RSC PP 2026/03
Robert Schuman Centre for Advanced Studies
Florence School of Regulation

POLICY PAPER

Critical Raw Materials and the Industrial Accelerator Act: Coordination Challenges in the EU Supply Framework

Marzia Sesini, Andris Piebalgs

European University Institute
Robert Schuman Centre for Advanced Studies
Florence School of Regulation

Critical Raw Materials and the Industrial Accelerator Act: Coordination Challenges in the EU Supply Framework

Marzia Sesini, Andris Piebalgs

RSC Policy Paper 2026/03

ISSN 1830-1541

Published in June 2026 by the European University Institute.
Badia Fiesolana, via dei Roccettini 9
I – 50014 San Domenico di Fiesole (FI)

Italy

With the support of the Erasmus+ Programme of the European Union

The European Commission supports the EUI through the European Union budget. This publication reflects the views only of the author(s), and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Robert Schuman Centre for Advanced Studies
The Robert Schuman Centre for Advanced Studies, created in 1992 and currently directed by Professor Erik Jones, aims to develop inter-disciplinary and comparative research on the major issues facing the process of European integration, European societies and Europe's place in 21st century global politics. The Centre is home to a large post-doctoral programme and hosts major research programmes, projects and data sets, in addition to a range of working groups and ad hoc initiatives. The research agenda is organised around a set of core themes and is continuously evolving, reflecting the changing agenda of European integration, the expanding membership of the European Union, developments in Europe's neighbourhood and the wider world.

For more information: http://eui.eu/rscas
The EUI and the RSC are not responsible for the opinion expressed by the author(s).

Florence School of Regulation
The Florence School of Regulation is a centre of excellence for applied research, policy dialogue and executive training, with the purpose to enhance economically and socially sound energy and climate regulation in Europe and worldwide. Founded in 2004 by three European regulators in the energy sector, the FSR has been providing a unique forum where regulators, utilities, policy-makers and academics meet, discuss and get trained. The FSR sits as a programme of the Robert Schuman Centre for Advanced Studies of the European University Institute in Florence, Europe's intergovernmental institution for doctoral and postdoctoral studies and research.

Florence School of Regulation, European University Institute Via Boccaccio 121, I-50133 Florence, Italy
FSR.Secretariat@eui.eu.
+39 055 4685 878

Abstract

This paper examines how the EU framework for critical raw materials operates under conditions of accelerated industrial demand introduced by the Industrial Accelerator Act. It builds on the work of the European Court of Auditors and focuses on how existing constraints become more binding when demand is actively driven by policy. The analysis highlights an asymmetry between the mobilisation of demand and the capacity of supply to respond, leading to timing and coordination challenges across the value chain. A comparison with the United States is used to illustrate how different policy configurations address similar constraints. The paper argues that the main issue lies not in the absence of instruments, but in how they operate together under these conditions, and identifies areas where targeted adjustments could improve policy effectiveness.

Keywords

Critical Raw Materials, Industrial Policy, Supply Security, Strategic Dependencies, Industrial Resilience

1. Introduction

The interaction between industrial demand and supply security in the EU's critical raw materials framework is increasingly shaped by the acceleration of industrial deployment introduced by the Industrial Accelerator Act (IAA). This can be interpreted in different ways.

One perspective is to view it as a complex and evolving policy area, where uncertainty remains high and where a cautious and incremental approach may be appropriate. Another is to consider that, under accelerated industrial deployment, existing constraints risk becoming more binding, and that a more coordinated approach may be needed to ensure that supply develops at the required scale and pace.

The paper is situated in this second perspective. Building on the European Court of Auditors' analysis and examines how the identified limitations in the current framework affect the capacity of the system to respond when demand is actively driven through policy (Section 3). In this context, it highlights an asymmetry whereby demand can be mobilised relatively quickly, while supply depends on slower processes (Section 4).

It argues that the main issue lies not in the absence of policy instruments, but in how they operate together under these conditions. On this basis, also with the help of an illustrative case (Section 5), it identifies areas where targeted adjustments could improve how supply responds to demand, without requiring a redesign of the overall framework (Sections 6 and 7), and then it concludes (Section 8).

2. Policy Context

Critical raw materials (CRMs) have become increasingly important within the European Union's broader industrial, energy and economic security agenda. Their role is closely linked to the EU's objectives of strengthening industrial competitiveness, reducing strategic dependencies, and advancing the transition toward a climate-neutral economy. In this context, the Industrial Accelerator Act (IAA) and the Critical Raw Materials Act (CRMA) represent complementary components of a wider policy framework aimed at supporting industrial transformation and supply resilience[1].

The Industrial Accelerator Act focuses primarily on accelerating industrial deployment and supporting the clean transformation of strategic sectors, including energy intensive industries, net-zero technology manufacturing and the automotive sector. Its objective is to strengthen Europe's industrial competitiveness and support the scaling-up of low-carbon industrial production through regulatory simplification, investment facilitation, and demand-side measures such as sustainability requirements and lead markets for low-carbon products.

At the same time, many of the sectors targeted by the IAA depend heavily on secure access to critical raw materials. Technologies associated with electrification, renewable energy, batteries, hydrogen production, digitalisation and advanced manufacturing require substantial quantities of materials such as lithium, cobalt, graphite, copper, rare earth elements, platinum group metals and semiconductors[2]. As industrial deployment accelerates, reliable access to these inputs becomes increasingly important not only from a decarbonisation perspective, but also from the perspective of industrial resilience and strategic autonomy.

The Critical Raw Materials Act addresses this dimension by focusing on the supply side of strategic value chains. Its objective is to strengthen access to critical raw materials through a combination of domestic extraction and processing, diversification of imports, recycling and circularity measures,

1 European Commission, *Communication on the Clean Industrial Deal: A Joint Roadmap for Competitiveness and Decarbonisation*, COM(2025) final; Regulation (EU) 2024/1252 establishing a framework for ensuring a secure and sustainable supply of critical raw materials ("Critical Raw Materials Act")

2 International Energy Agency, The Role of Critical Minerals in Clean Energy Transitions (2021)

monitoring of supply risks, and international partnerships. The CRMA establishes benchmarks for domestic extraction, processing, recycling and diversification, while also introducing the concept of "strategic projects" intended to facilitate the development of key supply chain capacities within the European Union[3].

Taken together, the IAA and the CRMA address different but interconnected dimensions of the same industrial ecosystem. The CRMA seeks to improve the security and resilience of supply, while the IAA aims to accelerate industrial demand and deployment in sectors dependent on those materials. In this sense, the two initiatives can be understood as complementary elements of a broader EU industrial strategy.

At the same time, the interaction between industrial acceleration and supply security increasingly takes place in a more complex international environment characterised by geopolitical tensions, concentrated global supply chains, and growing competition for access to strategic resources. Global production and processing capacities for many critical materials remain highly concentrated in a limited number of countries, while the development of alternative supply chains requires substantial investment, long lead times, and technological capabilities.

The European Court of Auditors (ECA) has examined several dimensions of the EU framework for critical raw materials supply security. Its analysis acknowledges the importance of the CRMA as a strategic framework but also identifies a number of implementation challenges related to data availability, monitoring, investment conditions, supply diversification and domestic production capacity[4]. The Commission has broadly accepted these recommendations and committed to strengthening implementation, including through improved monitoring, investment support and circular economy measures[5].

An additional dimension concerns technological development and innovation. Ongoing research and industrial experimentation may gradually reduce dependence on specific critical raw materials through substitution, improvements in material efficiency, or alternative production technologies. The pace and direction of innovation therefore remain relevant factors for assessing future supply requirements and the long-term effectiveness of policy measures.

Against this background, the interaction between accelerated industrial deployment and supply security increasingly raises questions not only about the availability of individual policy instruments, but also about how different parts of the framework operate together under conditions of growing demand and geopolitical uncertainty. The following section therefore examines how the current framework performs under these conditions and where implementation challenges become more visible.

3. Assessment of Current EU Policy

The adequacy of the current EU policy framework can be assessed by combining the diagnostic provided by the **European Court of Auditors**[6] (ECA) with the demand and deployment objectives introduced by the Industrial Accelerator Act[7] (IAA). The Court identifies a set of structural weaknesses in the EU's approach to critical raw materials, including limitations in data, target-setting, policy effectiveness and supply diversification. These weaknesses have so far been analysed primarily from a resource security perspective. The IAA introduces a different dimension: it accelerates industrial

3 Regulation (EU) 2024/1252 establishing a framework for ensuring a secure and sustainable supply of critical raw materials

4 European Court of Auditors, Special Report on the security of supply of critical raw materials in the EU, 2025

5 European Commission, Replies to the European Court of Auditors' Special Report on critical raw materials, 2025

6 European Court of Auditors, *Special Report 04/2026: Critical raw materials for the energy transition (2026), available at:* https:/www.eca.europa.eu/ECAPublications/SR-2026-04/SR-2026-04_EN.pdf

7 European Commission (2026), *Proposal for a Regulation on establishing a framework of measures for accelerating industrial capacity and decarbonisation in strategic sectors (Industrial Accelerator Act), COM(2026)100, 4 March 2026, available at:* https://single-market-economy.ec.europa.eu/publications/industrial-accelerator-act_en

demand for critical raw materials, without directly addressing the underlying constraints. As a result, it serves as a stress test for the existing policy framework, revealing the extent to which current instruments are able to support the scale and speed of the industrial transformation envisaged.

The assessment focuses in particular on four dimensions of the current framework that broadly relate to: the analytical foundation and role of EU industrial policy initiatives; the effectiveness of investment and financing mechanisms; and the contribution of international partnerships to supply diversification, and identifies related issues.

A first issue concerns the **data and demand projections** underlying the policy framework. The Court highlights limitations in data availability, gaps in trade statistics and weaknesses in demand projections for strategic raw materials. These elements are not only technical shortcomings. They directly affect the ability to anticipate future needs, plan the scale-up of supply, and monitor the implementation and effectiveness of existing instruments over time, particularly where responsibilities are distributed across different levels of governance. Under the IAA, where industrial deployment is expected to accelerate, these limitations translate into a risk of misalignment between industrial investment and material availability.

A second issue relates to the **role of targets** and their interaction with EU industrial policy initiatives. The CRMA[8] establishes benchmarks for domestic extraction, processing, recycling and diversification. However, these targets are non-binding and not clearly linked to the broader objectives of EU industrial and energy policy[9]. In the context of the IAA, this limits their usefulness as coordination tools. While industrial demand is shaped through regulatory incentives and lead markets, there is no instrument that translates these demand signals into coordinated supply development.

A third issue concerns **policy effectiveness**, including the role of investment and financing mechanisms. The Court finds that EU funding is distributed across multiple instruments and programmes, with limited tracking of outcomes and no clear assessment of its impact on supply security. This creates a lack of visibility on whether existing measures are delivering results. In addition, the development of projects across the value chain, from extraction to processing, is constrained by high upfront costs, long development timelines and uncertain revenue prospects, which make them difficult to finance. For example, several lithium mining projects in Europe have faced delays due to uncertain profitability[10], while investments in processing and refining capacity remain limited in the absence of stable demand and price signals11. If under gradual change, these limitations may remain manageable; under accelerated industrial deployment, they become more binding, affecting both the scale and timing of supply responses.

A fourth issue relates to **external supply and the contribution of international partnerships** to diversification. Despite increased attention to partnerships and trade agreements, including the establishment of 14 strategic partnerships between 2021 and 2025[12], the Court finds that progress in diversifying supply sources remains limited. Imports from these partner countries declined for 13 critical materials between 2020 and 2024, including fluorspar (−100%), cobalt (−66%) and lithium (−18%)[4]. At the same time, supply remains highly concentrated, with individual third countries accounting for the vast majority of EU supply for specific materials (e.g., Türkiye provides 99% of EU

8 European Commission, *Critical Raw Materials Act, available at:* https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en

9 Any change in the direction of more binding targets should be carefully designed so as to avoid making targets so specific as to reduce the room for entrepreneurial freedom in pursuing innovative ways of increasing competitiveness while respecting the same European objectives

10 Fraunhofer ISI (2025), *Recycling capacities for lithium-ion batteries will exceed demand in Europe for the time being, available at*: https://www.isi.fraunhofer.de/en/blog/themen/batterie-update/batterie-recycling_europa_kapazitaeten_bedarf_update_2025.html?utm_source=chatgpt.com

11 MiningSEE (2025), *Europe's lithium and nickel refining gap undermines raw materials sovereignty despite mining push, available at*: https://www.miningsee.eu/europes-lithium-and-nickel-refining-gap-undermines-raw-materials-sovereignty-despite-mining-push/?utm_source=chatgpt.com

12 European Commission, *Raw materials diplomacy, available at*: https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/raw-materials-diplomacy_en

boron, while China accounts for 97% of magnesium and 71% of gallium)[13]. This creates exposure to external risks, and as demand increases under the IAA, this exposure does not decrease. On the contrary, it becomes more significant, as a larger share of industrial activity depends on inputs sourced under uncertain geopolitical and market conditions.

Lastly, the Court highlights **remaining constraints on domestic supply**. Exploration activity remains limited, with the EU accounting for around 2–3% of global exploration expenditure[14]. Processing capacity is also insufficient, with the EU currently covering only a limited share of global refining for key materials[15], while projects face difficulties in securing financing due to high upfront costs and uncertain revenues[16]. Permitting procedures also remain lengthy and complex, with mining projects often requiring 10 to 15 years to become operational, despite recent efforts to streamline them under the Critical Raw Materials Act[17]. Hence, the issue may not only concern the existence of procedures themselves, but also their implementation, coordination, and interaction across different levels of governance. At the same time, permitting constraints may also reflect substantive tensions between industrial development, environmental protection, land use, and local acceptance. In some cases, accelerating supply development may therefore require clearer prioritisation between competing policy objectives, rather than procedural streamlining alone.These constraints directly affect the ability to scale up domestic production. In the context of the IAA, which aims to accelerate industrial deployment, this creates a timing mismatch, where industrial demand can be stimulated relatively quickly, while supply-side responses remain slow and uncertain.

As a result, the weaknesses identified by the CA become more directly relevant for the implementation of industrial policy, as they affect the system's ability to anticipate future demand for critical raw materials, coordinate the development of supply, and monitor the effectiveness of existing instruments. In its current configuration, **the framework might not provide the conditions to align** critical raw materials supply with the scale and timing of industrial deployment under the IAA. In this context, the risk that these limitations cannot be effectively managed increases. To this end, material needs may not be adequately anticipated due to insufficiently robust demand projections. At the same time, the ability to ensure that supply can respond to demand is limited by the absence of mechanisms to reflect this increase in industrial demand in the development of supply (e.g., offtake mechanisms). Finally, limited monitoring reduces the capacity to assess whether existing instruments are delivering the expected outcomes.

These issues point to a set of policy areas where targeted adjustments could improve how supply responds to demand, without requiring a redesign of the overall framework.

13 European Court of Auditors (2026), *Critical raw materials for the energy transition – Not a rock-solid policy, available at:* https://www.eca.europa.eu/en/publications?ref=SR-2026-04

14 European Commission (2023), *Staff Working Document accompanying the Critical Raw Materials Act, available at:* https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023SC0161

15 *Europe's refining gap in numbers, available at:* https://www.miningsee.eu/europe-races-to-expand-refining-and-processing-capacity-to-break-its-critical-minerals-bottleneck/

16 International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions, available at*: https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions

17 International Energy Agency (IEA), *The Role of Critical Minerals in Clean Energy Transitions, available at*: https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions

4. Illustrative Perspective: EU-US Cooperation and Lessons from the United States

The evolving cooperation between the European Union and the United States on critical raw materials provides an important additional dimension to the current policy context. In April 2026, the EU and the US signed a Memorandum of Understanding (MoU) on a Strategic Partnership on Critical Minerals and agreed an EU–US Action Plan for Critical Minerals Supply Chain Resilience[18].

This development is particularly relevant in light of the coordination challenges identified in the EU framework. While the US approach remains structurally different from the EU model, the new transatlantic cooperation suggests increasing convergence around the need to combine **industrial policy, supply security, and market shaping instruments** in response to geopolitical and economic pressures.

Rather than serving as a benchmark or a directly comparable case, the US approach and the emerging EU-US cooperation are considered here as illustrative examples of how policy instruments can be combined to address constraints in supply development under conditions of strategic and industrial pressure.

The Memorandum of Understanding recognises that critical minerals are “strategic assets integral to national security, industrial competitiveness, energy challenges and geopolitics” and establishes a framework for cooperation across the full value chain, including exploration, extraction, processing, refining, recycling and recovery[19]. It also foresees cooperation on investment de-risking, geological mapping, permitting, stockpiling, recycling and innovation, as well as cooperation related to export restrictions and rapid response mechanisms for supply disruptions.

The accompanying Action Plan is particularly relevant from the perspective of policy coordination. It introduces the possibility of coordinated trade and market instruments, including border-adjusted price floors, standards-based markets, price gap subsidies and offtake agreements[20]. These are precisely the types of mechanisms that can strengthen the connection between **industrial demand and supply development**, thereby addressing some of the timing and investment challenges identified in the EU framework.

At the same time, the broader U.S. approach to critical raw materials continues to provide a relevant reference point for understanding how different policy instruments can be combined to support supply-chain resilience.

In this sense, the focus is not on assessing the effectiveness of the U.S. approach as such, but on examining how different instruments are combined to link supply side support with demand side signals, and how this may inform the coordination challenges identified in the EU context.

To this end, the U.S. approach to CRMs is defined by a shift in policy paradigm, from market-led resource allocation to state-supported strategic mobilization. CRMs are explicitly framed as essential to national security, industrial sovereignty, and geopolitical competition, which provides the basis for **more direct public intervention** across the entire value chain[21].

Between 2021 and 2026, the United States mobilized approximately $40 billion in public funding for CRM-related projects. This substantial financial commitment reflects the recognition that CRM supply chains cannot be secured through market forces alone, particularly given long project timelines, high

18 Memorandum of Understanding between the European Union and the United States of America on a Strategic Partnership on Critical Minerals, Washington, 24 April 2026; United States–European Union Action Plan for Critical Minerals Supply Chain Resilience

19 Memorandum of Understanding between the European Union and the United States of America on a Strategic Partnership on Critical Minerals, Section I and II

20 United States–European Union Action Plan for Critical Minerals Supply Chain Resilience.

21 The White House, “Fact Sheet: Securing a Made in America Supply Chain for Critical Minerals,” 2022; U.S. Department of Energy, Critical Materials Strategy; Peter Handley and Thibault Michel, *The US’s Critical Mineral Offensive Strategy* (Paris: Ifri, March 2026).

capital intensity, and exposure to price volatility. EU-level and national support instruments remain significantly below U.S. levels[22].

Institutionally, the U.S. strategy is characterized by strong inter-agency coordination. Key actors are the Department of Defense (DoD) and the Department of Energy (DoE). The DoD supports projects linked to national security and utilizes the Defense Production Act (DPA) to finance strategic industries. The DoE funds processing, manufacturing, and recycling initiatives. Meanwhile, the Export-Import Bank (EXIM) and the U.S. International Development Finance Corporation (DFC) provide loans, guarantees, and international investment support. Together, these institutions form a coherent financing and policy ecosystem capable of acting rapidly and at scale.

A key strength of the U.S. strategy lies in its diversified and flexible financial toolkit, designed to address the specific risks associated with CRM projects. Public support extends beyond traditional subsidies to include **equity investments, concessional loans and guarantees, and blended finance structures** that combine public and private funding. This approach is particularly important for midstream activities where technological complexity and uncertain margins often deter private investment[23].

Beyond financing, the U.S. actively shapes market conditions to support supply-chain development. Key instruments include minimum price guarantees to protect producers from volatility, long-term offtake agreements often backed by government commitments, and conditional funding requirements such as minimum private cost-sharing[24].

Such instruments help reduce the coordination and investment challenges associated with uncertain demand, volatile pricing, and long project development timelines for alternative supply chains. Without these mechanisms, many CRM projects would struggle to reach final investment decisions.

A distinctive aspect of the U.S. strategy is its emphasis on demand-side instruments, which complement supply-side support. Public procurement is used strategically to create demand for domestic or allied origin materials. “Buy America” provisions require federally funded projects to prioritize domestic content, strengthening local supply chains[25].

The recent EU–US Action Plan suggests that some elements of this approach may increasingly become part of the transatlantic policy discussion. In particular, the references to standards based markets, joint public procurement, coordinated trade measures and offtake agreements indicate a growing recognition on both sides of the Atlantic that market shaping instruments may be necessary to support resilient supply chains.

Strategic stockpiling has also become a more visible element of both the U.S. approach and the new EU–US cooperation framework[26]. The MoU explicitly refers to cooperation on stockpiling and rapid response mechanisms. This is particularly relevant in a context where supply chains remain highly concentrated and exposed to geopolitical risks.

Across these elements, a common feature of the evolving EU–US approach is the increasing combination of **financial support, market-shaping instruments, and demand-side measures.**

22 Peter Handley and Thibault Michel, *The US’s Critical Mineral Offensive Strategy: How Can Europe Step Up?* (Paris: Ifri, March 2026); Marc-Antoine Eyl-Mazzega, Vincent Donnen, and Thibault Michel, *Financial Tools for Boosting Resilience of CRM Value Chains and Strategic Stockpiling* (Paris: Ifri, March 2026)

23 Marc-Antoine Eyl-Mazzega, Vincent Donnen, and Thibault Michel, Financial Tools for Boosting Resilience of CRM Value Chains and Strategic Stockpiling (Paris: Ifri, March 2026); Peter Handley and Thibault Michel, The US’s Critical Mineral Offensive Strategy (Paris: Ifri, March 2026).

24 U.S. Department of Energy, “Notice of Funding Opportunity for Domestic Critical Materials Processing, Recycling, and Manufacturing,” March 2026; U.S. Department of Defense, Defense Production Act Investments in Critical Minerals, FY2025.

25 Peter Handley and Thibault Michel, The US’s Critical Mineral Offensive Strategy: How Can Europe Step Up? (Paris: Ifri, March 2026).

26 U.S. Department of State, “Critical Minerals Ministerial Fact Sheet,” February 2026; Marc-Antoine Eyl-Mazzega, Vincent Donnen, and Thibault Michel, *Financial Tools for Boosting Resilience of CRM Value Chains and Strategic Stockpiling* (Paris: Ifri, March 2026).

This creates a more direct link between expected demand and investment decisions and reduces uncertainty for project development.

In this sense, both the U.S. experience and the new EU–US cooperation framework illustrate how different instruments can be combined to address the timing and coordination challenges identified in the EU context, highlighting several areas where EU policy could be strengthened:

- First, the U.S. experience points to the role of a broader financial toolkit, including equity investments and public-private investment vehicles. Faster and more flexible capital deployment appears particularly relevant in high-risk segments such as processing and refining.
- Second, the U.S. approach also underlines the role of market shaping instruments, such as price floors, contracts for difference, and long-term offtake agreements in improving project bankability and reducing exposure to market volatility. The EU–US Action Plan now explicitly refers to several of these instruments.
- Third, the use of demand side instruments suggests that public procurement and subsidy schemes can play a role in supporting supply diversification, for example through domestic or "trusted origin" criteria.
- Fourth, both the U.S. framework and the new transatlantic partnership indicate a growing role for coordinated strategic stockpiling as part of a broader approach to supply security.
- Finally, the EU–US partnership illustrates the increasing importance of aligning trade, investment, and industrial policies in external engagement. Partnerships with third countries are increasingly linked to investment support, standards, and supply-chain resilience objectives.

The U.S. approach to critical raw materials, together with the recent EU–US partnership, reflects a broader shift toward more coordinated and strategically oriented industrial policy in response to geopolitical and economic challenges.

Rather than providing a model to be replicated, this comparison helps clarify the nature of the coordination problem in the EU framework. In particular, it highlights how the interaction between **demand, investment, and supply development** can be structured differently depending on the policy configuration. At the same time, the new transatlantic cooperation suggests that some of these instruments may increasingly become part of the EU policy discussion itself.

5. Policy Reccomendations

This section addresses the weaknesses identified in Section 3, informed by the comparative insights from Section 4, and presents options to strengthen how the supply of critical raw materials responds to the scale and timing of industrial deployment under the IAA. The options do not redesign the existing framework, but focus on areas where current instruments remain insufficient. The options can be grouped into three areas:

Analytical capacity

- *Improving data availability and demand projections for critical raw materials.* As outlined above, limitations in the analytical basis of the framework affect the ability to anticipate material needs. Strengthening data availability, linking demand projections more directly to industrial deployment, assessing forecasts of technical innovation could provide a more consistent basis for both policy and investment planning, while improving the interaction between existing instruments over time.

Investment and project development:

- *Expansion and effective coordination of investment and financing instruments for projects across the value chain, including extraction, processing and recycling.* As previously identified, financing constraints persist, and the effectiveness of existing instruments remains difficult to assess. Improving the coherence and visibility of EU funding instruments and facilitating access to finance for strategic projects would help address these constraints. This includes the potential use of a broader range of financial instruments, as well as mechanisms that reduce exposure to market uncertainty, such as long-term offtake arrangements. Aligning financing timelines with industrial deployment could also reduce the risk of supply bottlenecks and help establish a clearer link between industrial demand and supply development.
- *Acceleration of permitting procedures for strategic projects.* As discussed earlier, permitting remains a key constraint affecting the timing of domestic supply responses. Project development timelines remain long and uncertain, often extending over a decade, despite recent efforts to streamline procedures under the CRMA. Further measures to reduce delays and improve predictability for project developers, including better coordination across levels of governance, would directly affect the feasibility and timing of supply expansion.

Supply resilience and diversification:

- *Establishment of an EU strategic raw materials reserve.* As highlighted above, external supply remains highly concentrated, and diversification efforts have delivered partial results to date. A reserve could mitigate short-term supply disruptions and reduce exposure to external shocks, particularly as demand increases, while complementing existing efforts to diversify supply through international partnerships, similar to the buffering role observed in U.S. stockpiling mechanisms. Its design would need to reflect differences across materials and market conditions, as well as its interaction with existing market-based allocation mechanisms.
- *Strengthening recycling and circular economy policies*. As demand increases, expanding the recovery and reuse of critical materials can reduce pressure on primary supply and improve system resilience. This would require both regulatory measures and targeted support for the development of recycling capacity and technologies, particularly in segments where secondary supply can contribute meaningfully over time.
- *Strengthening international partnerships and external coordination*. International partnerships can play an important role in reducing exposure to external risks and supporting supply diversification. However, their contribution depends on their ability to provide more stable and predictable conditions for access to materials and to support broader supply-chain resilience objectives.

The options outlined above reflect the fact that the pace at which industrial demand is driven and the conditions under which supply can respond might not always be connected. Demand can be mobilised relatively quickly through policy, while supply depends on investment cycles, permitting timelines and external conditions that evolve more slowly and with greater uncertainty. Therefore, the effectiveness of the framework depends on both the availability of instruments and how they operate together over time. Strengthening individual elements might be a necessary, but not sufficient, condition if these interactions are not taken into account.

6. Conclusion

This policy brief demonstrates that, while the European Union has developed a comprehensive framework to address critical raw materials (CRMs) supply and industrial transformation, its effectiveness is limited by persistent misalignment between supply-side and demand-side policies.

The Industrial Accelerator Act intensifies both the scale and temporal urgency of industrial demand for CRMs, whereas the existing supply framework, centred on the Critical Raw Materials Act (CRMA), remains insufficiently adaptive. Under conditions of accelerated industrial deployment, previously identified structural weaknesses, including deficiencies in data quality, target-setting, financing, and domestic supply development, become increasingly binding constraints.

The primary issue is therefore not the absence of policy instruments, but the structural disconnect between rapidly mobilised demand and comparatively inert supply responses. Demand can be activated through regulatory and market-based mechanisms, while supply is shaped by long investment horizons, complex permitting regimes, and volatile global market conditions. This asymmetry generates systemic risks in the form of supply bottlenecks, reinforced strategic dependencies, and potential delays to the green transition.

Comparative evidence from the United States indicates that more integrated and state-supported approaches, combining financial instruments, market-shaping policies, demand-side measures, and strategic stockpiling, can improve coordination across the value chain and reduce investment uncertainty.

Within the EU context, enhancing policy effectiveness does not require a wholesale redesign but rather targeted recalibration. This entails strengthening informational and analytical capacities, particularly in relation to data quality, monitoring, and demand forecasting; deepening the integration of industrial and supply policies; improving access to finance while mitigating investment risks; accelerating permitting and implementation processes; and reducing external dependencies through diversification, recycling, and strategic reserves.

Ultimately, achieving the Industrial Accelerator Act's objectives depends on the EU's ability to synchronise the evolution of the CRM supply with the scale, timing, and spatial configuration of industrial demand. Such a configuration constitutes a necessary condition for the emergence of a resilient, competitive, and climate-neutral European industrial system.

Authors

Marzia Sesini
Florence School of Regulation, European University Institute
marzia.sesini@eui.eu

Andris Piebalgs
Florence School of Regulation, European University Institute
andris.piebalgs@eui.eu