted the narrative<sup>2</sup> in its plans towards a mutually beneficial partnership on raw materials that creates added value in partner countries.

Building new trade ties with these partners needs to be well thought through to demonstrate that the EU is an attractive partner as well as benefiting the EU's downstream clean tech industry. Concrete measures need to follow words to ensure change in the Global South actually happens. In this context, the spotlight falls on the Strategic Partnerships, which the EU has been pursuing since 2021. Given the need to secure the EU's raw material supply as well as to build stable trade relations, this soft power instrument is becoming one of the EU's main strategies to pursue these goals.

Therefore, this T&E briefing aims to delve further into Strategic Partnerships. The following subsection will provide an overview of the current trade balance of the EU to offer insights into the state of raw materials supply. Then, section two will explore current challenges followed by a closer examination of the specifics of Strategic Partnerships in section three, which are intended to address these issues. Section four then looks at essential elements contributing to the success of these partnerships. Lastly, we provide recommendations for a broader agenda towards sustainable and resilient minerals supply chains.

<sup>&</sup>lt;sup>2</sup> See Commission's <u>Communication on a secure and sustainable supply of critical raw materials in support of the twin transition</u> published with the CRMA

# 2. Current situation, trade balance & challenges

## 2.1 Current trade balance

Critical raw materials like lithium, cobalt, copper and nickel are fundamental for batteries and other green technologies that are needed to decarbonise the transport and energy sector. Unlike fossil fuels, which are used all throughout the economy, critical raw materials (CRMs) are required in specific manufacturing processes - e.g. automotive/batteries, electronics, turbines, solar panels - as essential ingredients in relatively small volumes.

During 2020, approximately 7 million tonnes of minerals vital for clean energy technologies, such as copper, lithium, cobalt, graphite, and others, were extracted (see Figure 1). Considering the IEA's Sustainable Development Scenario, which anticipates acceleration action on low-carbon technologies, the amount of minerals needed is to quadruple<sup>3</sup>. Although this is a significant increase of mined quantities, these numbers remain miniscule next to the mined quantities of fossil fuels. For instance, in 2019 alone, approximately 8000 million tonnes of coal and 4700 million tonnes of crude oil have been mined<sup>4</sup>.



## Quantities of mined fossil fuels and minerals

Source: US Energy Information Administration & International Energy Agency)

\*Clean energy minerals for solar, wind energy, geothermal, hydropower, EVs, battery storage, nuclear and grid networks. Include copper, silicon, silver, zinc, manganese, chromium, nickel, molybdenum, lithium, cobalt, graphite, vanadium, and rare earth minerals

<sup>3</sup> International Energy Agency (2021): The Role of Critical Minerals in Clean Energy Transitions

<sup>&</sup>lt;sup>4</sup> <u>US Energy Information Administration</u>

#### Figure 1: Quantities of mined fossil fuels and minerals

Regarding trade globally, the global export value of raw materials varies depending on the material, with export values ranging from about \$91 billion for copper to \$1.5 billion for lithium (see Figure 2). Still, these volumes are significantly lower than for fossil fuels, where petroleum amounted to \$951 billion and natural gas to \$335 billion in 2021<sup>5</sup>.



### Value of exports for selected commodities (2021)

Source: International Renewable Energy Agency based on UN COMTRADE database

#### Figure 2: Export value of fossil fuels and Critical Raw Materials

In 2021, CRMs made up just 0.7% of EU imports, while other raw materials (such as wood, ores, etc.) made up 5%<sup>6</sup>. Overall these numbers illustrate that, despite the expected growth in the sector in the coming year, they pale in comparison to the scale of pollution-prone materials. What they also reveal however is that Europe alone will be unable to meet this demand.

By taking this to the European case of electrifying the automotive industry, T&E analysis has shown that even if Europe will be able to use its full potential for extraction by 2030, there would be a deficit to meet its demand for raw materials needed to decarbonise its transport sector (see Figure 3). Regarding its demand for mined materials in 2030, the EU would only be able to domestically meet 9% of its demand for cobalt, 16% for nickel, and 58% for lithium. Also for refined materials, the EU will rely on third countries, particularly for refined nickel (77% of 2030 demand will need to be imported) and cobalt (79% of 2030 demand will need to be imported) in the form of sulphates.

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<sup>&</sup>lt;sup>5</sup> IRENA <u>Report</u> on the Geopolitics of the energy transition (2023)

<sup>&</sup>lt;sup>6</sup> INTA Committee <u>Study</u> on Global value chains (2023)

# Europe's potential for mined and refined lithium, nickel and cobalt by 2030



Notes: 1. Chart shows theoretical capacities relative to demand from lithium-ion batteries in the EU, UK and EFTA in 2030. 2. Nickel and cobalt sulphate are suitable for batteries. 3. Nickel and cobalt in all forms include metal, sulphate and other chemicals. Source: T&E analysis

Figure 3: Europe's potential for mined and refined lithium, nickel and cobalt by 2030

Crucially, the CRM supply from third countries is highly concentrated: for instance, China provides 100% of the EU's supply of processed heavy rare earth elements (HREEs) and 85% of light rare earth elements (LREEs) in 2023.<sup>7</sup> Chile accounted for 79% of Europe's supply for lithium and Russia for 29% of nickel. The OECD points out that the overall production of CRMs is becoming more concentrated amongst countries, with China, Russia, Australia, South Africa and Zimbabwe among the top producers and reserve holders<sup>8</sup>.

High reliance on certain markets, even for small quantities with a relatively small market share compared to other commodities like oil or gas, can lead to serious market disruptions. To illustrate, in 2010, China imposed an export ban on rare earths to Japan during a dispute. Despite Japan importing just \$154 million worth of rare earth elements, it faced significant economic risks<sup>9</sup> due to the strong market concentration. This export ban jeopardised several Japanese industries heavily reliant on these minerals which forced Japan to give in to the dispute. Back then - and today as recently seen with gallium, germanium and graphite - China's near-monopoly on minerals processing and mid-stream poses a serious threat to Europe's ability to scale green technologies effectively.

<sup>&</sup>lt;sup>7</sup> EU <u>Study</u> on Critical Raw Materials for the EU (2023)

<sup>&</sup>lt;sup>8</sup> <u>OECD</u>: Supply of critical raw materials risks jeopardising the green transition (2023)

<sup>&</sup>lt;sup>9</sup> <u>Bruegel (</u>2023): Why Europe's critical raw materials strategy has to be international

## **INFO BOX 1: EU Trade with Critical Raw Materials**

#### **Definitions:**

- Critical Raw Materials (CRMs): Raw materials of high importance to the economy of the EU and whose supply is associated with a high risk.
- Strategic Raw Materials (SRMs): Raw materials important for technologies that support the green and digital transition and defence and aerospace objectives but without a sudden risk of supply disruptions. For instance, nickel and copper do not meet the EU's threshold to be considered critical, but, due to her economic importance they are listed as strategic.

Material	Main EU supplier extraction stage	Main EU supplier processing stage <sup>11</sup>	Import dependency (extraction / processing)
Lithium	No Data	Chile 79% Switzerland 7% Argentina 6%	81% / 100%
Cobalt	<i>No data</i> *Global <u>primary</u> supplier Congo 63%	Finland 62% Belgium 29% Congo (DR) 2%	81% / 1%
Nickel	Finland 38% Canada 24% Greece 19%	Russia 29% Finland 17% Norway 10%	31% / 75%
Manganese	South Africa 41% Gabon 39% Brazil 8%	Norway 21% Ukraine 19% Spain 14%	96% / 66%
Natural graphite	China 40% Brazil 13% Mozambique 12%	No data	99% / -
Copper <sup>12</sup>	Poland 19% Chile 14% Peru 10%	Germany 17% Poland 14% Spain 11%	48% / 17%
Heavy Rare Earth Elements (HREE)	Japan 55% China 43% USA 2%	China 100%	100% / 100%
Light Rare Earth Elements (LREE)	No data	China 85%	80% / 100%

#### Overview of EU sourcing shares of materials (selected materials) (2023)<sup>10</sup>



<sup>&</sup>lt;sup>10</sup> EU <u>Study</u> on Critical Raw Materials for the EU (2023)

<sup>&</sup>lt;sup>11</sup> Including recovered materials via recycling

<sup>&</sup>lt;sup>12</sup> Used for electrification

## 2.2 Searching for European USP

Given that the EU will continue to rely on global partners and markets to secure raw materials, the current geopolitical situation raises the question: how can Europe secure those partnerships in a responsible and longer term reliable manner. Two examples highlight the challenge.

The first challenge is dealing with increased resource nationalism and protectionist policies. Since 2019 the Indonesian government has made it a priority to support its own industries which lead to export restrictions on several raw materials like nickel as well as domestic processing requirements - local content requirement (LCR) - prior to export. Following, in 2019, the EU filed a WTO case against Indonesia's measures and succeeded in 2022. This 'win' for the EU will, however, not rule out future supply disruptions, in particular given rising export restrictions on unprocessed minerals in many other countries like Namibia or Zimbabwe. Although the WTO regime is key in offering a common framework for trade, the EU cannot keep filing WTO complaints whenever new export restrictions or LCRs come up. As WTO procedures are time intensive and trade disputes have been blocked within the WTO Appellate body in the past, the international dispute settlement mechanism does not provide a reliable mechanism on which the EU can rely on.

Similar measures as in Indonesia and Africa can be seen in Chile and other South American countries where governments are nationalising certain raw materials sectors such as lithium. For instance, this means that future lithium contracts would only be issued as public-private partnerships with state control. European companies would still be able to buy from these countries, however battery makers may need to comply with more specific contract conditions given the state involvement. These current developments show that the EU will not be able to rely on further WTO complaints for a sustainable, long-term security of supply. Instead, these developments suggest the need to be more responsive to the interests and needs of these countries.

Another recent example is the US Inflation Reduction Act (IRA) of 2022, which allocates \$369 billion for climate and energy initiatives, marking the country's largest climate change investment. The IRA aims to bolster domestic green technology supply chains, encourage domestic material procurement (or sourcing from free trade partners), and reduce China's influence on the battery industry. However, this could potentially delay EV and battery projects in Europe and divert investments in critical metals and processing to other regions, as Europe is still catching-up in this area. Hence, the EU is currently trying to finalise a targeted critical minerals agreement with the US to expand access to critical minerals that would allow the EU to be included in the provisions of the IRA and make EU EVs qualify for tax credits. This agreement is delayed as the EU and US are still discussing the details around the common safeguards around labour and environment.

All this shows that no secured relationship in this sector can be taken for granted which is why diversification is key, hence agreeing a number of strategic partnerships to hedge the risks across the globe.

The key underlying fact in all of this is China's dominant position in resource-rich countries and its control over several key CRM supply chains (see Figure 4). For example, even though China does not extract cobalt, it is the largest processor of cobalt, holding a 74% share in the global market. In the case of lithium, while China only contributes 17% to the extraction of lithium, it accounts for 65% of global lithium processing. Additionally, China is not among the top three copper producers, but it takes the lead in global processed copper production with a 42% share. This is not only due to China's huge processing and refining capacities but also a result of a proactive, assertive foreign policy strategy towards resource-rich countries allowing China to import extracted minerals from third countries and refine domestically.



Top producers in extracting and processing minerals (2022)

Figure 4: Share of top producing countries in total production for selected resources and minerals, 2022 (<u>Critical Minerals Market Review</u> (2023))

As China is actively pursuing additional supplies from foreign sources, the EU should learn from its approach (but apply much higher social and environmental standards on top). China started approaching relevant partners years ago with large scale direct investments and infrastructure projects, in particular via its Belt and Road initiative, a vast infrastructure and economic development project backed by fresh-government investments to enhance trade and connectivity across Asia, Europe, Africa, and beyond. For instance, from 2020 to 2023, China allocated more than \$15 billion for investments in projects for battery metals overseas (see Figure 5).





**Note**: Chinese data as analysed by T&E based on the China Global Investment Tracker by The American Enterprise Institute and The Heritage Foundation; European data based on known project investments.

Figure 5: Chinese and European overseas investment in battery metals (2020-2023 year-to-date)

This proactive approach has brought straightforward investments and concrete offers to the table. In contrast to Chinese investments abroad, Europe is lagging behind. When examining the largest battery metals projects by EU companies since 2020, only two projects (from Eramet) stand out: the Centenario lithium project in Argentina and the Sonic Bay nickel project in Indonesia. The lithium project in Argentina is a collaboration with the Chinese mining company Tsingshan, which is equally invested and contributed \$375 million to project capital expenditures<sup>13</sup>. Meanwhile, the nickel project, boasting a \$2.6 billion investment, aims to establish facilities for processing nickel for electric vehicle batteries in cooperation with BASF.<sup>14</sup>

This section shows that global competition through increasing concentration in supply chains, rising nationalism and Chinese dominance are posing significant challenges. But Europe is still in the game. Europe has strong expertise, high standards and a growing cleantech industry which can benefit the Global South if the EU acts quickly. The EU as a whole, including member states and European companies, need to put new offers on the table and bring their vast EV and battery downstream industries with them to invest in the global south countries. The EU needs to find their unique selling points (USP) and do so quickly. This is where Strategic Partnerships can play a major role to open new doors.

<sup>13</sup> Eramet (2023)

<sup>&</sup>lt;sup>14</sup> <u>Reuters</u> (2023)

# 3. Strategic partnerships: A more flexible approach?

With the Critical Raw Materials Act (CRMA) being finalised in 2023 and entering force in 2024, the EU is attempting to revamp its external raw materials approach. The act aims at diversifying the EU's sources of imports from non-EU countries to reduce strategic dependences by ensuring that by 2030, no third country provides more than 65% of any given raw material. For this, the EU utilises its existing instruments such as Free Trade Agreements (FTAs), or pursue new approaches like Strategic Partnerships. The latter is a novel tool that can help Europe develop a new strategic and more flexible approach in its relationship with the Global South .

## 3.1. Framework of Strategic Partnerships: What it is and what it is not

Given the recent lack of effectiveness of WTO ,, and the fact that FTAs take a long time to get agreed, the EU has started to focus on a new approach to engage with possible partners for critical minerals: Strategic Partnerships. Such agreements are often complementary to prior negotiated or concluded trade and investment agreements, and offer a political framework and concrete bilateral cooperation for CRMs.

Strategic Partnerships are an instrument the EU uses to scale up cooperation with a third country on critical raw materials. These partnerships take the form of legally non-binding agreements. According to the EU's CRMA, Strategic Partnership means 'a commitment between the Union and a third country to increase cooperation related to the raw materials value chain'. They are supposed to set out concrete actions that are of mutual interest.

Strategic Partnerships are agreed by the European Commission with third countries and do not require ratification by EU member states like FTAs and are based on a voluntary basis. Still, the CRMA foresees coordination between the Commission and Member States to maintain consistency with each Member State's bilateral cooperation agreements with relevant third countries, as well as their support to implement the measures outlined in Strategic Partnerships agreements.

Serving as a rapprochement between countries, Strategic Partnerships are sealed with a Memorandum of Understandings (MoUs). The MoU does not create rights or obligations under domestic or international law on either side but *shall* represent a commitment of financing on the part of either side. The MoUs are followed by a 'roadmap', an action plan, normally within six months. This roadmap can include concrete projects with companies on board and outline steps the EU and the partner country are going to take to implement the promises made in the MoU.

The instrument is considered to be a soft power instrument. Areas or projects where both sides wish to intensify cooperation can be pursued more easily. This non-binding approach leaves countries with more sovereignty, *somewhat* more similar to the Chinese approach. The EU seeks to make these partnerships mutually beneficial and foster projects that can enhance value addition via job creation through local processing and manufacturing or infrastructure development.

This partnership serves as a rapprochement between states bringing together interested parties from industry and businesses, identifying and conducting common projects with potential support from the EU in terms of financing and capacity building. Considering this, in their initial stage, Strategic Partnerships primarily serve as a diplomatic exercise which can lead to deepened cooperation.

The central 'funding' pillar foreseen to support projects in resource-rich countries, as well as broader projects in infrastructure development, is the EU Global Gateway strategy which was launched in 2021. This initiative has been mentioned as a key finance instrument in several Strategic Partnerships.

### **INFO BOX 2: Global Gateway**

Global Gateway is an EU strategy to establish 'EU-led connectivity' around the world, for instance, by boosting clean energy and transport projects worldwide. This action has been considered to be an European answer to the Chinese One Belt, One Road initiative, with a stronger focus on promoting social and environmental standards.

Organised as a Team Europe approach, this initiative brings together EU institutions, EU member states, European financial institutions and national development finance institutions and foresees to mobilise €330 billion. This amount results from existing EU development funds as well as the assumption that public money will be able to mobilise -' leverage' - private investment for projects.

An overriding interest of this strategy is to combine international development and commercial priorities. However, think tanks have criticised<sup>15</sup> that the promised sum is based on tools from existing development commitments that have already been adopted as part of the EU's 2021-27 budget. The actual grant amount by the EU, which excludes potential funding via the Team Europe approach, is limited to  $\leq 18$  billion via the EU's external assistance programme. It remains unclear how strategic partnerships and strategic projects will be financed through this initiative, given the intransparent procedures behind the Team Europe approach.

Global Gateway consists of the following programs and presumed investments to be taken:

European Fund for Sustainable Development plus (EFSD+): €135 billion in investment are foreseen under EFSD+. This is considered to be the main financial tool to mobilise investments. The EU provides €40 billion in guarantee capacity which aims to de-risk and contribute to risk-sharing in high-risk investments made by development finance institutions and other international finance institutions. This procedure is also known as 'blending'. From €40 billion<sup>16</sup>, the EIB contributes €26.7 billion and a new window under ESFD+ for Global Gateway provides €13 billion.

<sup>&</sup>lt;sup>15</sup> <u>eurodad</u> (2022)

<sup>&</sup>lt;sup>16</sup> From the EU's Neighbourhood, Development and International Cooperation Instrument (NDICI) under the multi-annual financing frameworks (MFF)

- EU countries' financial and development finance institutions: €145 billion in planned investments. The Commission counts on the contribution from Member states.<sup>17</sup>
- EU external assistance programmes: €18 billion in grants.

## 3.2. Strategic Partnerships agreed so far

The EU signed MoUs for a Strategic Partnership with Canada and Ukraine in 2021, Namibia and Kazachstan in 2022, and Argentina, Chile, Zambia and the Democratic Republic of Congo in 2023. Overall, these MoUs seek to integrate the raw material value chains, identify joint projects and enhance collaboration in research and development while holding up high environmental, social and governance (ESG) standards. In this way, they can help the EU ensure its security of supply while also addressing domestic needs and interests for economic development in resource-rich countries. More countries are likely to follow, notably Greenland and Australia where the discussions are ongoing.



Figure 6: Strategic Partnerships discussed and in place (October 2023)

<sup>&</sup>lt;sup>17</sup> This offers the possibility to label other projects funded by Member States under the Team Europe approach later on.



Regarding the <u>EU-Ukraine partnership</u>, a strong emphasis is placed on both primary and secondary raw materials and environmental responsibility, with a focus on decarbonizing raw material mining to reduce its ecological footprint. The <u>roadmap</u> seeks to bolster the capacity of Ukrainian institutions and industry stakeholders through capacity-building events, including training for public administration and companies. Additionally, it aims to modernise data management of Ukrainian mineral resources, introducing innovative digital practices such as creating a 'data room.' Earth-observation programs are to be utilised for resource exploration and environmental performance monitoring. The roadmap also promotes business investment platforms to facilitate joint-venture projects and investments in critical raw materials and batteries.

In the context of the EU-<u>Canada</u> partnership, the EU <u>announced</u> that concrete projects are on the way in strategic areas, including the battery value chain and rare earth elements. The partnership fosters information exchange and business opportunities between EU Member States, Canadian provinces, and the private sector. It also promotes exchanges between research communities, with additional engagements planned for the future. These initiatives strengthen the collaboration between Canada and the EU and provide a platform for tangible progress. The EU points out that the partnership has resulted in EU investments in Canada in cathode active materials and offtakes for lithium, nickel and cobalt for batteries<sup>18</sup>. The 'matchmaking' of bringing together public institutions and companies has proven to be very effective, as shown for example with Swedish Northvolt partnering up with Vale Canada to ramp up supplies of low-carbon nickel used to manufacture electric vehicles<sup>19</sup>.

The Strategic Partnership with <u>Kazakhstan</u> focuses on closer economic and industrial integration in the raw materials, batteries, and renewable hydrogen value chains, including identifying joint projects, recycling, and attracting private investment. This also involves exploring new deposits in Kazakhstan and cooperation in manufacturing battery components for the EU, modernising mining and refining practices, and enhancing supply chain resilience through transparency and information sharing. It also highlights bilateral cooperation in capacity-building, research, innovation, and technology transfer as well as collaboration with the European Bank for Reconstruction and Development to stimulate technological development.

The MoU with Kazakhstan has resulted in a roadmap with a concrete joint project - German company HMS Bergbau AG is to invest \$700 million to develop lithium deposits in Kazakhstan<sup>20</sup> - that is supposed to follow the principle 'technology for raw materials'. This means that raw materials are extracted and sold to EU companies under the condition that these companies bring their modern technologies to the extracting country, promoting long-term development in the region with improved industries and high quality jobs.

<sup>&</sup>lt;sup>18</sup> EU <u>Communication</u> (2023)

<sup>&</sup>lt;sup>19</sup> <u>Vale</u> (22/3/2022)

<sup>&</sup>lt;sup>20</sup> Astana Times (2023)

The partnership with <u>Namibia</u> centres on promoting local value addition in mining and renewable hydrogen value chains. Capacity building is a core element, encompassing training and skills development along raw materials and renewable hydrogen value chains. Mobilisation of funding for the development of soft and hard infrastructure represents a central element as well given this will be required for projects development and for leveraging private sector funding through cooperation. The cooperation also focuses on regulatory alignment, standards, and certification to ensure that Namibia's industries meet international standards. Furthermore, it encourages business-to-business cooperation, particularly with European and critical raw materials businesses, as well as infrastructure development.

The MoUs with <u>Argentina</u> and <u>Chile</u> underline a strong commitment to sustainable raw materials value chains, research and innovation collaboration, and ESG criteria alignment. Both countries are to be connected to the EU's Global Gateway Investment Agenda for Latin America and the Caribbean. This signifies a commitment to cooperation and investment, emphasising the potential for future projects and initiatives in alignment with the broader global goals. The Strategic Partnerships with <u>Zambia and the Democratic Republic of Congo</u> foresee the integration of sustainable raw materials value chains, funding for infrastructure development, and cooperation in research, innovation, and capacity building to ensure responsible and sustainable production. Global Gateway is seen as the central funding tool.

Looking at the partnerships concluded so far, the different preconditions and challenges become evident, which is why a one-size-fits-all approach is not possible. While partnerships with Canada or Kazakhstan already have concrete projects in the pipeline, other partner countries will require supporting infrastructure, funding support and capacity building to bring concrete minerals projects online. Here, the Global Gateway dimension becomes particularly important, and should be directly linked to projects. With regard to countries with less developed industrial capacities today, the EU needs to bring in a more needs-oriented angle offering more concrete support for such projects.

Ultimately, the promises made such as technology transfer can only materialise if the content of the agreement is enforced via concrete projects. Concrete projects with a concrete time frame will enable the EU to deepen its trade relations and guarantee its security of supply. In order to get out most of these partnerships, the EU needs to be as concrete as possible. Roadmaps should be as precise as possible to pave a way forward connecting relevant companies for joint projects.

# 4. What Europe needs to succeed: building European USP

Strategic Partnerships are a good starting point but the EU is not negotiating them in a vacuum. China, the US and others are similarly racing to secure critical minerals and, in many cases, are ahead of Europe. So the EU needs to understand its unique proposition, or USP, that would make the bloc attractive to the mineral-rich countries. This section looks at what that USP can look like.

## 4.1 Moving up the value chain

From Chile, to Zimbabwe, to Indonesia resource-rich countries want to see a new era in developing their raw materials - one that brings higher value add on top of extraction and allows the countries to move up the value chain to midstream, and even downstream industries, e.g. cathode and battery factories. So as part of its proposition, the EU should support such value addition via building national industrial capacities in resource-rich nations. This involves fostering mid- and downstream industries, sharing technological and personnel know-how, e.g. to improve mining processing and develop clean tech manufacturing, as well as supporting recycling industries. By doing so, the EU can position itself as an appealing partner and contribute to the global shift towards cleaner technologies.

For instance, the International Energy Agency (IEA) points at the potential for developing and emerging countries in Africa to move up the value chain through downstream activities provided that there are sufficient investments, training of local workforces, and a reliable electricity supply<sup>21</sup>. By engaging in processing and manufacturing, these countries can unlock higher-margin opportunities and boost their economic growth, all while reducing their reliance on raw material exports. To unleash this potential, the EU should not only empower resource-rich countries, but support them in building key infrastructure and expertise to be able to move into mid- and downstream sectors, most notably by supporting the build-up of low and zero carbon energy supply.

However, given recent efforts and frameworks such as the new Critical Raw Materials Act, the EU's objective is to similarly onshore much of the same mid- and downstream industry. Are the two goals compatible? Even if the EU manages to onshore close to 40% of its processing (or refining & midstream) needs, a significant 60% still needs to come from the global market. Currently this is largely concentrated in one country, so helping resource-rich countries move up the value chain is also in Europe's interest to diversify the supply.

However, not every country will process minerals and manufacture battery components. The feasibility, infrastructure and other local conditions need to be considered as not every project is likely to be viable and attract the right investment or engagement from European companies. In general, new mid- and downstream activities are more feasible, if these are backed by cost advantages, affordable renewable energy supply or existing related expertise (e.g. chemicals). Researchers point out that new value addition in a new sector materialises if this requires relatively low government sources and the new activity can leverage existing comparative advantages in the short term<sup>22</sup>.

For instance, researchers found that for the case of the Democratic Republic of Congo (DRC), value addition could appear in copper manufacturing or in precursor productions for NMC batteries<sup>23</sup>. This

<sup>&</sup>lt;sup>21</sup> IEA (2023): Financing Clean Energy in Africa

<sup>&</sup>lt;sup>22</sup> Naveed, Abdurrehman, and Cina Vazir. "Value Amidst Transition: Evaluating Strategic Opportunities for Value Addition in the Democratic Republic of Congo."

<sup>&</sup>lt;sup>23</sup> idem.

will require a well thought-out selective approach, as a one-size-fits-all approach is not the way to go, given the diversity of the countries involved.

## 4.2 Swift action and adequate funding

It is crucial to keep time constraints in mind. The right moment to build up these ties is now, as several countries including China have already invested high amounts of money into projects overseas that will supply raw materials for their cleantech industries. Investments and swift action are key in this. With the CRMA, the EU has introduced a fast-track permitting process for 'strategic projects', an initiative that streamlines the approval process for mining, processing, and recycling projects, both within Europe and in foreign countries.

Facilitating timely project implementation is a good start, however, such projects require the right funding framework. Projects in the raw materials sector, especially abroad and in extractive activities, remain high-risk investments due to vulnerability to fluctuating commodity prices, environmental and regulatory challenges, political instability and geopolitical risks and long-term capital intensity. Hence, such operations require targeted funding, in terms of loans and guarantees, ideally off-take agreements and more.

Regarding the EU taxonomy, if extractive and processing activities fall under sustainable activities, it is necessary to adopt strict sciences-based criteria for the definition of sustainable mining and refining including high environmental and social standards<sup>24</sup> to provide clarity to investors. Crucially, in order to enhance infrastructure and project development abroad, long-term financing with low rates and adjusted risk profile to the Global South countries is needed. This long term capital could also be provided from international institutions like the International Monetary Fund (IMF), regional development banks or national export agencies in the EU.

As already mentioned, the central funding pillar to finance projects within Strategic Partnerships is the EU Global Gateway initiative. This strategy, organised as a so-called 'Team Europe approach' bringing together EU institutions, EU member states, European financial institutions and national development finance institutions - foresees mobilising over €300 billion from 2021 to 2017 with technically only €18 billion of actual EU grants. This amount is based on the assumption that the EU will mobilise, or leverage, most resources from private investors. Several researchers and think tanks criticised<sup>25</sup> that this is based on an unreliable methodology and that the actual grant amount is limited to €18 billion.

The dependence on funding from the private sector for the Global Gateway (and thus strategic partnerships) is therefore immense. Last year, the US, Japan, Canada, and Australia all announced critical minerals funds ranging from \$788 million to \$8.5 billion. What distinguishes these approaches from Global Gateway is that grants are delivered faster and easier, and are based on government's

<sup>24</sup> also requested by <u>SOMO</u>

<sup>&</sup>lt;sup>25</sup> eurodad (2022)

funding only. Similarly, the EU needs to bring adequate funding to the table if it is to materialise the goals of its strategic partnerships.

More transparency is required in this process to understand which projects are financed and under which conditions. For projects funded by Global Gateway under the Strategic Partnership angle, provisions to measure the success should be included to ensure that these projects will be mutually beneficial. The current lack of transparency hinders involvement of industry and CSOs, especially grassroots organisations in concerned countries. The assumption of future private investments is not sufficient to ramp up supply chains with partners in the Global South and should instead be connected to a EU-wide fund boosting projects in down- and upstream segments.

What also needs to be supported on a wider agenda is EU technical and financial assistance that can remedy the increased compliance costs for trade partners. If a partner is interested, the EU may consider regulatory cooperation as well meaning that regulators may exchange information and experience and identify potential areas of cooperation. Such measures can be done on a voluntary basis without dictating regulations onto trade partners and meeting them on an equal footing.

EU funding should support environmental protection initiatives in partner countries and anti-corruption initiatives as well as the additional costs emerging from this engagement. For instance, in South American countries, this engagement could be materialised by support for the Amazon Fund, the Escazu Agreement or the Leticia Pact. For concerned local communities, the EU could fund projects dealing with water supply protection or air quality monitoring. Financial or technical support may help governments enhance due diligence procedures or support the fight against corruption and tax evasion issues. There are several initiatives tackling these problems as for example EITI (Extractive Industry Transparency Initiative), an initiative with 57 countries committing to principles that seeks to enhance transparency in these sectors. This gives CSOs and especially grass root NGOs possibilities to intervene and point out problems or abuses. These extra efforts can send positive signals to partner countries and enhance the governance structures that ultimately allow to keep the added value within the countries benefiting local communities.

## 4.3 Active involvement from EU businesses

Concrete projects from upstream to downstream cannot materials with government support alone; companies must be on board. Long-term offtake agreements - e.g. an EU-based car or battery maker committing to purchase refined battery metals for 10 years at a guaranteed price - as well as support with technology and skills expertise is paramount to the success of strategic partnerships. Europe has many well developed and highly competitive companies in cleantech manufacturing - bringing them on board is its chief USP. The one most important task for the European Commission and EU member states is to secure this company engagement and making joint projects and offtake agreements (for the EU market, e.g. to meet the CRMA goals) a core part of strategic partnerships.

Just like Europeans, resource-rich countries and their citizens want clean water, clean air and decent working conditions. The EU, with high social and environmental standards entrenched in its activities for decades, should help ensure that similarly high standards are met with strategic partnership countries. As the EU laws do not apply here, the EU should collaborate with governments willing to adopt and implement responsible practices. This will also help EU companies scale battery and EV manufacturing, since there is a growing regulatory and investor demand for sustainably sourced and transparently tracked raw materials.

In general, the EU should prioritise investments with high quality, responsible practices as this constitutes one central USP distinguishing the EU. The EU is a frontrunner when it comes to legislation and standards around social and environmental rules from the REACH rules on chemicals to the Water Framework Directive. In the last few years, the EU has also ramped up its efforts on corporate disclosure and due diligence rules. For instance, the EU Batteries Regulation adopted in 2023 obliges companies to fully conduct due diligence on and track their supply chains of key battery raw materials. Similarly, the EU's Corporate Sustainability Due Diligence Directive - which at the time of publishing of this briefing is still under negotiation - pushes for stronger due diligence and transparency across all value chains regardless of the commodity on both human rights and environmental protection. Crucially, both laws apply to any company wanting to do business on the EU market above a certain annual turnover to comply with these rules regardless of if they are based in the EU or outside of it.

A critical aspect of nurturing mid and downstream industries is technology transfer, which should be done by companies. By sharing knowledge and expertise, companies can create added value and foster technological and skills growth within resource-rich countries that stays beyond projects. Concrete actions include training and education for the local labour force, as well as partnerships with local educational institutions (possibly in partnership with universities from the off-taker countries) and apprenticeship programs under government guidance.

Additionally, hiring local staff will not only stimulate the local economy but also create a sense of ownership and responsibility in the sustainable management of resources. This is already part of FTAs with wording that states that companies are obliged to hire a certain percentage of local staff, including senior staff. Strategic partnerships are an opportunity to start implementing this on the ground.

As calls on the EU to engage in rebalancing the global system of Intellectual Property Rights (IPR) in order to foster the legal transfer of climate-friendly technology show<sup>26</sup>, it is crucial that EU companies engage in genuine open technology transfer also to the benefit of strategic partnership countries. Questions regarding patents on sustainable raw materials extraction might arise in upstream activities, but also further down the value chain with technologies needed for manufacturing processes. EU companies need to embrace the gain of such transfers and eventually,

<sup>&</sup>lt;sup>26</sup> Resolution adopted by the <u>Greens (2022)</u>

be persuaded - or incentivised - to share these technologies. Overall, to make EU companies consider this cooperation, the EU needs to set the right framework for such IP sharing to be worth it. Apart from making the location more attractive (via e.g. infrastructure investments), this also means supporting better education and upskilling for local communities via external or development instruments.

# **5. Conclusion & Policy Recommendations**

To sum up, given that the EU will rely on imports of critical minerals for a long time, it has to engage in meaningful partnerships with its trade partners taking into account the countries needs to boost their economic development. The diversification of trade patterns to enhance the security of supply for CRMs is key but Europe can only succeed over its competitors if it helps the resource-rich partners ensure that the extracted minerals create an added value within the country before leaving to Europe.

Recent trends, such as the increasing export restrictions on both processed and unprocessed materials, and growing inclination toward resource nationalisation, show that the EU has to become more adaptive and responsive to the needs of resource-rich nations, supporting their green industrialisation ambitions. For the EU, this entails a holistic approach where the European Commission, member states and European companies need to join forces and be clear on what their unique proposition is .

In practical terms, this translates into several key recommendations:

- 5. The EU needs to cultivate more Strategic Partnerships, with a diverse set of partner countries and clear prioritisation of the critical minerals needed: Strategic partnerships offer a more flexible approach to engage with resource-rich countries focusing on common interests. The focus should extend beyond diplomatic ties to encompass genuine business-to-business (B2B) engagement that fosters concrete projects and longer term offtakes. The selection process and ESG criteria need to be transparent (to allow the oversight of the civil society), and the project selection needs to align with EU as well as local needs. A lot more critical minerals for batteries, such as nickel and lithium, will be needed this decade than a less clear demand for hydrogen, which should be mirrored in EU approach to strategic partnerships.
- 6. In order to live up to the promise of mutually beneficial partnerships, the EU needs to foster local green industrial value chains and responsible sourcing practices in resource-rich countries: this includes developing processing and manufacturing activities, genuine technology transfer and local labour force upskilling, as well as capacity building and educational activities. While there is no universal formula, comprehensive analysis of local conditions can identify truly viable projects. A particular USP of the EU is in bringing and deploying high social and environmental standards with strategic partnership countries, including working with governments to put in place local regulations and due diligence rules.

- 7. The EU needs to establish a robust funding framework, including fresh money via the Global Gateway initiative and a dedicated CRM fund: The EU should financially support these initiatives through guarantees and loans, making projects abroad not only attractive but also economically viable and scalable. A dedicated fund is imperative to de-risk projects and build technical and regulatory capacity in strategic partnership countries. The EU can also take an active role in coordinating Development Financial Institutions and Export Credit Agencies of Member States, to make sure these have an adapted risk profile and concrete ESG criteria for critical minerals projects in resource-rich countries.
- 8. **Bring EU companies on board:** Long-term offtake agreements, as well as support with technology and skills expertise is paramount to the success of strategic partnerships. Europe has many well developed and highly competitive companies in cleantech manufacturing bringing them on board is a core task for the European Commission and EU member states. This is the EU's chief USP.

But Europe won't be able to do it alone. If the EU is committed to embrace a mutually beneficial partnership, this means tackling the deep divide between the west and the Global South. In order to do so, a common approach with partners is needed. A shared agenda between the EU and US regarding CRM partnerships with the Global South is vital. Both aim to secure, open up, and diversify markets essential for their respective climate objectives. Simultaneously, they seek to create agreements that benefit low- and middle income countries while upholding stringent labour and environmental standards, countering growing Chinese presence. The last recommendation includes:

9. All the measures the EU is going to take to advance its USP should be done by aligning approaches globally for sustainable critical minerals partnerships. Addressing the north-south divide and securing sustainable CRM supply chains requires a global perspective. This involves harmonising standards, ensuring their enforceability and working jointly to avoid fragmentation of initiatives.

These common objectives have started to materialise in a couple of initiatives, such as the US initiated <u>Minerals Security Partnership</u> together with Australia, Canada, Finland, France, Germany, Japan, South Korea, Sweden, the UK and the European Commision. The European Commission, on the other hand, is planning an EU Raw Materials Club. While details of the latter are yet unknown, it is important both the MSP and the EU Club work jointly and avoid fragmentation.

Such initiatives are a great start but in order to be successful, standards for labour, human rights, and environmental practices must be enforceable. Additionally, it needs to be clear how profits can be equally shared, for instance with a minimum threshold ensuring fair and sustained benefits for resource-rich countries. A strategic framework on how to align critical minerals partnerships with just energy transitions and net-zero economic objectives in developing countries can be part of this as well. Ultimately, inclusive decision-making processes must involve Global South partner countries and affected communities to integrate concerns into the discussion.

Europe's pursuit of CRM supply security demands a proactive and collaborative effort. By embracing these strategies and focusing on mutual benefit, Europe can avoid the resource curse from happening again while securing the minerals it needs for its own green transition.

# **Further information**

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