April 2024

Critical Raw Materials Act

Opportunities | Challenges | Viability | Next Steps

Adamas Intelligence

TRADIUM

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1. Executive Summary

In April 2024, the EU passed the Critical Raw Materials Act ("CRMA") into law in a landmark accomplishment that will strengthen the union's critical raw materials supply chains for decades to come, albeit not without some foreseeable challenges.

For strategic raw materials – a subset of critical raw materials deemed "crucial" to strategic technologies – the CRMA mandates that 10% of the EU's annual consumption must be mined domestically, 40% must be processed domestically, and 25% of all processing waste and end-of-life scrap must be recycled domestically by 2030. Furthermore, the EU may not source over 65% of any strategic raw material from a single nation.

Despite the CRMA's applicability to strategic raw materials broadly, a detailed review of the act reveals a disproportionately high focus on raw materials used to produce rare earth permanent magnets, such as neodymium, praseodymium, dysprosium and terbium, as well as battery-grade lithium used to produce batteries.

To that end, the outlook for lithium in the context of the CRMA is positive, with the EU well positioned to meet or exceed targets across all four pillars: extraction, processing, recycling and supply diversification.

Conversely, the outlook for rare earths is concerning, with the region unlikely to meet 2030 extraction or processing targets across the entirety of the value chain without an expedited, concerted push from government and industry.

Furthermore, without sufficient end-to-end processing capacity in the region, the EU may be constrained in its ability to recover rare earths from magnet production swarf and end-of-life devices, if first it can overcome hurdles related to sourcing and centralizing feedstocks.

Challenges related to the above are further compounded by strong social resistance to new mine development despite a broad recognition in Europe that import dependence on single sources, such as China for rare earths, is increasing.

Nevertheless, in recent years Europe's raw materials independence has moved up the political agenda as global crises, such as the COVID-19 pandemic and Russia's invasion of Ukraine, have highlighted the fragility of its supply chains.

It is, therefore, essential in our view that EU politicians and industry stakeholders seek dialogue with the union's population to inform, educate and foster acceptance of responsible mining projects in member states.

This report unravels the implications of the CRMA for lithium and rare earth element supply chains, examines the viability of mandated targets and highlights potential challenges, opportunities and recommendations policymakers and industry stakeholders should be aware of.

2. Introduction

Battery raw materials, rare earth elements and other critical raw materials play an increasingly important role in the global economy. They are the critical enablers of technologies at the heart of electromobility, renewable power generation and storage, energy efficient consumer and industrial goods, aerospace and defense applications.

In a world increasingly strained by geopolitical conflicts, access to critical raw materials may influence the economic and environmental sustainability of entire nations. As stated by European Commission President Ursula von der Leyen during her State of the Union address in 2022, “lithium and rare earths will soon be more important than oil and gas.”

While China and Japan have long made the issue of raw materials supply chain sustainability a top strategic priority, the European Union has lagged behind. To close this gap, the EU has developed the Critical Raw Materials Act to bolster domestic supply chains for critical raw materials while helping enable economic and environmental sustainability in the region.

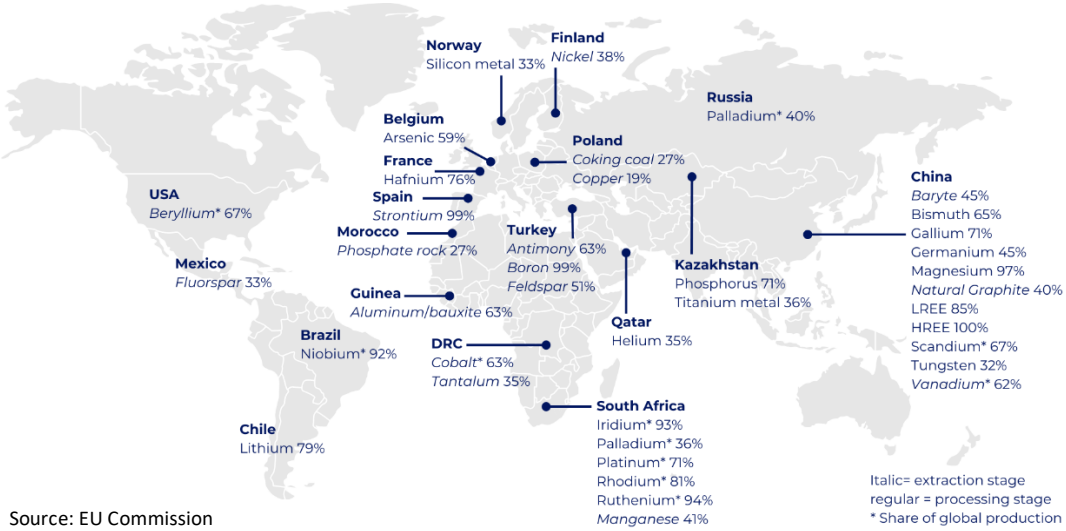
Through the act’s implementation, the EU aims to increase reliable and sustainable access to critical raw materials by mandating precise targets for domestic mining, processing and recycling to be reached by 2030. Moreover, the CRMA seeks to limit the EU’s imports from individual non-member states or nations to reduce single-source overdependencies.

In its most recent assessment, the EU identified 34 critical raw materials, of which 16 are deemed strategic raw materials. Among the latter are rare earth elements and lithium, both of which are crucial to the region’s ongoing shift to electromobility and renewable power generation. They are also critical to enabling the economic success and competitiveness of domestic manufacturers reliant on sustainable supplies.

In the case of rare earth elements and lithium, the EU is host to sufficient mineral resources to meet CRMA targets but, to-date, political and social resistance, coupled with complacency on the part of some end-users, have hampered necessary investment and development.

While lithium’s role in electrification and the energy transition is well understood among the masses, the intricate role of rare earth elements is less understood, presenting a potential blindspot that EU policymakers and industry participants should be aware of.

Figure 1: Countries the EU imports critical raw materials from (2020)



Source: EU Commission

3. Critical and Strategic Raw Materials

In its draft submitted on March 16, 2023, and subsequent amendment, the EU Commission published a list of 34 Critical Raw Materials ("CRMs"), of which 16 are classified as Strategic Raw Materials ("SRMs"). As such, all SRMs are CRMs, but not all CRMs are SRMs.

Shown in blue below in Figure 2, SRMs are those deemed "crucial" by the EU for strategic technologies used for electromobility, renewable power generation, and digital, defense, and aerospace applications. In its classification, the EU considered not only what raw materials are strategic to the region but also the product specifications needed to support demand from the aforementioned applications (e.g., battery grade, metallurgical grade, etc.).

As per CRMA guidelines, the EU's targets for domestic mining, processing and recycling apply explicitly to SRMs, as does the mandate to reduce supply dependency on individual nations.

Figure 2: The EU's Critical Raw Materials list (of which Strategic Raw Materials are shown in blue)

Source: Own elaboration from EU Commission list

LREEs: La, Ce, Pr, Nd, Sm, Eu, Gd HREEs = Tb, Dy, Ho, Er, Tm, Yb, Lu, Y

4. A Long Way to the CRMA

While the EU published its first list of Critical Raw Materials in 2011 (on which there were 14 inclusions), it took over a decade to conceive, rally political support for, and ultimately announce the CRMA in September 2022.

In March 2023, the EU Commission officially tabled a proposal for the CRMA as part of the *Green Deal Industrial Plan for the Net-Zero Age*, to which EU Parliament agreed in December of that year.

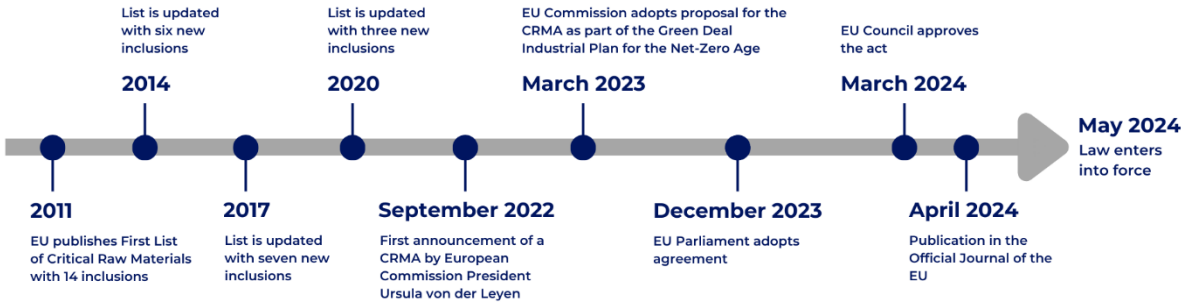
In March 2024, the EU Council approved and adopted the act and in May 2024, the act is expected to come into law.

Although the European Commission, which has the sole right to present draft legislations in the EU, speaks of a record time in which political agreement was reached on the CRMA, in practice, the European Council, which sets the general political direction and priorities of the European Union, required a total of 14 discussion meetings before the law was adopted.

Throughout the process, the relevant specialist committee of the European Parliament dealt with 1,172 amendments tabled for the CRMA, of which 107 were put to vote.

All that said, laboriously passing the act is a landmark accomplishment for the EU that will strengthen critical raw materials supply chains for decades to come, albeit not without some foreseeable challenges, in our opinion.

Figure 3: Simplified timeline of the legislative process leading to adoption of the CRMA



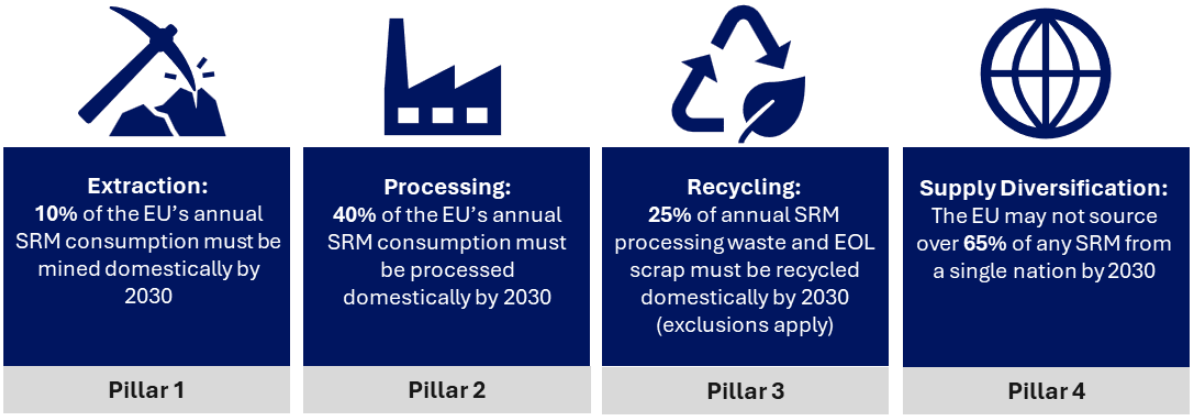
"Lithium and rare earths are already replacing gas and oil at the heart of our economy. By 2030, our demand for those rare earth metals will increase fivefold."

- State of the Union Address by President von der Leyen (2022)

5. The Act in Detail

For SRMs, the CRMA mandates that 10% of the EU's annual consumption must be mined domestically, 40% must be processed domestically, and 25% of all processing waste and end-of-life ("EOL") scrap must be recycled domestically by 2030. Moreover, the EU may not source over 65% of any SRM from a single nation.

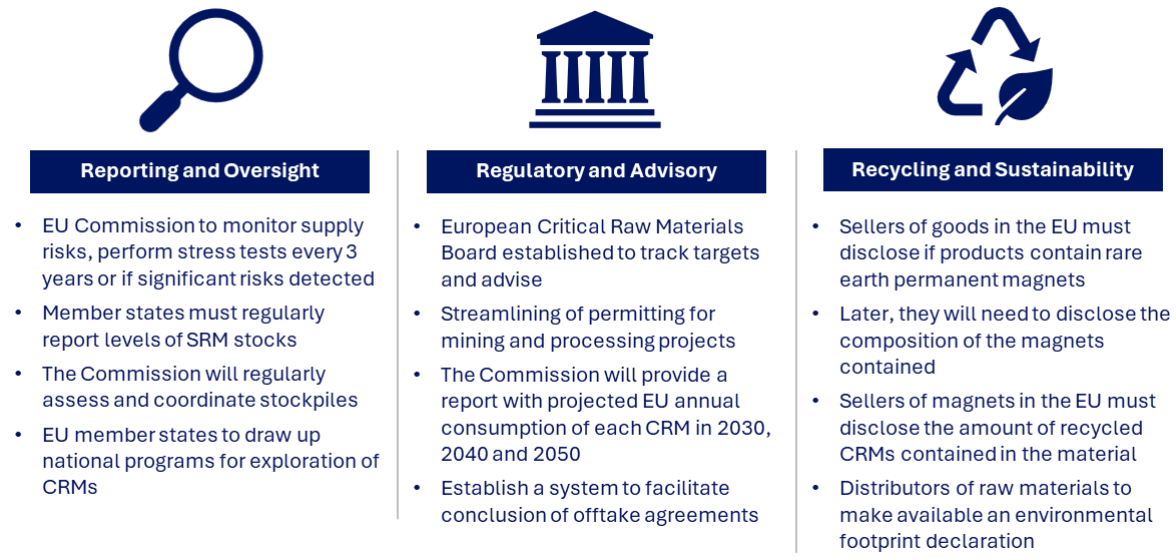
Figure 4: Targets for domestic supply and recycling of Strategic Raw Materials



Among other notable provisions, the EU Commission will monitor supply risks and perform stress tests every three years going forward, or if significant risks are detected, and will regularly monitor, coordinate and assess strategic stockpiles of raw materials. Furthermore, the CRMA directs EU member states to develop national mineral exploration programs for CRMs, which alone could boost exploration and development activity on the continent to unprecedented levels.

To guide industry development, the EU Commission will publish projections of the expected annual consumption of each of the 34 CRMs for the years 2030, 2040 and 2050, with the first expected within 18 months of the act coming into law. Moreover, the Commission will streamline permitting for supply chain development projects and establish a system to facilitate offtake agreements.

Figure 5: Other notable provisions of the CRMA



6. What is the Status Quo?

As the technological importance of rare earths has grown since the 1980s, so too has Europe's dependence on imports from China. Despite the region's long history of mining and being host to numerous prospective deposits, there is currently no rare earth mining in Europe.

Consequently, for finished materials, such as NdFeB magnets, China is responsible for upwards of 90% of the region's supplies, and combined with Myanmar, where a coup is fueling a surge of unregulated mining, upwards of 90% of the rare earth supplies used to produce those magnets.

For lithium, on the other hand, Europe has just a single mine in operation that supplies into the ceramics industry and, as a result, the EU is 79% dependent on imports from Chile.

In recent years, however, Europe's raw materials independence has moved up the political agenda as global crises, such as the COVID-19 pandemic and Russia's invasion of Ukraine, have highlighted the fragility of its supply chains.

Moreover, the U.S. Inflation Reduction Act ("IRA") has fueled fears of an exodus of industry players from the EU due to competitive subsidies being offered by the former. Additional challenges for the EU's competitiveness are, for example, high energy prices and slow bureaucracy. According to state-owned Swedish miner LKAB, "the greatest threat to the mining and processing of materials that are indispensable for society is administrative in nature."

The Rare Earth Value Chain in Europe

Mining:

The CRMA focuses explicitly on those rare earths used to produce permanent magnets for electric vehicle traction motors, wind power generators, robotics, defense and a multitude of other applications.

At present, with only minor production of rare earth permanent magnets in Europe, the region's demand for rare earth inputs to produce magnets (i.e., SRMs) is also minor but expected to grow rapidly in the years ahead as multiple new magnet factories are established.

As new magnet production capacity is developed in the region, Adamas Intelligence forecasts that the EU's domestic demand for rare earth oxides used to produce magnets will approach 5,500 tonnes per annum by 2030, of which a modest 10% would have to be mined in the union, as per the CRMA.

The European Union is host to a growing number of prospective rare earth deposits and advanced development projects, including Per Geijer and Norra Kärr in Sweden, Sokli in southern Finland and Matamulas in central Spain, that make this target attainable. However, lead times to develop new rare earth mines and processing facilities are notoriously long thus without political and financial expedience, the 10% CRMA target may be challenging to achieve by 2030.

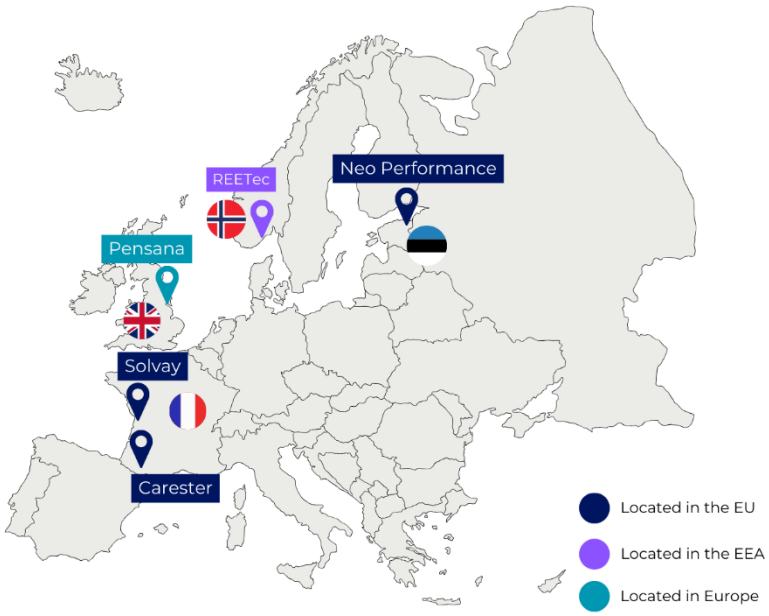
There are also a number of prospective rare earth projects in the European Economic Area ("EEA"), such as Fen in Norway, and in territories related to EU countries, such as Kvanefjeld, Sarfartoq and Kringlerne in Greenland, that could contribute meaningful supply to the EU but would not be considered a domestic source as per the CRMA.

Figure 6: Rare earth exploration and development projects in the EU/EEA/territories

Processing:

The second pillar of the CRMA that relates to domestic processing of rare earths is even more complicated. As per CRMA guidelines, the EU must process at least 40% of its SRM consumption domestically each year by 2030, including all intermediate steps between mining and production of finished materials.

Figure 7: Rare earth processing projects in the EU/EEA

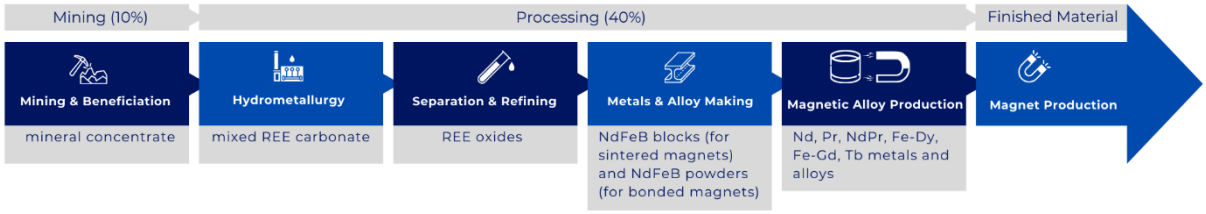


Below is a simplified overview of the mine-to-magnet value chain. As it relates to the figure below, the first pillar of the CRMA mandates that 10% of the EU's SRM consumption must be mined and beneficiated domestically by 2030, but 40% of hydrometallurgical processing, separation, metal and alloy production, and magnetic alloy production must take place domestically.

Inferring from Adamas Intelligence's projections of the region's 2030 demand, the second pillar of the CRMA could be satisfied via existing rare earth separation capacity in Estonia and France, coupled with sufficient hydrometallurgical processing capacity at the front end, and the development of approximately 2,000 tonnes of rare earth metal and alloy production capacity, and 6,000 tonnes of NdFeB magnetic alloy production capacity in the EU.

In the context of the second pillar, the CRMA ambiguously refers to the midstream as the preparation and further processing of raw materials into the form required by industry. However, for each respective SRM, the legal text does not specify the individual processing steps, which as illustrated below, can be many.

Figure 8: Simplified mine-to-magnet value chain



Recycling:

In 2023, nearly 21,000 tonnes of NdFeB magnets were discarded in Europe in end-of-life ("EOL") devices, including mobile phones, hard disk drives, EV traction motors, wind power generators, MRI machines and hundreds of other applications, according to data from Adamas Intelligence.

Of this amount, less than 1% is currently recycled each year owing to logistical, economical and technological hurdles that have historically challenged the viability of recycling efforts.

On the logistical front, the 21,000 tonnes of NdFeB magnets discarded last year were collectively contained in nearly 900 million EOL devices making the sourcing and centralizing of EOL feedstocks a formidable challenge. However, with increasing numbers of EV traction motors, wind power generators and other high intensity applications of NdFeB expected to reach EOL in the years ahead, Adamas expects that recyclers will tap into these waste streams first and foremost.

On the economic front, with an average of just 29 grams of NdFeB per EOL device last year, there is little REE-related value to be recovered from the majority of discarded units, a fact that has hindered large-scale recycling efforts to date. However, by 2030, Adamas projects that high intensity applications will become an increasingly large share of EOL feedstock supplies helping bolster the viability of commercial recycling initiatives.

On the technological front, the liberation of magnets from a heterogeneous array of different EOL devices has historically been a major hurdle for aspiring recyclers, as has been the array of different coatings applied to magnets. However, some emerging recyclers in Europe have developed promising new technologies to address these challenges that Adamas expects could be commercialized this decade.

Looking ahead, Adamas Intelligence projects that EOL NdFeB magnet supply in the EU will reach nearly 31,000 tonnes annually by 2030, of which approximately 11,000 tonnes will be contained in EOL devices that host more than 200 grams of magnets or more – the threshold for magnet loading above which CRMA recycling targets apply.

Of the 11,000 tonnes of eligible EOL scrap, nearly 3,000 tonnes per annum would need to be recycled by 2030 to satisfy CRMA guidelines. Collectively, this could be achieved by recycling all EV traction motors and wind power generators reaching EOL in the region that year, which is plausible, however, the widespread, dissipative nature of this material across the region may present challenges.

Outside the scope of EOL devices, a future mine-to-magnet value chain in Europe would also generate appreciable amounts of process waste and scrap, of which at least 25% would need to be recycled, according to CRMA guidelines.

Along this value chain, Adamas expects that the final step that entails the production of sintered NdFeB magnets will generate the greatest amount of process scrap, in the form of swarf, that could be recycled almost entirely if sufficient processing capacity is established in Europe for this purpose.

In recent years, several government-funded research projects in Europe have promoted the recycling of rare earths, involving domestic companies along the value chain, such as REEtec in Norway, Vacuumschmelze in Germany, Magneti Ljubljana in Slovenia, and Less Common Metals in the UK.

Consequently, some of these companies are working to integrate recycling into their production processes. However, it is important to note that European project partners located outside of the EU will not directly contribute to the recycling targets mandated by the CRMA but could supply processed raw materials into the EU thereby reducing the region's existing overdependence on single-source suppliers.

The Lithium Value Chain in Europe

Mining:

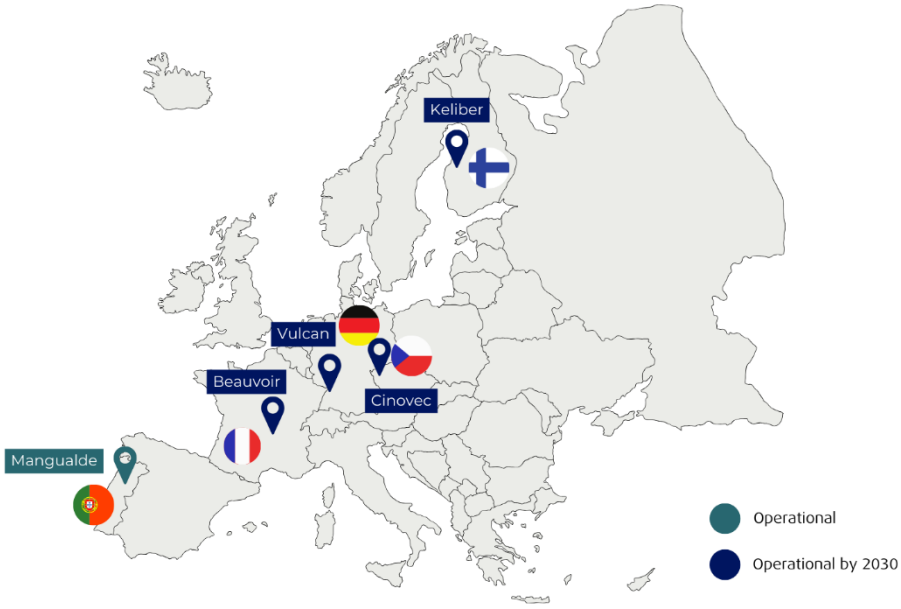
As it relates to lithium, the CRMA focuses explicitly on so-called battery-grade lithium, often consumed in the form of lithium carbonate or lithium hydroxide to produce cathode active materials ("CAMs") for lithium-ion ("li-ion") batteries.

At present, with just modest production of li-ion batteries in Europe, often using imported CAMs, demand for battery grade lithium inputs in the region is also modest but expected to grow rapidly in the years ahead as multiple new battery factories are established.

As production capacity continues to ramp up in the region, Adamas Intelligence forecasts that the EU's domestic demand for battery-grade lithium will surpass 550,000 tonnes of lithium carbonate equivalent ("LCE") per annum by 2030, of which a modest 10% would have to be mined in the union, as per the CRMA.

The European Union is currently host to a single lithium mine in Portugal that produces around 4,000 tonnes of LCE per annum for the ceramics industry, along with a handful of emerging mine producers with potential to come online by 2030. As such, Adamas projects that 15% of EU demand could be satisfied by domestic sources of supply by 2030, significantly exceeding CRMA guidelines.

Figure 9: Lithium mines and exploration and development projects in the EU



Processing:

At present, Europe has no commercially significant lithium processing capacity, but a growing number of facilities planned for the region could put the CRMA target of 40% within reach by 2030, Adamas data shows. However, it is worth noting that Europe currently has nearly three-times more battery manufacturing capacity in the pipeline for 2030 than it needs domestically. In the unlikely event that all or a large portion of this capacity is ultimately built, and Europe becomes a major exporter of batteries, demand for battery-grade lithium on the continent could be materially higher than projected above.

Figure 10: Lithium processing plants planned for development in the EU

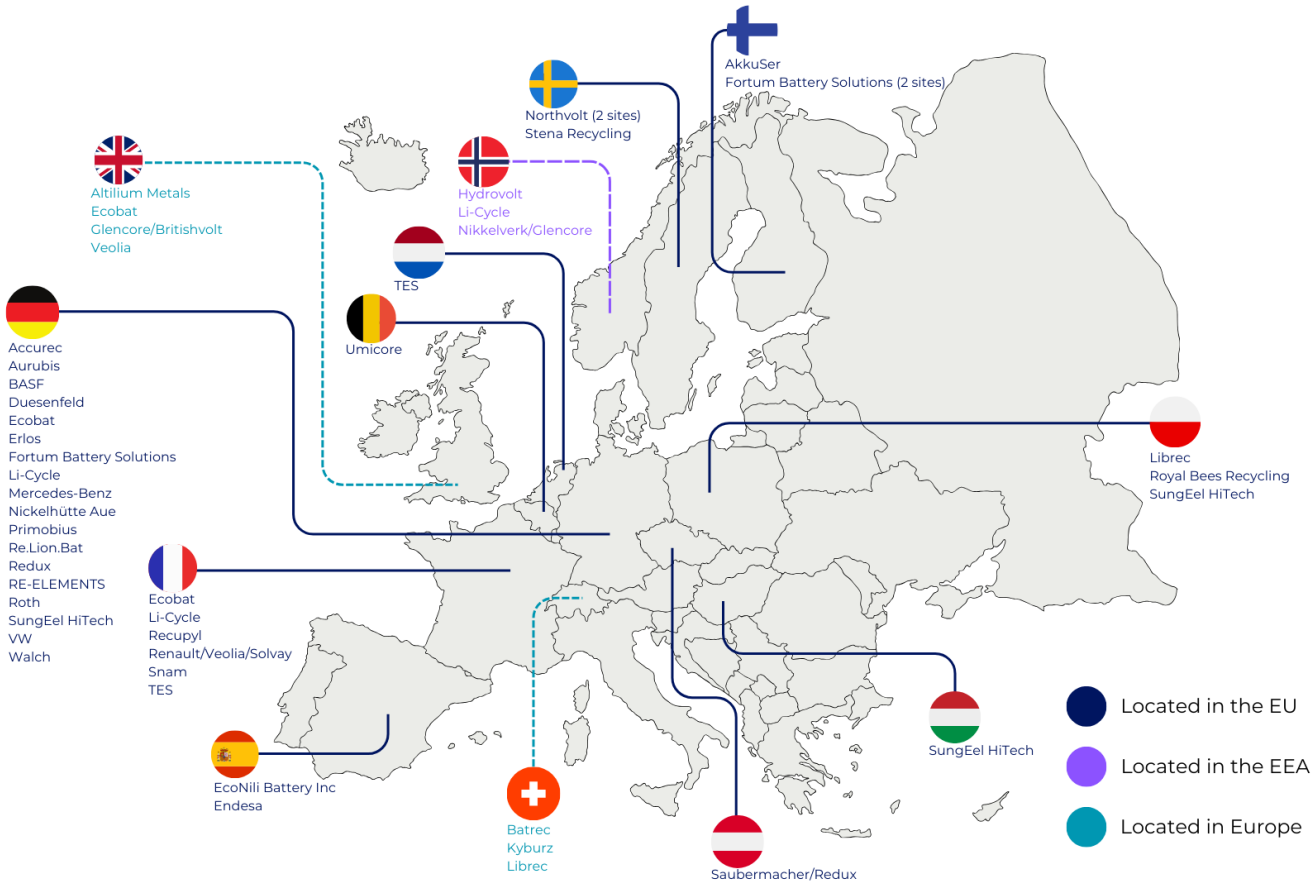
Recycling:

In 2023, around 50% of all batteries that reached EOL in Europe were collected for recycling, according to data from Adamas Intelligence. Between 2023 and 2030, battery recycling capacity in Europe is expected to triple, offering ample capacity to treat the region's EOL supplies and a pathway towards meeting or exceeding CRMA guidelines if the economic incentive for lithium recovery is present.

In addition to EOL battery supplies, the EU's battery factories are also expected to produce appreciable amounts of scrap and production waste in the years ahead, of which at least 25% would need to be recycled according to CRMA guidelines.

Today, most battery recyclers are also focused on tapping into battery manufacturing waste streams, opening the door to domestic partnerships between cell makers and recyclers. Consequently, it is our view that the EU is on track to meet and exceed the CRMA target of recycling 25% of process scrap along the value chain by 2030.

Figure 11: Lithium recycling facilities operating and planned for development in the EU



7. CRMA: Viability Assessment for Rare Earths and Lithium

Rare Earths

A lack of existing mines and long permitting and development lead times for new mines make achieving CRMA targets for domestic rare earth mining a major challenge.

While there are advanced rare earth projects in the EU, such as Norra Kärr in Sweden and Sokli in Finland, it can take five to 10 years to complete environmental studies, feasibility studies, permitting, financing, construction and commissioning without prioritization and imminent support from government.

With the backing of government, be it through subsidies, debt funding, tax incentives and/or accelerated permitting, a single HREE-rich mine, such as Norra Kärr, could meet most or all of the EU's projected 2030 demand for dysprosium and terbium.

Similarly, a single LREE-rich mine, such as Sokli, could meet upwards of 25% of the EU's projected 2030 demand for neodymium, praseodymium, samarium and gadolinium, and all the region's magnet-related demand for cerium.

Further downstream, the EU's prospects for processing are more promising. Based on existing and announced rare earth oxide separation capacity in the region, Adamas projects that, with access to sufficient feedstocks and hydrometallurgical processing capacity at the front end, the EU could process into oxides upwards of 50% of all strategic rare earths it consumes domestically each year by 2030.

However, this oxide production will be all for naught if the EU does not address the absolute lack of rare earth metal and alloy production capacity in the region, and the utter lack of emerging capacity in the pipeline. Government support via subsidies, tax incentives and/or rebates can go a long way to help close this gap and overcome the economic moat that China's metals industry has established, Adamas believes.

Furthermore, broadening the scope of eligible production and processing countries to include those in the European Economic Area, such as Norway, and/or EU territories, such as Greenland, would expand the number of prospective suppliers to the EU, increasing the likelihood of meeting or exceeding CRMA guidelines by 2030.

Lastly, with respect to recycling, Adamas believes that without ample end-to-end processing capacity in the region, the EU may be constrained in its ability to recover rare earths from magnet production swarf and EOL devices, if first it can overcome challenges related to collecting the latter owing to the widespread, dissipative nature of this material across member states.

Mandating the recycling of all devices that contain more than 200 grams of magnets, such as EV traction motors, wind power generators, industrial robots, elevator drives and other high-intensity applications, will significantly increase the EU's likelihood of meeting or exceeding CRMA recycling targets.

Lithium

A healthy pipeline of emerging lithium producers and prospects makes the probability of achieving CRMA targets for domestic mining high in our view.

Similarly, a growing number of emerging lithium chemical and downstream processors makes the CRMA targets for domestic processing within reach.

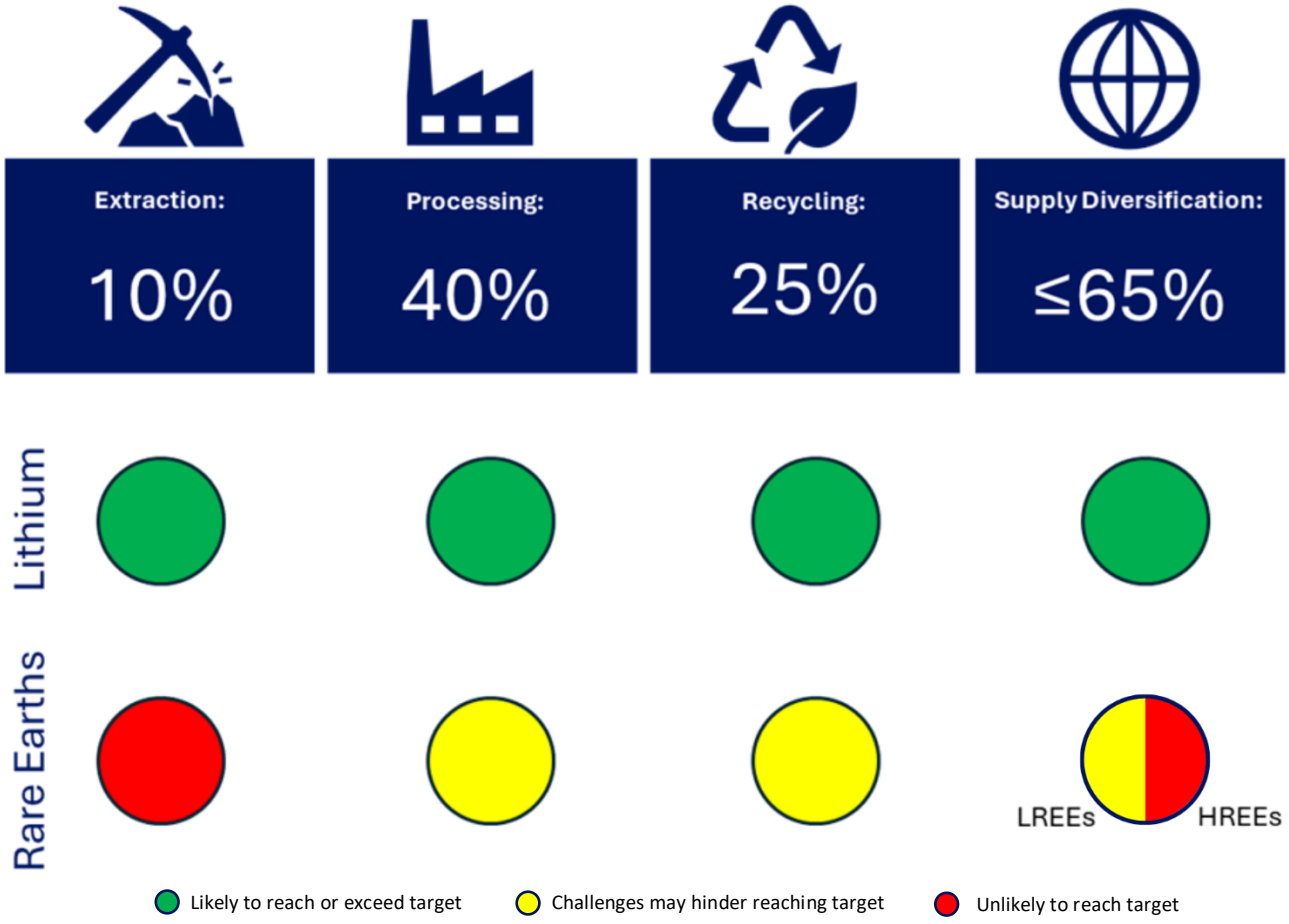
Moreover, a broad landscape of existing and emerging battery recyclers in the EU provides ample capacity to treat the region's EOL supplies and battery manufacturing scrap, thereby offering a pathway towards meeting or exceeding CRMA guidelines for lithium recycling.

Comparison

Overall, the outlook for lithium in the context of the CRMA is positive, with the region well positioned to meet or exceed targets across all four pillars.

Conversely, the outlook for rare earths in the context of the CRMA is more concerning, with the region unlikely to meet 2030 extraction or processing targets across the value chain without an expedited, concerted push from government and industry. Furthermore, without sufficient end-to-end processing capacity in the region, the EU may be constrained in its ability to recover rare earths from magnet production swarf and EOL devices, if first it can overcome challenges related to sourcing and centralizing feedstocks.

Figure 12: Viability of CRMA targets for lithium and rare earths



8. The Road Ahead

Following the CRMA's passing into law, a sequence of targets, assessments and reviews will be carried out to guide the act's success.

Within **9 months** following the CRMA's enactment, single points of contact are to be appointed for approval, planning, exploration, monitoring, and other duties to help streamline approval procedures and maximize efficiency and transparency.

Within **12 months**, companies using strategic raw materials within the union will be identified and cataloged on a continuously updated list. Large manufacturers of cleantech and/or strategically important technologies must conduct a risk assessment at least every three years.

Within **12 months**, member states must set up national exploration programs for CRMs.

Within **12 months**, product, component and waste streams with a relevant CRM recovery potential shall be identified, and within **24 months** products containing threshold amounts of rare earth permanent magnets should be labeled accordingly to better facilitate recycling.

Within **18 months**, the EU Commission will report projected annual consumption of each SRM in the region for 2030, 2040 and 2050 to guide industry development and assess CRMA compliance.

Within **24 months**, and every two years thereafter, the EU's strategic stockpiles must be reviewed and adjustments coordinated among members.

Within **36 months**, and every three years thereafter, a stress test must be carried out for each SRM, or sooner if increasing risks are detected.

Within **36 months**, companies selling rare earth permanent magnets in Europe must disclose the amount of recycled neodymium, dysprosium, praseodymium, terbium, boron, samarium, nickel, and cobalt in their magnets.

Within **42 months**, member states must adopt and implement measures to promote the recovery of critical raw materials from extractive waste, particularly from existing extractive waste facilities.

Within **60 months**, the Commission will define and enforce minimum shares of recycled raw materials to be contained in rare earth permanent magnets sold in the region.

The list of SRMs shall be reviewed and, if necessary, updated every three years following the date of the CRMA's enactment. In addition, after five years, the CRMA's outcomes will be assessed to determine if it has achieved its objectives or needs to be recalibrated.

Figure 13: Simplified timeline of targets, guidelines and reviews following enactment of the CRMA

9. Open Issues and Challenges

Despite the law's broad scope across the value chain, several open issues and vague text passages could hinder implementation.

For example, the European Association of Metals, Eurometaux, urges policymakers to take additional measures, including introducing new EU-level financing, provision of cheaper energy, and a reduction in regulatory burdens, to help secure final investments in the sector.

Moreover, the Federation of German Industries ("BDI") argues that there is insufficient reference to other EU programs and member states in the CRMA and advocates for a rapid, unbureaucratic pooling of existing financial instruments.

Both organizations applaud the act's general provisions but see the lack of concrete financing measures for strategic projects as a major hurdle. In principle, we agree.

Within the act, we identified text passages that would potentially allow EU member states and institutions room to water down provisions.

For example, the first pillar mandating that at least 10% of the EU's annual consumption of strategic raw materials be mined domestically applies only if EU reserves allow for this yet in many countries, there has been little-to-no exploration for these materials to-date. As such, ensuring that each member state carries out a thorough and comparable exploration effort will be challenging, if not contentious, in our view.

Additionally, as noted in the act, the acceleration of permitting processes for strategic projects can be extended in exceptional cases, which are not defined in detail, a fact that will bring no comfort to prospective investors.

Moreover, besides giving the union more breathing room through its ambiguity, the act also allows for critical raw materials and final products to be excluded from certain provisions in special cases. For example, supply chain participants can withhold information regarding strategic stockpiles of specific raw materials when this could compromise defense and national security.

Furthermore, the CRMA calls for the adoption of delegated acts specifying a minimum proportion of recycled raw materials to be used in the manufacture of rare earth permanent magnets but leaves the option to exclude certain products or end-use segments from this obligation without clarifying which. This leaves room for additional discussions and potential bypass provisions to be injected into the CRMA in due course. In addition, while the legislation calls for penalties should targets not be met, it does not specify what those penalties would be.

Challenges related to the above-described uncertainties are further compounded by a strong social resistance to new mine development within the EU despite a broad recognition that import dependence on single sources, such as China for rare earths, is increasing.

This resistance, often referred to as "nimbyism" (an acronym for "not in my backyard"), has been a major hurdle for the Norra Kärr project in Sweden, the Matamulas project in Spain and lithium development prospects in Portugal.

It is, therefore, essential in our view that EU politicians and industry stakeholders seek dialogue with the population to inform, educate and foster acceptance of responsible mining projects in Europe.

About Adamas Intelligence

Founded in 2012, Adamas Intelligence is an independent market research and advisory firm focused on mine-to-application supply chains for critical minerals, metals and materials, such as rare earth elements and battery materials.

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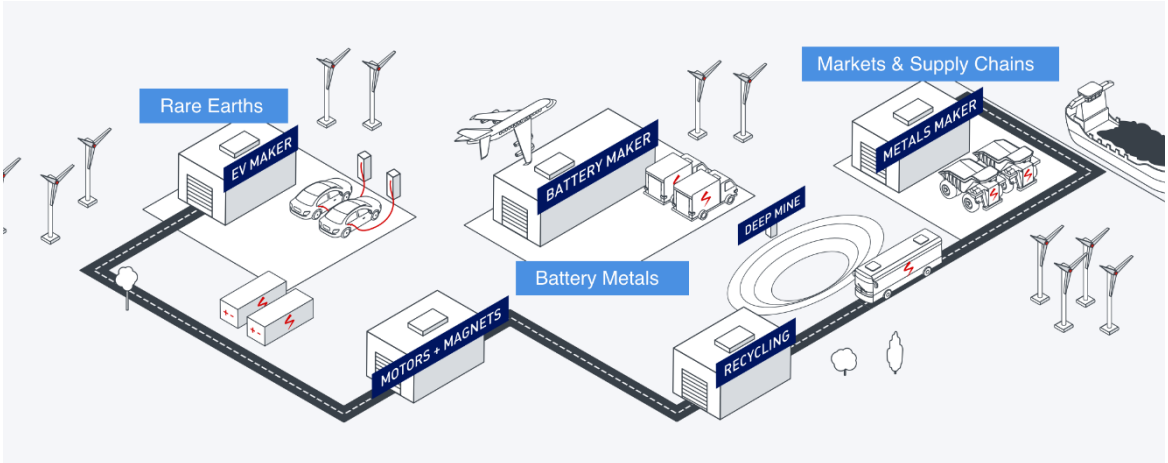

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About TRADIUM

TRADIUM is one of the most renowned suppliers of strategic metals in Europe and specializes in supplying a wide range of innovative industries that use technology metals, rare earths and precious metals. As an owner-managed company, TRADIUM in Frankfurt am Main has been operating successfully internationally for 25 years and supplies industrial companies from over 70 countries.

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About Rawmaterials.net

Rawmaterials.net is a news portal specializing in strategic raw materials and rare earths. The site offers news, background reports, analyses, and interviews on raw materials bundled on one page, up-to-date, and widely accessible. The German-speaking sister portal Rohstoff.net offers similar coverage with a more in-depth scope on Germany and Europe.

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