ecno
European Climate
Neutrality Observatory

Clean Industrial Transition Monitor

Moving to a clean industrial future in Europe

Progress, Gaps and Policy Implications
of the Clean Industrial Deal

Executive summary

Europe is under pressure, economically and politically. Policymakers are seeking to boost EU independence and resilience to preserve its prosperity in a volatile international environment. The transition to a clean and competitive industrial base is at the heart of this strategy. ECNO has analysed its real-world progress and the proposed policies under the Clean Industrial Deal.

Main insights and recommendations

1. **There is progress towards a clean and competitive industry in Europe.** However, the results show that the transition still faces major weaknesses, including insufficient demand for clean products and materials, gaps in infrastructure development, limited financing, and difficulties diversifying the supply of critical raw materials.

2. **The Clean Industrial Deal has the potential to close important policy gaps:** The CID represents the EU's most comprehensive attempt so far to create the conditions for a competitive clean industrial base in Europe. The analysis shows that its >80 dossiers largely cover the weaknesses identified.

3. **Focus on demand-side policies marks an important shift in EU industrial strategy:** The Industrial Accelerator Act (IAA), the Public Procurement Act and the Corporate Fleets initiative aim to create lead markets for clean materials and technologies. Implemented effectively, these policies could provide the reliable demand signals needed to unlock investment in low-carbon production and to scale new industrial value chains in Europe.

4. **A robust ETS carbon price remains the foundation of Europe's clean industrial transition:** The EU Emissions Trading System (ETS) is the central economic signal underpinning the entire EU climate and industrial policy framework. It helps narrow the cost gap between fossil-based and low-carbon production and provides financing for industrial decarbonisation projects.

5. **Fair transition financing is still missing from the package:** Positive trends in job creation and employment rates highlight the potential of the clean transition to generate new economic opportunities across Europe. To sustain this momentum, long-term financing beyond the Recovery and Resilience Facility and the Just Transition Fund will be needed. Successor instruments within future cohesion policy frameworks should support regions in harnessing the opportunities through economic diversification and reskilling.

6. **An economic and security imperative to safeguard the long-term industrial vision against short-term measures:** Short-term political measures – such as lowering carbon costs, weakening climate legislation or focusing primarily on deregulation – could weaken Europe's industrial base over the long-term. Accelerating electrification and renewable energy deployment, while moving away from imported fossil fuels, is Europe's long-term strategy to boost industrial competitiveness and economic resilience.

7. **Europe's clean industrial strategy must continue to look beyond its borders to succeed:** European industries rely heavily on exporting industrial products. To sustain competitiveness and ensure it does not transition in isolation, the EU must maintain leadership and forge strategic partnerships for a global clean transition. By staying committed to its vision and policies, the EU can signal reliability, influence international standards, and open opportunities for its clean industrial products abroad.

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1 Understanding the clean industrial transition

Boosting competitiveness and economic resilience

Europe's economy is under pressure from high energy costs and weak growth. At the same time, geopolitical tensions, trade disputes, and shifting supply chains are adding to global uncertainty. EU leaders are trying to mount an effective response to these difficult circumstances. The EU's Competitiveness Compass recognises decarbonisation as a core objective in this context, as a means of enhancing EU competitiveness while boosting economic resilience and independence – and in this follows the recommendations of the Draghi report.

Europe's industry sits at the centre of today's challenging economic and political landscape. The industrial sector – including manufacturing and construction – accounts for around 20% of EU gross domestic product (GDP), underlining its central role in Europe's prosperity (ECNO, 2024). Manufacturing alone employs more than 30 million people across the Union (Eurostat, 2026). Yet its share in total employment fell from 18% in 2008 to 15.3% in 2025 (ETUC-ETUI, 2025). This structural shift highlights the pressure on Europe's industrial base at a time when it is expected to modernise, decarbonise, and remain globally competitive.

For industry, achieving climate neutrality depends on creating the right enabling conditions to generate low-carbon innovation, redirect investment, transform production processes, and bring new products to market. Success is critical not just for the future of EU industry alone. The change in industry is also required for progress in other sectors, that need low-carbon materials and technologies to decarbonise (e.g. buildings and transport sectors).

Establishing these enabling conditions requires targeted and coherent policy action. With the Clean Industrial Deal (CID), the EU has put forward a roadmap towards a clean industrial future, presenting a broad toolbox of legislative, regulatory and financial instruments designed to support this transformation.

This report presents an analysis of the state of the enabling conditions, measured through indicator trends, and how the CID covers those areas in needs of targeted policy action.

EU policy can facilitate a targeted transition

The energy sector illustrates what sustained policy focus can achieve. In 2025, wind and solar generated more power in the EU than fossil fuels for the first time. Renewable power overall makes up half of Europe's electricity production – up from 15% 20 years ago (Ember, 2026; Eurostat, 2025a). This was achieved through a combination of ambitious policy instruments such as the EU Emissions Trading System, rapid technological progress, and targeted public support schemes such as feed-in tariffs for renewable electricity (ECNO, 2025b). This puts Europe on track towards a clean and domestically sourced power system that saves billions in energy import bills and makes the economy less prone to external shocks.

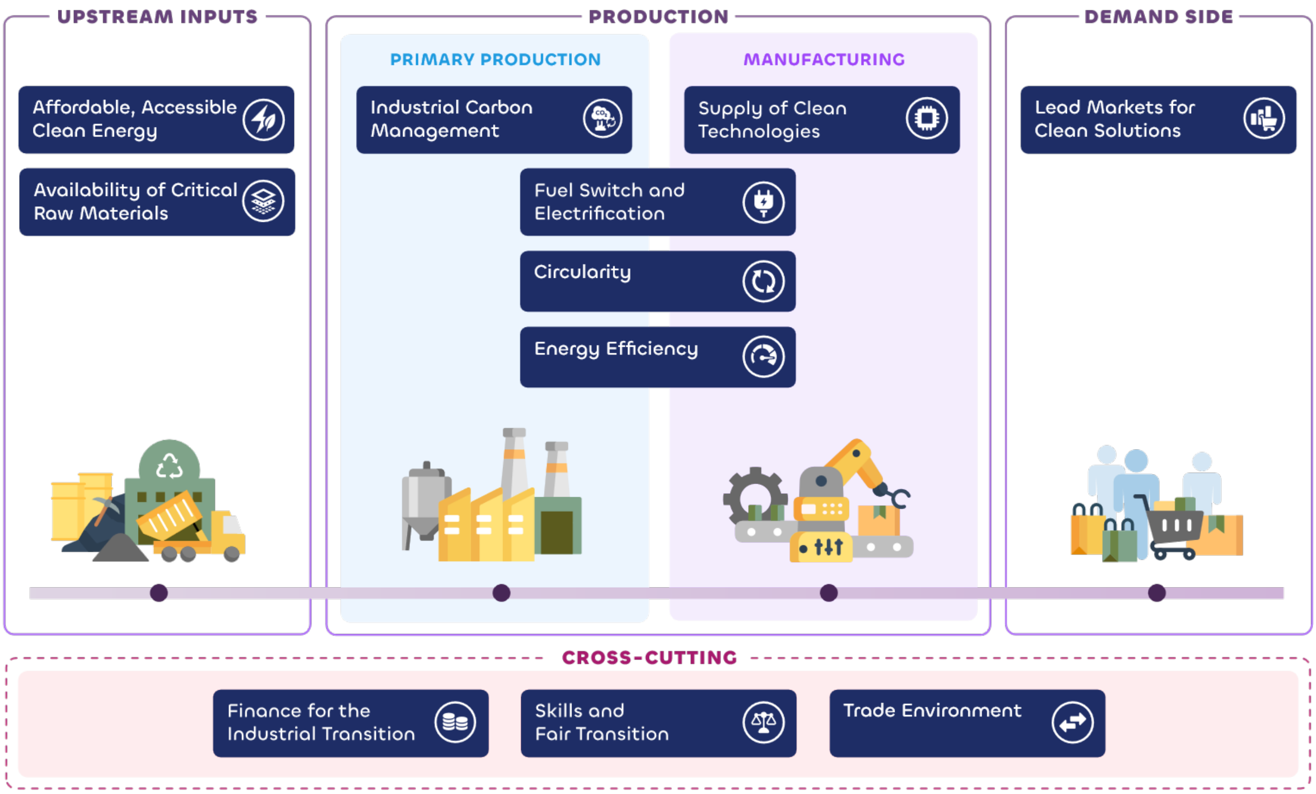
In contrast, the transition towards a clean industrial sector has not been steady over time and slowed down recently. Over the last three decades, emission reductions in the EU industry were caused to a large extent by external economic shocks (including production losses) and incremental shifts within fossil-fuel-dependent technologies (from coal to oil and gas), and not through structural shifts towards decarbonised production or the rise of industrial activities facilitating economy-wide decarbonisation (ECNO, 2024). This highlights the structural complexity of industrial transformation and the need for profound changes in production processes, infrastructure, and investment patterns. Effective policy must therefore target the underlying structures and enabling conditions that support this systemic shift.

Enabling conditions for the clean industrial transition

Europe's industrial ecosystem is highly diverse and interconnected. Different industries face distinct decarbonisation pathways and constraints, and they are embedded in complex value chains that span multiple sectors and regions. The manufacturing sector accounts for around 24% of GHG emissions (Eurostat, 2026), with the energy-intensive industries alone comprising about 14% and therefore playing a central role in determining the pace of industrial decarbonisation (Jäger, 2023). At the same time, Europe must rapidly scale up new clean industries and technologies, including batteries, heat pumps, electrolysers, and other clean-tech solutions. These technologies will be essential for building a decarbonised, innovative, and globally competitive European economy.

The full value chain of the industrial ecosystem has to be analysed to understand what the industry in Europe needs to be able to decarbonize while remaining competitive, differentiating between what is required from upstream, at primary production and in manufacturing, and from the demand side. Moreover, there are several cross-cutting elements relevant to all value chain stages.

Figure 1: Enabling conditions for the transition along the value chain.



Source: ECNO 2026

At the level of **upstream inputs**, the availability of **affordable**, **accessible**, and **clean energy** plays a central role for the clean industrial transition. This includes both low-carbon electricity and clean fuels such as hydrogen and its derivatives. In addition, access to **Critical Raw Materials** is a necessary precondition for scaling clean industrial production and clean technologies.

At the stages of **primary production** and **manufacturing**, a range of decarbonisation measures are relevant. These include improvements in **energy efficiency**, **fuel switching and electrification** of industrial processes, the scale-up of **clean technologies**, **increased circularity** and material efficiency, and the deployment of **industrial carbon management** solutions, including Carbon Capture and Storage (CCS) technologies.

Regarding the **demand side**, providing stable incentives for the deployment of low-carbon products and clean technologies is a precondition for investment certainty and large-scale industrial transformation. Well-designed **lead markets**, together with complementary demand-side instruments, play a central role in creating the sustained and reliable demand needed to anchor low-carbon production in Europe.

Across all value chain stages, several **cross-cutting** enabling conditions shape the pace and direction of the transition. A supportive regulatory and investment framework is essential to mobilise the **finance** needed for capital-intensive green industrial projects.

The **trade environment** must support, rather than undermine, industrial decarbonisation and competitiveness. Finally, **skills development** and the management of a **fair transition** are critical to ensuring that the industrial workforce can adapt to new technologies and production processes.

The relevance and weight of these enabling conditions can vary considerably across sectors: while some industries can decarbonise primarily through electrification and efficiency improvements (e.g. food, pulp and paper), others depend more heavily on hydrogen (e.g. steel) or carbon management solutions (e.g. cement). In addition, sectors operate in different market, financing and trade environments, meaning that the importance of lead markets, the finance framework or trade measures varies depending on exposure to international competition, capital intensity and position in the value chain among others. These nuances notwithstanding, the application of **a value chain stage approach can identify where progress has been strongest and where the most significant bottlenecks remain**. It also facilitates a structured assessment of how effectively the Clean Industrial Deal and its associated policy files could address current weaknesses, and whether certain value chain stages are receiving insufficient political attention.

2 Progress in the clean industrial transition

The assessment of the clean industrial transition builds on the most recent ECNO Flagship Report and applies a full value chain framework to industrial transformation. This framework distinguishes between different stages of the value chain and identifies the key enabling conditions necessary for the industrial transition. Details for each enabling conditions are included in chapter 4.

Progress at the level of enabling conditions

Across the enabling conditions assessed in this Monitor, progress towards a clean industrial transition remains highly uneven. While there is visible progress in the data in many cases, shortcomings and weaknesses can be identified, pointing to a need for further targeted action.

At the **upstream stage** of the value chain, **access to affordable and reliable clean energy** presents a mixed picture. The decarbonisation of electricity generation has advanced with emissions declining and on track with the EU climate target for 2030. However, grid development is lagging behind, and non-fossil flexibility is not increasing fast enough to substitute fossil capacities. Investment in electricity grids has remained below what is needed to support the ongoing transition of the power system. Underdeveloped grids are already constraining industrial electrification, with companies facing long waiting times or outright refusals for grid connections. These constraints delay investment decisions and increase uncertainty, particularly for energy-intensive industries seeking to transition away from fossil fuels. Renewable hydrogen production, key to decarbonizing heavy industry sectors such as steel or chemicals, shows a particularly worrying development. Installed electrolyser capacity in the EU only reached 308 MW in 2024. Together with plants under construction (1.8 GW) capacity is falling short of the EU hydrogen target of 6GW for 2024 (EC, 2020; ACER, 2025).

Regarding **Critical Raw Materials**, Europe continues to be dependent on imported critical raw materials, with the trade balance in key elements such as lithium (central for battery manufacturing) and platinum (used in hydrogen electrolysers), heading in the wrong direction. Given the increased global demand and limited domestic supply chains, European industries are increasingly vulnerable to dependencies and supply disruptions – particularly as the supply of some of these materials is heavily concentrated in individual third countries such as China.

On the **primary production** and **manufacturing** stages, several core enabling conditions regarding decarbonisation of production processes in industry are progressing far too slowly. **Fuel switching and electrification** stand out as a major bottleneck: despite being among the most cost-effective and technologically mature decarbonisation pathways, electrification of industrial energy use has remained almost stagnant over the past decade. This reflects a combination of high and volatile electricity prices, slow grid expansion, and insufficient policy incentives to shift away from fossil fuels.

Progress on **circularity** and **energy efficiency** remains insufficient to deliver the required reductions in material and energy demand, despite some recent improvements. Regarding **circularity**, resource productivity has increased in recent years, signalling a gradual decoupling of economic growth from material use. However, the circular material use rate continues to rise far too slowly to meet existing targets. Accelerating progress in this area would not only reduce emissions, but also strengthen the resilience of Europe's industry, particularly in light of persistent dependencies on critical raw material imports. In the area of **energy efficiency**, progress also remains insufficient to align with climate neutrality objectives. Although final energy consumption in industry fell to a record low in 2023, this decline must be interpreted cautiously, as it coincided with weakened manufacturing output. Part of the reduction therefore reflects lower production levels rather than structural efficiency improvements alone. Nevertheless, the continued decrease in energy intensity per unit of output indicates that genuine efficiency gains are taking place, even if at a pace that remains too slow to deliver the deep structural transformation required.

Industrial carbon management technologies, which are essential for hard-to-abate sectors, are still at an early stage of deployment. The uptake of industrial carbon management technologies and the corresponding infrastructure development have been far too slow. A promising sign regarding infrastructure development is the level of public funding allocated to these projects, which is expected to accelerate the uptake of Industrial carbon management in the future.

At the **primary production** and **manufacturing** stage, the development of the **clean-tech** sector shows the most encouraging – yet uneven – outlook. The value added of the clean technology sector has grown relatively strongly in recent years, and selected segments of clean-tech manufacturing – most notably batteries[1] and wind turbine components – have seen capacity expansion and rising industrial value added. These trends suggest that, where policy frameworks are relatively clear and markets more mature, Europe is capable of mobilising investment and scaling production. However, progress remains highly uneven across technologies. While battery capacity increased rapidly between 2018 and 2024 and wind turbine blade production has grown substantially, deployment and manufacturing

[1] The outlook for further expansion of battery manufacturing capacity remains uncertain, particularly in light of Northvolt's bankruptcy proceedings initiated in late 2024 (United States) and early 2025 (Sweden). The data analysed in this report do not yet reflect these developments.

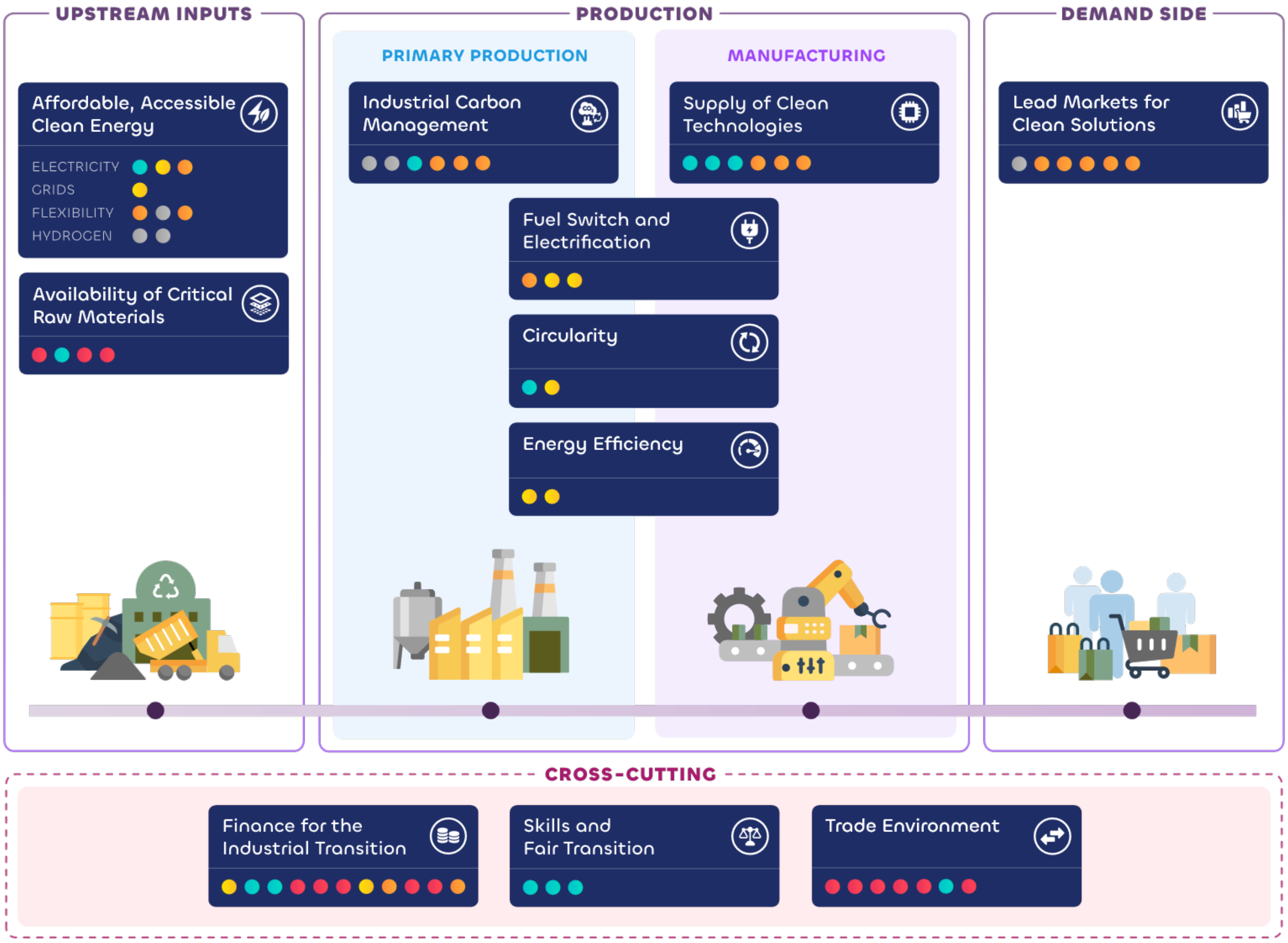
capacities for electrolysers, heat pumps and solar technologies remain insufficient to meet 2030 targets, highlighting persistent structural gaps in parts of the clean-tech ecosystem.

Compared to other stages of the value chain, **demand-side** conditions remain particularly underdeveloped. **Lead markets for clean materials and technologies** are not yet emerging at sufficient scale, leaving green producers exposed to high-cost differentials and persistent investment uncertainty. While the uptake of passenger zero-emission vehicles, as well as heat pump sales, have recovered from a slowdown in 2024 progress remains insufficient. Demand for clean basic materials such as clean steel continues to rely on company announcements and voluntary initiatives which do not generate demand signals of the needed scale and reliability.

Among the enabling conditions which apply along the full value chain, the most encouraging signals emerge in the area related to **skills** and the **fair transition**, particularly **employment**. Employment linked to environmental goods and services, renewable energy supply chains, and regions in transition remains on track, indicating that the clean industrial transition is already generating economic opportunities and supporting labour market resilience.

Lastly, the analysis identifies a misalignment in **financial** and **trade**-related enabling conditions. While private finance for cleantech innovation and scale-up has improved, overall investment in the industrial transition remains insufficient, and public financial signals are increasingly contradictory, with declining support for renewables alongside continued high fossil fuel subsidies. At the same time, Europe’s trade position in several energy-intensive and clean-tech sectors has deteriorated, reflecting both cost pressures and delayed industrial modernisation.

Figure 2: Assessment of progress along the value chain.



Source: ECNO 2026

Does the Clean Industrial Deal cover all weak spots?

The Clean Industrial Deal (CID) is the flagship strategy of the current EU institutional cycle (2024–2029). It brings together a wide range of legislative, regulatory and financial instruments to accelerate industrial decarbonisation and ensure Europe's competitiveness. In total 85 legislative and non-legislative measures, to ensure financing programmes and guidance documents, are announced in the respective Commission Communications.[2] ECNO has analysed the coverage of enabling conditions across the CID policy files and assessed whether the key gaps identified in each area are adequately addressed (see Annex for a detailed overview of all files and their respective relevance for the eleven enabling conditions defined).

[2] ECNO has analysed (EC, 2025b) 85: The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation and (EC, 2025a) 378: Delivering on the Clean Industrial Deal I.

The result of this policy mapping shows that the CID, if proposed policies are well designed and fully implemented, will meaningfully strengthen the EU's industrial policy framework, as it addresses the key enabling conditions that need to be in place for a successful industrial transition. It particularly **targets demand-side constraints, infrastructure bottlenecks and financing gaps** more explicitly than previous initiatives. Hence, the CID focuses on the enabling conditions which are most decisive for the success of the transition. However, with progress across enabling conditions remaining uneven, there are still several challenges that the CID only partially addresses. Furthermore, committing to an action does not guarantee impact. Coherent implementation of proposed measures and maintaining regulatory certainty at Member State level is crucial.

Decisive for the transformation is ensuring a **fair transition**, especially in regions that are dependent on traditional energy-intensive industries. Leaving people in those regions behind can undermine buy-in to the transformation, risking backlash to climate and industrial policies. The CID, with its focus on the short-term competitiveness challenges facing decarbonising industry, only partially addresses the fairness dimension of the transition. More comprehensive measures to protect vulnerable regions and households fall largely outside the scope of the CID and remain anchored in parallel policy frameworks, notably the Just Transition Framework and Social Climate Fund. While these instruments are crucial for mitigating social impacts such as energy poverty, transport poverty and regional economic decline, they are not structurally integrated into the CID's industrial policy logic.

ECNO indicators in the fair transition and skills enabling condition show positive signals in creating job opportunities, including employment rates in the EU's vulnerable regions. Sustaining this positive trend would require the establishment of a JTF-like instrument within future cohesion policy frameworks, anchored in the EU's Multiannual Financial Framework. A key remaining **gap concerns long-term and stable financing for just transition measures**, which are specifically designed to target local challenges in regions most affected by the transition to climate neutrality (such as investments in local small and medium enterprises to support economic diversification and reconversion, targeted reskilling of workers, or investments in social services infrastructure to support social inclusion and cohesion). Current support relies heavily on time-limited instruments such as the Recovery and Resilience Facility and the Just Transition Fund, with no clear successor secured beyond their expiry. This creates uncertainty for regions and workers that require sustained support for reskilling, economic diversification and social protection.

The EU's broader **geopolitical and economic positioning** also raises challenges, and industrial decarbonisation remains closely tied to global trade dynamics. The EU's industries rely on exports, but they are often also dependent on imported clean tech components and critical raw materials, many of which remain highly concentrated in China. In 2024, the EU exported around EUR 2.6 trillion worth of goods, with a surplus of close to EUR 150 bn (Eurostat, 2025b). This dependence on international trade shows the EU's decarbonisation efforts cannot succeed in isolation. If further trading partners retreat from climate action, similarly to what has happened in the US over the past year, EU industries risk losing access to important export markets. In this context, it is important for the EU to integrate climate and trade considerations as a priority into its external action and to forge **strong, mutually beneficial partnerships**.

Recent **volatility in global fossil fuel markets** also highlights the structural vulnerability of Europe's industrial model. As it imports virtually all the oil and gas it consumes, the EU remains exposed to geopolitical shocks that often translate into higher energy prices for households and industry. The most effective way to reduce this exposure is to accelerate the shift away from fossil fuels through electrification, renewable energy deployment and greater resource efficiency. Reducing fossil fuel dependence is therefore not only a climate objective but also a strategy for strengthening Europe's long-term industrial competitiveness and economic security (Piria et al., 2026).

At the same time, **industrial transformation is accelerating outside Europe**, with competing jurisdictions advancing ambitious clean industrial strategies and attracting investment in low-carbon production. Any weakening of key climate legislation, such as the Emissions Trading System (ETS) or the Carbon Border Adjustment Mechanism (CBAM), risks eroding the EU's climate leadership and its influence as a global standard-setter.

Emerging clean steel projects in regions such as the Middle East and North Africa (MENA) as well as Asia, supported by favourable energy costs and targeted industrial policies, illustrate that clean industry is not automatically anchored in Europe (Basirat, 2026; Nicholas, 2026). The ETS and CBAM are designed to internalise carbon costs and narrow the green premium faced by low-carbon producers. If the EU weakens or slows the implementation of core climate instruments, including the ETS and CBAM, investments may increasingly shift to countries that combine strong demand signals, lower energy costs or more generous subsidies. A retreat from climate leadership would therefore not only weaken global climate action but also directly undermine Europe's clean industrial competitiveness.

Too important to fail: the top CID proposals

The long list of different elements in the Clean Industrial Deal is an indicator of significant EU policy activity and shows the comprehensive scope of the framework. Seven policy files stand out as particularly decisive because they function as cross-cutting levers across multiple enabling conditions – especially demand creation, financing, grid infrastructure and circularity.

Demand-side measures emerge as one of the weakest enabling conditions across this assessment. The CID marks a qualitative shift by explicitly recognising the need to create lead markets for clean materials and technologies. Initiatives such as the **Industrial Accelerator Act, the Corporate Fleets and the Public Procurement Act** are therefore among the most strategically important elements of the package. By introducing product labelling, sustainability criteria and "Made in Europe" elements, the IAA seeks to reinforce lead markets for low-carbon industrial products, although the draft proposal is less ambitious than expected, with low quotas for green public procurement and delays in launching a labelling initiative. The Public Procurement Act is crucial because it can transform public purchasing power into a structural demand driver for clean materials and technologies. Moving from voluntary to mandatory sustainability criteria would provide predictable offtake for clean steel, cement and other low-carbon products, directly addressing one of the most persistent bottlenecks: insufficient and unreliable demand.

The review of the **EU Emissions Trading System (ETS)** is decisive. A proposal from the European Commission is expected in the middle of 2026. The carbon price is the underlying economic signal, directly applicable to companies, upon which the entire EU climate and industrial framework rests. Without a robust and predictable carbon price, low-carbon producers continue to face a green premium, as fossil-based production remains artificially competitive due to unpriced environmental externalities. The **Carbon Border Adjustment Mechanism (CBAM)** complements the ETS by extending this carbon pricing logic to imports, helping to preserve a level playing field and to reduce the risk of carbon leakage. Many CID instruments – including the **Innovation Fund**, the **Hydrogen Bank** and the proposed **Industrial Decarbonisation Bank** – are directly financed through revenues from the auctioning of ETS emission allowances. Weakening the carbon price signal, for instance through extended free allocation or dilution of CBAM, would therefore undermine both investment incentives and the financial architecture of the transition. Staying the course on the ETS and CBAM is thus indispensable for the credibility and effectiveness of the Clean Industrial Deal.

The **Grids Package**, presented by the European Commission in December 2025, is critical because infrastructure constraints are emerging as one of the most binding bottlenecks for industrial electrification. A large share of industrial processes can already be electrified with commercially available or near-market technologies, yet electrification in industry has remained largely stagnant. One of the key barriers is limited and delayed access to grid connections, which slows investment decisions and deployment of electrification technologies. The Grids Package seeks to address these constraints by strengthening cross-border infrastructure planning, accelerating permitting procedures and mobilising additional financing for strategically important interconnections through initiatives such as Energy Highways. However, the effectiveness of these measures will ultimately depend on rapid and coordinated implementation by Member States. Without accelerated grid expansion and modernisation, electrification and hydrogen deployment cannot scale, regardless of available financing or demand-side measures.

With the climate investment gap standing at €344bn annually in Europe, there is a clear need to mobilise public finance to enable transformation across the aforementioned action areas. The **Clean Industrial State Aid Framework (CISAF)**, adopted in June 2025, is decisive for mobilising national co-financing and derisking large-scale industrial investments. It directly addresses financing gaps and investment risk, particularly in energy-intensive sectors, and could help crowd in private capital where market conditions alone might be insufficient. There has already been some criticism of the revision in its failure to include production aid support to factories (therefore mirroring the production tax credits of the Inflation Reduction Act) (T&E, 2025). However, conversely, there are early signs that CISAF is unlocking public financing, with ambitious new state aid schemes in Germany, France and Greece (European Commission, 2026a, 2026b, 2026c). What will be crucial to monitor is the effectiveness of these schemes – how they translate national money into competitive green industrial projects.

Finally, the **Circular Economy Act**, which is expected to be presented in the fourth quarter of 2026, will be crucial for the CID's ability to enhance the resilience of European industries to global supply chains disruptions by promoting a more circular use of key materials, which has so far lagged behind. As the CID itself recognises, the clean transition will significantly increase demand for critical raw materials and industrial inputs, making improved recycling and circular use of existing resources essential to reduce dependencies and strengthen the resilience of the EU economy. The details of the Circular Economy Act are yet unknown, but it is expected to strengthen access to secondary raw materials and boost high-quality recycling, thereby reducing imported primary resources. By facilitating the free movement of circular products, recyclates and waste across the single market, the Act could help address existing fragmentation and improve the availability and cost competitiveness of secondary feedstocks for European manufacturers, including energy-intensive industries. At the same time, the Act is anticipated to introduce demand-side measures to create lead markets for circular materials and harmonise circularity criteria in public procurement, ahead of the broader revision of the Public Procurement Framework in 2026.

3 Conclusions

Potential for success through an expanded toolbox

The Clean Industrial Deal has been designed to update the EU's policy framework in the face of the twin challenge of becoming more competitive and moving towards decarbonisation. As the analysis shows, the policies included largely cover those enabling conditions for which the data shows the need for targeted action. If ambitiously designed and implemented, the Clean Industrial Deal has the potential to improve the EU's progress in the clean transition and reverse the competitiveness challenges highlighted by both the Draghi report and industry groups.

Most importantly, the CID has the potential to close a persistent gap in demand-side policies and elevate them to a central pillar of the industrial strategy. The IAA, the Public Procurement Act and the Corporate Fleets initiative are complementing the EU's toolbox by creating markets for clean materials and products. Equally important is the focus on energy prices and grid infrastructure. By prioritising grid expansion, permitting reform and instruments to stabilise electricity costs for industry, the CID recognises that electrification will not scale without structural improvements to energy infrastructure and price formation. In a context where high energy prices dominate political debate, this focus signals a move away from emergency relief towards structural reform – though the balance between short-term price support and long-term investment remains delicate.

Financing gaps and the risk of investments going abroad

Despite its breadth and solid coverage of existing policy gaps, the CID as a framework leaves important issues unaddressed. Two concerns stand out.

For one, the **fairness dimension of the transition** remains only partially integrated into industrial policy. While employment indicators are currently positive, long-term and stable financing for just transition measures beyond the Recovery and Resilience Facility and the Just Transition Fund is not secured. Without a durable successor instrument anchored in the next Multiannual Financial Framework, vulnerable regions and workers face uncertainty at a time of structural transformation.

At the same time, the **EU's geopolitical positioning** presents an additional risk. As key global players, such as China, accelerate clean industrial investments under different energy and policy conditions, any weakening of core instruments such as the EU ETS or delays in implementation could undermine Europe's competitiveness and credibility. In this context, ongoing debates about the future stringency of the EU ETS and the implem-enttation of CBAM are not merely technical adjustments, but strategic choices about Europe's economic model. A retreat from climate leadership would increase the risk that clean industrial investment shifts abroad – and likely slow global progress on climate action.

Crunch time in 2026–27: decisions need close monitoring

The CID enters a critical phase. While 2025 marked the launch of the strategy, 2026 and 2027 will determine its substance. Key files – including the ETS review and CBAM, the Industrial Accelerator Act, the new Public Procurement Act and the implementation of the Grids Package – will move through the legislative process. Between the Commission, the European Parliament and Member States in Council, there is a risk that the substantive functions they should deliver are restricted or disabled in the name of short-term economic advantage or fiscal constraint. Recent political developments – from competitiveness-focused European Council meetings to industry summits in Antwerp and the World Economic Forum – underline how quickly the narrative can shift from long-term transformation to immediate cost concerns.

At the same time, the **agreement and implementation of the Deal need to look beyond the short-term competitiveness concerns of industry** and consider the potentially adverse impacts on workers or partner countries over the long-term. Strengthening domestic clean manufacturing capacity, shaping lead markets and reducing external dependencies implies a more active industrial policy that may favour certain sectors and technologies. This entails trade-offs between integration in global markets, resilience and competitiveness that must be managed carefully. A long-term perspective is therefore essential: if the transition leads to industrial displacement within Europe or is perceived as disproportionately benefiting trade partners, public support for climate and industrial policy could erode. An industrial policy which focuses solely on the challenges of today without ensuring the sustainability of the industry tomorrow will only lead to further crises on the horizon. The decisive question for the coming years is therefore not only whether the CID contains the right instruments on paper, but whether political negotiations preserve their structural impact and align them with a coherent long-term industrial strategy.

To ensure success, both the development of the legislative process and how it shapes the final policy as well as real-world developments in industry and related markets deserve close attention. The analysis presented here was able to spotlight current shortcomings in the enabling conditions for the transition and the coverage of these by the CID – but could not evaluate the extent to which these policy initiatives are likely to create the needed effect. More in-depth analysis would be required to assess individual laws as they are proposed, negotiated, amended and implemented. Additionally, the data used for ECNO's trendline assessment is not available in real time and relies on annual values. More continuous monitoring of relevant developments with more regularly updated data would provide earlier signals of emerging gaps, policy effectiveness and shifts in investment dynamics.

4 Detailed results for enabling conditions

Methodology for indicator assessment and classification

The data underpinning this analysis is drawn from ECNO's Flagship Report 2025. A set of indicators forms the basis of the assessment for each enabling condition. Past progress for these indicators is evaluated against the EU's vision of climate neutrality, using official targets and benchmarks derived from EU strategic planning documents where available.

The indicator progress check compares the absolute annual change of the past development with the absolute required annual change to meet the future benchmark, starting with the last data point of the trendline and drawing a straight line to the benchmark. The ratio between these two values (ratio of the slopes of the two lines) indicates the required change in the pace of development. If no quantified benchmark can be derived from EU sources, the analysis relies on a default approach complemented by qualitative insights from official EU documents and on external scientific literature outlining the desired direction and speed of change.

Figure 3: Progress check for indicators with a benchmark.

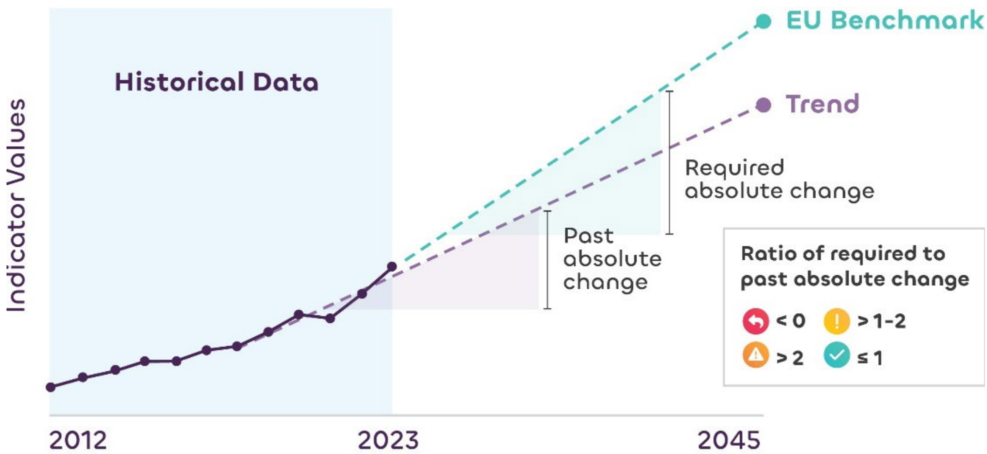
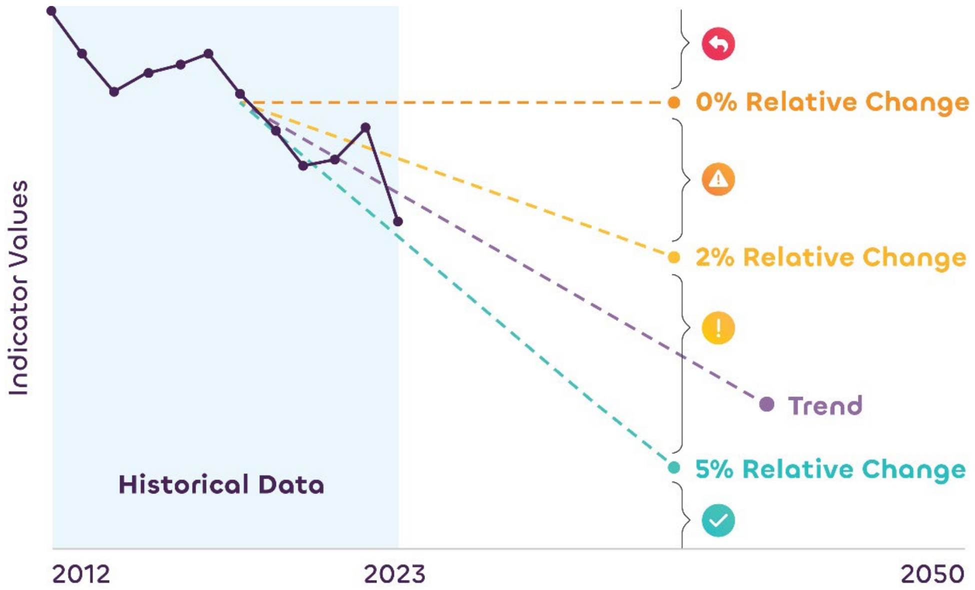


Figure 4: Progress check for indicators without a benchmark.



Progress for each indicator is classified along a five-degree scale. Four classes indicate the degree or lack of progress, namely on track, too slow, far too slow, and wrong direction; while the fifth class, insufficient data, is applied where no progress check can be carried out due to missing data.

Further information on the methodology can be found on [ECNO's website]. Detailed information on each indicator can also be accessed through the links provided in the respective enabling condition chapters.

INPUT

Affordable, Accessible Clean Energy

The clean industrial transition implies a move away from fossil fuels through electrification, fuel switching, and the use of clean hydrogen. Clean energy affordability and the performance of the electricity system and its associated infrastructure become decisive enablers – or bottlenecks – for this shift.

Indicators:

ELECTRICITY SUPPLY

- GHG emissions of electricity generation
- Share of fossil fuel-fired power generation
- Investment in renewables

GRIDS

- Investment into power grid

FLEXIBILITY

- Battery storage capacity
- Flexible power demand
- Investment in battery storage

HYDROGEN

- Renewable and low carbon hydrogen production capacity
- H_2 infrastructure (pipelines, sto-rage, connected industrial sites)

State of play: renewables advance, grids hold back

Affordability and access to clean energy for the industrial transition is showing mixed progress. While the decarbo-nisation of electricity generation is advancing, grids development is lagging behind, and non-fossil flexibility is not increasing fast enough to substitute fossil capacities. Renewable hydrogen production capacity is falling short of targets set in the EU hydrogen strategy (ACER, 2025; EC, 2020). A significant number of EU policies is targeting this area.

ELECTRICITY SUPPLY

What the data says: The **decarbonisation of electricity generation has advanced**, but **not at the pace required**. Greenhouse gas emissions from electricity generation are declining and remain on track with the EU climate target for 2030. However, coal and gas are projected to remain part of the electricity mix well into the 2030s, and investment in renewable capacities is happening far too slowly. This creates a struc-tural risk for industrial decarbonisation (see also chapter Fuel Switch and Electrification), as companies may face constraints in accessing sufficient and affordable volumes of green electricity over the medium- to long-term (ECNO, 2025a).

Existing policies: The EU's policy package to decarbonise the power sector is likely to advance progress but not at the required scale. Most importantly, the Electricity Market Design (EMDR, 2024) reform is set to shape renewables support, while the Renewable Energy Directive (RED III, 2023) sets new targets for 2030 and aims to remove major barriers to wind development. Most policies enacted still need to be implemented at Member State level (ECNO, 2025a).

INPUT

GRIDS

What the data says: Investment in electricity grids has remained below what is needed to support the ongoing transition of the power system. Underdeveloped grids are already constraining industrial electrification, with companies facing long waiting times or outright refusals for grid connections. These constraints delay investment decisions and increase uncertainty, particularly for energy-intensive industries seeking to transition away from fossil fuels. Without a rapid acceleration in grid planning, permitting, and investment, electricity networks risk becoming one of the most binding constraints on the clean industrial transition (ECNO, 2025a).

Existing policies: EU policies, which focus on cross-border coordination, planning, and projects of common interest, have limited direct impact on grid construction, as responsibility for the actual build-out of electricity grids lies with Member States. At EU level, the Trans-European Networks for Energy Regulation (TEN-E, 2022) aims to strengthen EU energy infrastructure by supporting cross-border connectivity, grid modernisation, and the transition from fossil to clean gases. Member States are required to prioritise Projects of Common Interest (PCIs), digitalise electricity grids for renewable integration, and align infrastructure planning with climate targets. The Ten-Year Network Development Plan (TYNDP) (ENTSO-E, 2024; ENTSO-G, 2025) aims to support cross-border integration and guide planning across Member States, but its limited alignment with EU climate targets weakens its effectiveness (ECNO, 2025a).

FLEXIBILITY

What the data says: Progress on clean flexibility in the electricity system has been **insufficient**. Battery storage capacity has grown, but not at a pace consistent with future system needs, and current investment trends in battery storage suggest no significant acceleration in deployment in the short to medium term. Data on industrial demand-side flexibility remain limited, preventing a comprehensive assessment of the sector's contribution to system balancing (ECNO, 2025a).

Existing policies: The EU policies supporting clean flexibilities are likely to advance progress but not at the required scale. The revision of Electricity Market Design (EMD) addresses regulatory barriers to demand-side response and storage. Under the EMD Member States are now required to regularly assess system-level flexibility and define national objectives for clean flexibility, distinguishing between demand-side response and energy storage. Member States are encouraged to develop new and adapt existing support mechanisms, such as capacity markets, to better accommodate these solutions (EMDR, 2024). The policy impact is however contingent on Member State implementation as the policy framework contains few binding elements (ECNO, 2025a).

HYDROGEN

INPUT

What the data says: Renewable hydrogen production capacity in Europe is **failing to meet industrial demand**. Installed electrolyser capacity in the EU only reached 308 MW in 2024. Together with plants under construction (1.8 GW) capacity is falling short of the EU hydrogen target of 6GW for 2024 (EC, 2020; ACER, 2025)[3]. Without security about the long-term availability and affordability of renewable hydrogen many decarbonisation projects including in the steel or chemicals sector are being put on hold. **Limited data on hydrogen infrastructure** makes it difficult to assess whether industrial sites (will) have timely access to the necessary infrastructure, particularly hydrogen pipelines, to support planned changes in industrial processes and equipment. Given the long lead times associated with hydrogen infrastructure, this represents a significant risk for sectors that depend on hydrogen to decarbonize (ECNO, 2025a).

Existing policies: Existing policies are advancing the deployment of renewable and low-carbon hydrogen[4] but not at the required scale and speed. Most relevant policy instruments, e.g. the Net Zero Industry Act, the revised TEN-E Regulation and the delegated act clarifying rules for producing low-carbon hydrogen, are relatively new and their effects are yet to be seen. Various instruments provide financing for hydrogen deployment, such as the Innovation Fund, Connecting Europe Facility (CEF), the Modernisation Fund and most recently the Hydrogen Bank with its new Hydrogen Mechanism connecting suppliers and buyers. Several instruments target hydrogen infrastructure build-out, such as the European Hydrogen Backbone initiative and the Hydrogen and Decarbonised Gas Market Package but gas and hydrogen infrastructure planning remains fragmented across Member States with inconsistent strategies for repurposing networks for hydrogen (ECNO, 2025a).

[3] The EU hydrogen strategy sets a target for 6 GW of electrolyser capacity in 2024 and 40 GW in 2030, and for 10 million tonnes of renewable hydrogen production by 2030. Despite an increase of 51% of installed electrolyzer capacity in the EU in 2024, the trajectory falls short of achieving the EU 2030 target (ACER, 2022).

[4] Low-carbon hydrogen defined by the Gas and Hydrogen Markets Directive (EU 2024/1788) is defined as hydrogen derived from non-renewable sources, which meets a GHG emission reduction threshold of 70 %.

INPUT

Adequacy of the Clean Industrial Deal: Affordable, accessible clean energy is an area where the CID places great emphasis on.[5] Core challenges such as high electricity prices and underinvestment into grids are recognized. The **Affordable Energy Action Plan**, the **Electricity Market Design**, the **Energy Taxation Directive**, the **European Grids Package**, the **Industrial Accelerator Act** (IAA) and funding schemes such as the Hydrogen Bank are likely to improve the policy framework for clean energy provision. With its recently published European Grids Package, the EU Commission is proposing to centralise the planning of cross border infrastructure. The Commission is further proposing changes to EU law which would allow governments to exempt grid projects from environmental impact assessments, which would reduce permitting times. Additional financing (Energy Highways) is targeting strategically important interconnections. The policy impact of the European Grids Package as well as the IAA will however strongly depend on effective implementation by Member States.

A **key gap** which the CID is not addressing is continued public financing for fossil fuels (e.g. EU taxonomy, State aid framework). Hydrogen deployment continues to lag far behind targets due to uncertainty around infrastructure availability, long-term demand and price formation. While the CID reinforces existing hydrogen strategies, it does not provide the level of coordination and certainty needed to unlock investment in hydrogen-dependent industrial processes.

[5] 25 of 85 initiatives of the CID focus in some form on clean energy (see Annex).

INPUT

Availability of Critical Raw Materials

Indicators:

- Trade balance in rare earths
- Trade balance in cobalt (oxides and hydroxides)
- Trade balance in lithium (carbonates)
- Trade balance in platinum (unwrought or powder form)

The success of the EU's industrial transition depends on a secure access to key resources and materials. Beyond energy, key clean tech manufacturing sectors heavily depend on resources such as lithium, nickel, cobalt, rare earth elements and copper to be able to produce at scale. The EU has defined 34 of these raw materials as critical based on their economic importance and risks related to their supply. Given the increased global demand and limited domestic supply chains, European industries are increasingly vulnerable to dependencies and supply disruptions – particularly as the supply of some of these materials is heavily concentrated in individual third countries such as China.

State of play: Efforts to diversify speeding up but critical dependencies remain

The EU has stepped up efforts to increase its domestic supply and diversify imports of critical raw materials, but it **remains vulnerable to possible disruptions**. For example, China supplies all of the EU's heavy rare-earth elements and 98% of its rare-earth magnets. In 2025, it introduced export controls on heavy rare-earth elements as a response to US tariffs, further highlighting this vulnerability (European Parliament, 2025). Partnerships formed with third countries remain non-binding, as do the targets set in the Critical Raw Materials Act to boost domestic supply and recycling.

What the data says: Europe continues to be dependent on imported critical raw materials, with the trade balance in key elements such as lithium (central for battery manufacturing), platinum (used in hydrogen electrolysers) and rare earths (used in permanent magnets for EVs and wind turbines) all negative and showing increasing import reliance. For some materials, trade balances show a mixed picture: while upstream cobalt is mostly imported, the EU exports significant volumes of processed intermediates, such as cobalt oxides and hydroxides used for battery production, reflecting its ability to create value through refining and chemical processing despite dependence on raw material imports.

Existing policies: The Critical Raw Materials Act (CRMA), which entered into force in 2024, is the EU's key existing regulation for securing supply of critical raw materials. The act promotes increased domestic raw material production,

INPUT

diversified supply chains, and improved circularity in industry. It sets non-binding targets for CRM extraction, processing, consumption, and sourcing. Specifically, the EU seeks to extract at least 10%, process at least 40%, and recycle at least 25% of its annual CRM consumption by 2030 – with no more than 65% of the EU's annual consumption of a given CRM coming from a single trading partner.

Adequacy of the Clean Industrial Deal: The CID puts an emphasis on building stronger partnerships to secure access to critical raw materials and making better use of existing critical resources, including through enhanced recycling and the creation of markets for secondary raw materials. Whether the latter will be achieved depends on the forthcoming **Circular Economy Act**. The **ResourceEU Action Plan** launched at the end of 2025 further builds upon the CRMA and aims to reduce Europe's dependency on raw materials in the battery, defence and rare earth value chains by up to 50%, notably by mobilising EUR 3 billion to de-risk investments and by setting export restrictions on metal scraps and rare earth waste. The EU is also working together with member states on a pilot to improve stockpiling efforts. The Commission is setting up a **European Critical Raw Materials Centre** to support this coordination effort, in addition to providing market intelligence, steer and finance strategic projects using instruments with private and public partners, including joint purchasing. Beyond efforts to boost domestic supply, the EU has also stepped up its "raw materials diplomacy" to reduce its exposure to import dependencies and address supply chain vulnerabilities. Since 2021, the EU has established **bilateral raw materials partnerships** with 15 countries. It is also working on diplomatic efforts through the G7 Critical Minerals Production Alliance and the G20 Critical Minerals Framework.

Key gaps: Even though circularity is addressed, the CID does not tackle overall material use through sufficiency approaches. Additionally, targets in the CRMA are not binding which limits predictability for investors. CRM partnerships and Clean Trade and Investment Partnerships are non-binding in nature – while they are useful instruments to support import diversification, additional measures are needed to guarantee the supply of imported critical raw materials. Financing for CRM projects also remains a hurdle, for which the CID does not deliver any dedicated mechanism.

Industrial Carbon Management

Industrial carbon management (Carbon Capture and Storage – CCS, and Carbon Capture and Utilisation – CCU[6]) is central to the clean industrial transition for some hard-to-abate industries, such as cement, chemicals, and under certain circumstances for other sectors, where no other viable decarbonisation strategies exist. Technical carbon removals could play a very minimal role in mitigating residual emission from the industrial sector.

Indicators:

- Amount of CO_2 captured
- CO_2 infrastructure (pipelines, storage, connected industrial sites)
- Public funding for CO_2 infrastructure in the EU
- Public funding for permanent CDR in the EU
- Sales of BECCS and DACCS for immediate or future delivery
- Sales of permanent CDR for immediate or future delivery

PROD

State of play: slow progress in emerging technologies

So far, the **uptake of industrial carbon management technologies** and the corresponding **infrastructure development** have been **far too slow**. However, this is partly due to the fact that these technologies are still quite novel. Given that a range of policies were put in place to support this area, there is a potential for faster progress in the future.

What the data says: Progress was far too slow for deployment of industrial carbon management technologies, and data availability limits the ability to assess progress in infrastructure build-out. A promising sign regarding infrastructure development is the level of public funding allocated to these projects, which remains on track. However, public funding allocated to permanent carbon dioxide removal projects themselves has been growing at a pace which is far too slow to be compatible with needs, even though it increased from EUR 0.7 million in 2019 to EUR 156 million in 2024. Similarly, the sales of carbon credits in the EU have been underperforming for the two key technologies: DACCS and BECCS, which provide permanent storage. Potential resource constraints – such as biomass availability for BECCS and high water and energy demands for DACCS limit feasibility for such projects.

[6] Carbon Capture and Storage, and Carbon Capture and Utilisation are technologies which can be deployed to mitigate emissions directly at the industrial plant, and thus they can be used as an industrial decarbonisation strategy. BECCS and DACCS on the other hand are removal technologies which are needed to achieve net zero on a system level and could potentially be deployed in industry.

Existing policies: In the stream of policies addressing bottlenecks in this area which were adopted after 2022, the Net Zero Industry Act stands out, as it includes a legally binding target of 50 Mt CO_2 injection capacity per year by 2030. It also streamlines permitting and improves access to financing for strategic projects, both concerned with deployment of CCS, CCU and Carbon Dioxide Removal (CDR) technologies and development of the necessary CO_2 infrastructure. Another document tackling this area is the Industrial Carbon Management Strategy (ICMS), which offers support for demonstration projects, development of CO_2 transport and storage infrastructure, offers public funding as well as tools to facilitate private investment.

PROD

Adequacy of the Clean Industrial Deal: Most structural barriers to Industrial Carbon Management were addressed by previous EU policies, such as the NZIA and the Industrial Carbon Management Strategy (ICMS). The CID reinforces the ICMS's focus on supporting investments in carbon capture and storage throughout the value chain, but it does not propose additional dedicated incentives in this area. The CID partly tackles mobilisation of public funding for industrial carbon management, e.g. through inclusion into **CISAF flexibilities for state aid** (article 6). The **Industrial Decarbonisation Bank** tackles the revenue uncertainty by derisking investments through offering CCfD contracts. The forthcoming **ETS review** is expected to clarify how to account for captured CO_2 which is utilised in non-permanent products.

No **key gaps** were identified.

Fuel Switch and Electrification

Indicators:
- Share of electricity in industrial energy and feedstock use
- Share of renewables and biofuels in energy and feedstock use
- Electricity to gas price ratio for industrial consumers

Fuel switch and electrification are central to the clean industrial transition because they replace fossil fuels with low-carbon energy sources, reducing dependence of industrial plants on imported energy carriers and input price volatility. Electrification stands out as the most critical pathway, as a large share of industrial sectors can already be electrified with technologies that are commercially available or close to market readiness.

State of play: prolonged stagnation in key area

PROD

The data indicate that **progress on fuel switching and electrification** remains **highly inadequate**. Recent crises, which triggered electricity price spikes and heightened volatility, have further reinforced these negative trends. So far, the **policies** to incentivize electrification and fuel switch were **insufficient**, but the CID has a potential to close this gap.

PROD

What the data says: The progress towards fuel switch in industry was far too slow in recent years, particularly with respect to electrification. Share of electricity in industrial energy and feedstock use was close to stagnant in the last decade with data available, increasing by only 0.5% between 2013 and 2023. To reach the target value of 41% stipulated in the 2040 climate target plan, the pace of change would have to be 52 times faster. Barriers to electrification that hinder the progress include e.g. high and volatile electricity prices, slow permitting for grid connections, insufficient electricity infrastructure (see chapter on Affordable, Accessible Clean Energy). Electricity-to-gas price ratio – which is key for incentivizing electrification – is improving, but at a too slow pace. Trends in the share of renewables (mainly from biomass) and biofuels in industrial energy and feedstock use are more encouraging, with progress accelerating after a temporary slowdown during the pandemic. This momentum was further reinforced by the surge in fossil fuel prices following Russia's aggression against Ukraine in 2022. However, the pace of changes over 5 years until 2023 remains too slow to be compatible with the climate neutrality target.

Existing policies: The policy landscape for incentivising fuel switch and electrification in the EU industry has so far been insufficient in bringing about meaningful progress, with cost considerations representing the most significant blind spot. Ther cornerstone, the EU ETS, which sets a legally binding limit on GHG emissions, is accompanied by the Carbon Border Adjustment Mechanism (CBAM), which was put in place to prevent carbon leakage. The Renewable Energy Directive III, adopted in 2023, introduces a binding target for renewable fuels of non-biological origin (RFNBOs) in industry and supports the increase in share of renewable energy use in the sector; however, it is worth to note that it still has not been fully implemented in Member States, despite a past implementation deadline.

PROD

Adequacy of the Clean Industrial Deal: The CID partially addresses the long-standing stagnation in industrial fuel switching and electrification. Financing support is increased through the **Industrial Decarbonisation Bank** and the pilot auction targeting industrial heat decarbonization. The proposed **Industrial Accelerator Act** is streamlining permitting procedures for industrial projects, while reducing industrial energy costs and supporting long-term contracts is tackled in the **Affordable Energy Action Plan**, which includes a EUR 500 million pilot Power Purchase Agreement (PPA) programme with the EIB. The forthcoming Electrification Action Plan aims to promote electrification across sectors, including in industry. Notable progress in this enabling condition can be expected from the policies supporting grid modernisation (see chapter on Affordable, Accessible Clean Energy).

PROD

Nonetheless, cost competitiveness remains a **central gap**. Existing carbon pricing under the EU ETS provides an important signal, but on its own it has not been sufficient to drive electrification at scale. The persistent cost differential between electricity and fossil fuels continues to undermine industrial electrification. The proposed revision of the Energy Taxation Directive could address this imbalance by better aligning taxation with climate objectives, but its impact remains uncertain as negotiations are ongoing.

Circularity

Indicators:

- Resource productivity
- Circular material use rate

Adapting circular economy principles in industry helps reduce waste, improves resource efficiency, and increases material recycling and reusing rates, thus not only reducing GHG emissions but also strengthening the resilience of industrial enterprises. Circularity supports industrial decarbonisation by improving efficiency of manufacturing processes and extending product lifecycles.

PROD

PROD

State of play: stagnant circularity may accelerate with upcoming policies

While resource productivity has improved, **progress** on increasing the use of circular materials remains largely **stagnant**, resulting in a **mixed circularity outlook**. Upcoming policy initiatives will try to address key bottlenecks.

What the data says: The progress in advancing circularity is too slow, but the pace of change increased over the last few years. Resource productivity was increasing relatively fast over the 2018-2023 period. Accelerating progress in this indicator means that the link between the use of natural resources and economic growth is weakening more quickly than previously. Given that resource productivity is measured relative to Gross Domestic Product (GDP), this positive outcome is not the result of the drop in industrial production that happened in 2023. The circular material use rate increased slightly in 2023 to 11.8%. However, to reach the target value of 23.4% in 2030 – set in the Circular Economy Action Plan in 2020 – the circular material use rate would have to increase 32 times faster.

Existing policies: Existing and forthcoming EU policies are expected to strengthen the transition towards a more circular economy, yet the measures currently in place remain insufficient to fully address underlying challenges, particularly in reducing primary resource demand, improving material efficiency, and alleviating environmental pressures. Several key initiatives stemming from the Circular Economy Action Plan – which so far used to underpin the EU's policy in the area – entered into force relatively recently (in 2024). These include the Ecodesign for Sustainable Products Regulation, the Empowering Consumers for the Green Transition Directive, and the Classification, Labelling and Packaging of Chemicals Regulation. To underpin circularity-related innovation and investment, the Circular Economy Financing Support Platform, launched in 2017, continues to play a supporting role.

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PROD

Adequacy of the Clean Industrial Deal: The CID builds on the Circular Economy Action Plan and signals further legislative action regarding circularity. The forthcoming **Circular Economy Act** is expected to facilitate the free movement of circular products, secondary raw materials, and waste. It will further strengthen the supply of high-quality recyclates and introduce demand-side measures to develop lead markets for circular products and materials, thereby lowering feedstock costs for manufacturing. It is also anticipated to harmonise circularity-related criteria for public procurement, ahead of the planned revision of the **Public Procurement Framework** in 2026, and to support market uptake of secondary raw materials – an area where additional policy action is widely recognised. Lead markets are a key factor for incentivization of higher uptake of circularity principles. As of now, the **Industrial Accelerator Act** announced the introduction of circularity criteria for steel in the delegated act on steel products under the Ecodesign for Sustainable Products Regulation, but other sectors where urgent action is needed (e.g. plastics) are not covered.

A **key gap** in the EU's circularity policies is insufficient monitoring of implementation on sectoral and Member State level. Better monitoring and review of past progress could contribute to improvement of the design and implementation of policies related to circular economy in the CID (European Environment Agency, 2024).

Energy Efficiency

Indicators:

- Final energy consumed in industry
- Energy intensity of output

Improving energy efficiency plays a central role in industrial decarbonisation by cutting the energy intensity of production, thereby directly reducing greenhouse gas emissions. At the same time, lower energy consumption translates into reduced operating costs for industrial firms, strengthening their financial performance and creating stronger incentives to reinvest in low-carbon technologies and more sustainable production practices.

State of play: signs of progress amid drop in output

Improvements in the energy efficiency of industrial processes remained limited, with overall **progress being too slow** to be compatible with climate neutrality.

What the data says: The reduction in final energy consumption in industry accelerated according to the most recent data, reaching its lowest level on record again in 2023. However, this trend must be interpreted with caution, as it unfolded against the backdrop of weakened economic activity in the EU manufacturing sector in 2023. Therefore, it cannot be viewed as an unequivocally positive outcome, as it partly reflects shrinking industrial output rather than efficiency gains alone. That said, the continued decrease in energy intensity per unit of output suggests that improvements in energy efficiency were not solely driven by lower production levels but also point to genuine progress in reducing the energy intensity of industrial activity.

Existing policies: The existing policies are likely to advance progress, but not to a sufficient extent, as some key gaps remain, particularly regarding demand-side flexibility, access to the markets, and clean energy carriers. A series of major EU policy initiatives – including RED III, the Action Plan for Affordable Energy, the revision of EU Emissions Trading System (EU ETS), and the Energy Efficiency Directive (EED) – entered into force between 2023 and 2025, but their impact will hinge on swift and effective implementation. The EU ETS continues to be the principal instrument driving reductions in industrial energy demand by imposing carbon costs.

PROD

PROD

Adequacy of the Clean Industrial Deal: Energy efficiency is supported through existing instruments such as the Energy Efficiency Directive and complementary CID initiatives are being rolled out to further advance industrial energy efficiency, including the **Action Plan on Affordable Energy**. Support for investments in enhancing energy efficiency in industry is also provided through the **Clean Industrial Deal State Aid Framework** and the **Industrial Decarbonization Bank**.

Key gaps: The ‘energy efficiency first’ principle was de-emphasised across the board in the CID. Making eligibility for investment support measures conditional on applying energy saving measures first (renovations, energy audits, smart meters) is currently not considered or expected to be delivered in other policy files of the CID. Moreover, the planned actions under Action Plan on Affordable Energy are limited to incremental improvements in existing instruments (labelling and eco-design) and improving financing conditions for energy service companies.

Supply of Clean Technologies

Indicators:

- Clean technology industry added value
- Battery manufacturing capacity
- Wind turbine blades manufacturing capacity
- Solar/PV modules manufacturing capacity
- Heat pumps manufacturing capacity
- Electrolyser manufacturing capacity

Sufficient clean tech supply matters for industrial transition because it enables industries to replace carbon-intensive processes with cleaner alternatives without delays or cost bottlenecks. Adequate supply capacity also helps ensure that the transition strengthens, rather than undermines, industrial productivity and competitiveness, as clean technology production offers economic opportunities for Europe's industry.

PROD

State of play: uneven progress across technologies

The development of the EU’s cleantech production is **advancing too slowly**, and the **outlook varies depending on the technology**: batteries and wind turbines paint a more positive picture than electrolysers, heat pumps and solar technologies. Numerous supporting measures have been adopted lately or are forthcoming, yet they must still be fully implemented to deliver results.

What the data says: The value added of clean technology industry grows relatively fast, but the progress remains uneven across different technologies. Battery manufacturing capacity expanded rapidly – from 16 GW/year in 2018 to 255 GW/year in 2024 – but momentum has slowed amid market volatility, most visibly illustrated by Northvolt’s bankruptcy, while weaker demand has left existing capacity underutilised (Calipel et al., 2025; Nicolas et al., 2024). Manufacturing capacity of wind turbine blades also has been growing fast, reaching 30 GW/year in 2024. However, the capacities for electrolysers, heat pumps and solar technologies have been insufficient to reach 2030 targets.

Existing policies: The Net Zero Industry Act is a cornerstone of the EU’s policies supporting development of its cleantech manufacturing base. It aims to do so by introducing a binding EU cleantech manufacturing target, stipulating that by 2030, the EU’s cleantech manufacturing capacity should meet at least 40% of the EU's annual deployment. It offers tools such as streamlined permitting procedures and other support for net-zero strategic projects, and targeted financial support; however, the NZIA still needs to be fully implemented to be effective. The Innovation Fund and InvestEU facility are important funding sources for cleantech manufacturing projects.

PROD

Adequacy of the Clean Industrial Deal: The CID makes clean-tech manufacturing a central pillar of EU industrial strategy[7] building on the Net Zero Industry Act and complementary financing instruments. The **Industrial Accelerator Act** and the **Public Procurement Act** are expected to strengthen the EU's cleantech policy mix through sustainability and 'Made in Europe' criteria for public (potentially also private) procurement (see chapter on Lead Markets for Clean Solutions). Cleantech manufacturing projects are also supported through the **Clean Industrial Deal State Aid Framework**, by granting them access to national investment support tools. The forthcoming European **Competitiveness Fund**, proposed by the EC in 2025, will constitute a much-needed source of financing for industrial manufacturing projects.

Key gaps: So far the expected pool of additional financial resources which will be available through the Competitiveness Fund to advance cleantech manufacturing is considered to be insufficient to drive necessary change.

[7] 14 of the 85 announced initiatives in the CID and Delivering on the CID Communication are relevant for this enabling condition.

Lead Markets for Clean Solutions

Indicators:

- Share of green public procurement
- Share of ZEVs in passenger car stock
- Share of ZEVs in heavy-duty vehicle stock
- Share of ZEVs in new passenger car registrations
- Heat pump sales
- Stock of heat pumps

Lead markets for clean materials, technologies and products are essential to the industrial transition, as they translate climate and industrial policy objectives into concrete demand and reduce investment uncertainty. For basic materials such as green steel, low-carbon cement and chemicals, strong demand signals are needed to unlock capital-intensive low-carbon production that faces persistent cost differentials. For clean technologies – including electrolysers, batteries, heat pumps and electric vehicles – lead markets support industrial scale-up and cost reductions, anchoring manufacturing capacity in the EU.

State of play: Demand as a bottleneck

Demand for clean materials, products and technologies across key sectors remains **insufficient** of what is required to support large-scale industrial transformation.

What the data says: Uptake of passenger zero-emission vehicles, as well as heat pump sales, have recovered from a slowdown in 2024 but progress remains **insufficient**. In 2025, EV sales overtook petrol car sales for the first time, marking an important milestone (ACEA, 2026). Estimates for heat pump sales in 2025 show a modest rebound but have not returned to previous levels (EHPA, 2025). Demand for clean basic materials such as clean steel continues to rely on company announcements and voluntary initiatives which do not generate demand signals of the needed scale and reliability (Agora Industry, 2024; ICCT, 2024).The absence of data on the share of green public procurement, limits insight into the role public demand plays in supporting early markets for clean products and technologies.

Existing policies: Policies focusing on activating demand for clean products and technologies are as of now fragmented across sectors with no EU wide strategy in place. Key demand-side policies include national support schemes for EVs and building renovation including heat pumps, for energy efficiency and electrification technologies.

DEMAND

Adequacy of the Clean Industrial Deal: Demand-side conditions emerge as one of the weakest enabling conditions across the assessment. The CID marks a qualitative shift by explicitly recognising the need to create lead markets for clean materials and technologies. Initiatives such as the **Industrial Accelerator Act** (IAA), the **Corporate Fleets** and the revision of the **Public Procurement Act** are therefore among the most strategically important elements of the package. The proposal for the IAA introduces sustainability and "made in Europe" criteria for public procurement and public support schemes for industrial materials and products, such as cement, aluminium, batteries, solar, wind and heat pumps. A voluntary steel label will instead be introduced via a delegated act under the Ecodesign for Sustainable Products Regulation (ESPR). Forthcoming **eco-design rules** under the ESRP are expected to set performance standards, enhancing the sustainability and environmental performance of various products and materials (ECNO, 2025a).

Key gaps: However, most demand-side measures remain at an early or preparatory stage. Mandatory requirements (e.g. quotas for green materials), price-based support mechanisms or embodied carbon limits have not been considered in the CID. To further activate demand for ZEVs, the EU, as identified in the Action Plan for the Automotive Industry, could provide guidance and coordinate implementation of ZEV purchase incentives in MS, which currently vary substantially in their structure and efficacy. The CID lays the groundwork for stronger demand-side intervention but does not yet deliver the scale or reliability of demand signals required to unlock investment in capital-intensive clean production. The IAA and Public Procurement Act are also not addressing all sectors as they focus on public procurement which for some industries only presents a small market share.

CROSS-CUTTING

Finance for the Industrial Transition

Decarbonising and transitioning European industry will require funding. Public funding will have a role to play to crowd in private investment and to provide funds where activities or European technologies are not yet profitable or competitive. The finance sector plays a critical role in mobilising capital towards low-carbon industrial investments and scaling mature solutions across value chains. Well-designed financing mechanisms, combining public support with private capital, can lower the cost of capital, bridge investment gaps, and accelerate the deployment of clean industrial processes, making Europe's industrial transition both economically viable and globally competitive.

Indicators:

- Climate Investment gap
- Early-stage private cleantech investment
- Cleantech scale-up finance
- Investment in fossil fuel supply
- Fossil fuel subsidies
- Subsidies to renewable energies
- Share of GHG emissions covered by an explicit carbon market price or tax
- Share of EU ETS revenues directed towards green investments
- Industrial electricity prices EU
- Industrial electricity prices USA
- Industrial electricity prices China

State of play: A need for a better coordination between the different policy levers

Funding for the industrial transition remain **insufficient**. Bridging this gap will require comprehensive public policy that leverages existing regulations, public finance schemes and financial regulations to mobilise both public and private investments.

What the data says: While investments in the decarbonisation of energy, mobility and buildings increased significantly during the first half of the decade, a slow-down has been observed over the past two years, even though the EU remains far from achieving its 2030 climate targets. In the meantime, public funds available for the transition are going into the wrong direction. Renewable subsidies decreased recently while fossil fuel subsidies continued to grow, reaching EUR 242 billion in 2023. Carbon pricing mechanisms plays a great role in industry decarbonisation, as well as in accelerating the electrification of end-use sectors, but the share of GHG emissions covered by such mechanisms are still progressing too slowly. However, cleantech private investment are showing significant improvements over the past few years, both for early-stage and scale-up projects, increasing at a significant path since 2019.

CROSS-CUTTING

Existing policies: Several regulations and measures have been implemented at national and EU level to boost investment towards industrial transition. Several measures include public subsidies schemes, such as the 8th Environmental Action Programme that urged MS to exit fossil fuel subsidies or the Energy Taxation Directive. This latest is currently under negotiation, with the aim to move the tax burden away from electricity and onto fossil fuels. The proposed Competitiveness Fund will have some funds dedicated to industrial transition, but they will remain limited compared to the size of the investment gap. Other sections of the MFF already play an important role to finance the industry transition, such as Connecting Europe Facility, whose fundings to energy projects are likely to increase in the next EU budget for 2028–2034 from €5.84 billion to €29.9 billion. Finally, EU and MS also introduce carbon taxation schemes such as the EU ETS, or national carbon taxes. The revision of the EU ETS Directive established a new ETS (ETS2) that covers road transport and buildings. The implementation of ETS 2, initially planned in 2027 has been postponed by one year to 2028, following the agreement found between the European Parliament and European Council on the EU climate law.

Adequacy of the Clean Industrial Deal: The CID strengthens the financial architecture for industrial decarbonisation through the **Clean Industrial Deal State Aid Framework** and the proposed **Industrial Decarbonisation Bank**. These instruments help address financing gaps, particularly for first-of-a-kind projects and scale-up investments. The CID also addresses several core challenges related to financing for the industrial transition. The investment case for European industry in transition is weakened by structural factors, most clearly high energy prices relative to the US or China. The **temporary electricity price relief** for energy-intensive industries under the Clean Industrial State Aid Framework, combined with requirements to reinvest in decarbonisation, aims to ease short-term cost pressures, thus improving the investment case for EU industry in transition. The launch of a **€500 million EU-EIB pilot** to derisk corporate power purchase agreements and the introduction of tripartite contracts between governments, energy suppliers and industrial consumers are important steps towards lowering electricity costs and reducing price volatility.

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Key gaps: The European Competitiveness Fund is tied to the next MFF (2028–2034) meaning additional financing for industrial decarbonisation projects will not materialise in the short term, despite urgent investment needs. With the financing and size of the Industrial Decarbonisation Bank still up for debate, and the State Aid Framework a step forward but unlikely to transform national industrial investments, the tools that the CID proposes before the next budgetary period are likely insufficient to cover the investment gap. Ongoing negotiations on the Energy Taxation Directive aim to move the tax burden away from electricity and onto fossil fuels, though this remains politically contentious in 2026. Also, the forthcoming Grids package might not materially improve the electricity-to-gas price ratio for industry, as current market design still allows gas prices to set electricity prices. Introducing an EU-wide Industrial Electricity Price framework as in Germany would address this issue but is not foreseen under the CID (Wettengel, 2025). Meanwhile the Carbon Price is increasing at too slow of a pace and the share of ETS revenues directed at green investments is progressing far too slow undercutting one of the EU's key tools to both incentivise and finance the transition. Here the EU is if anything taking a backwards step, with the rumoured proposal to extend free allowances in the 2026 revision (Collins, 2026).

Skills and Fair Transition

Indicators:

- Employment in environmental goods and services
- Employment rate in regions
- Employment in renewable energy supply-chains

Skills development and a fair transition are critical for industrial decarbonisation because the shift to clean production requires a workforce with the right technical and digital capabilities to deploy and operate low-carbon technologies. Focusing on quality jobs and social fairness also helps ensure that workers and communities benefit from the transition, thereby preventing regional and social disparities.

State of play: employment on track, skills hard to monitor

Progress in the fair transition presents a **particularly positive picture** in terms of **employment**. However, data are insufficient to assess progress in strengthening skills critical to the transition, and anecdotal evidence – such as business surveys (EIB, 2023) – suggests that that skills mismatches and shortages persist. The fairness dimension in this analysis is considered solely in relation to labour market outcomes, in order to maintain a focused scope.

What the data says: Quantitative measurement of quality of jobs, skills adequacy and effectiveness of reskilling and upskilling policies poses methodological challenges. As a result, data available for this area are insufficient to assess current trends. Progress in creating job opportunities to support a just and fair transition remains on track. In 2023, employment in the environmental goods and services sector exceeded 2 million full-time equivalents for the first time. Employment rates in the EU's vulnerable regions in transition also continued to improve, reaching nearly 77% in 2023 and remaining on course toward the 2030 EU target of 78% for people aged 20–64, as set out in the European Pillar of Social Rights Action Plan. However, this data does not capture the quality of jobs. The gains in employment rate align with the Competitiveness Compass, which highlights record overall EU employment rates of around 75%. This resilience is partly due to emergency measures implemented during the COVID-19 pandemic and the energy crisis, which helped safeguard jobs and support businesses. Moreover, around 90% of the employment increase in 2023 stemmed from the growth of the labour force itself, reinforcing the upward trend.

CROSS-CUTTING

Existing policies: A central framework already in place is the European Skills Agenda, under which the Pact for Skills was launched in 2020 and supported the upskilling or reskilling of around 1.5 million people in 2023. Financial instruments also play a pivotal role: the Just Transition Fund (JTF) – which will be available until 2027 – significantly contributes to employment support, with more than EUR 800 million earmarked for adapting workers, firms, and entrepreneurs to change, and a further EUR 640 million allocated to improving access to employment. In parallel, the Recovery and Resilience Facility (RRF) is expected to continue to support employment, while targeted measures under the Energy Performance of Buildings Directive (EPBD), together with funding from the Social Climate Fund (SCF) and the RRF, are likely to stimulate job creation in the building renovation sector. There is uncertainty over whether a just and fair transition will be prioritised in the coming years, particularly in the upcoming MFF negotiations, amid limited funding commitments, deregulatory pressures, and a shift in the EU budget towards defence.

Adequacy of the Clean Industrial Deal: The CID addresses the fair transition, however mainly focused on skills development and job quality. The **Union of Skills** aims to strengthen skills development, labour mobility and workforce resilience through e.g. STEM and digital skills initiatives, vocational trainings, and skills guarantees for workers from sectors undergoing restructuring. The **Quality Jobs Roadmap** aims to support the creation of high-quality, fair and secure employment across the EU, in line with the green and digital transitions, while the **Skills Portability Initiative** – due in 2026 – will aim to facilitate the transferability of skills across the EU, enhancing labour mobility and workforce adaptability.

A **crucial gap** is a long-term financing instrument for just transition actions beyond the RRF and JTF. Securing long-term funding for reskilling and employment opportunities will be key for progress in the area and should be included under the next MFF.

CROSS-CUTTING

Trade Environment

A supportive trade environment is essential for industrial decarbonisation because it enables access to affordable clean technologies, critical raw materials (see chapter on Critical Raw Materials), and low-carbon inputs, while also facilitating the export of domestic goods to global markets in order to strengthen competitiveness. At the same time, well-designed trade principles help prevent carbon leakage and create incentives for global uptake of low-emission production methods.

Indicators:

- Trade balance in iron and steel
- Trade balance in cement
- Trade balance in chemicals
- Trade balance in wind turbines
- Trade balance in solar/PV components
- Trade balance in EVs
- Trade balance in heat pumps

State of play: problem area, U-turn needed

The EU's **trade balances in some of the critical industrial products** – such as iron and steel, cement and chemicals – have been **trending in the wrong direction** for about a decade. So far policy action to support this area has been limited, but a wide range of relevant initiatives has been brought forward within the CID to bolster these sectors.

What the data says: In all three relevant non-cleantech sectors, trade balances have been declining sharply. Iron and steel slipped into deficit in 2015, while chemicals have been in the red since 2016, highlighting growing vulnerability in carbon-intensive sectors. Trade balance in cement remains positive, but it still fell by 83% since 2015. Energy costs seem to be one of the crucial reasons for this dynamic: from 2013 to 2024, industrial electricity prices rose by over 7.5% per year, far outpacing the US and China. This problem was mainly driven by Europe's lack of natural (fossil-fuel) resources (Draghi, 2024) to rely on imports during the recent fossil fuel energy crisis in 2022, when the global prices shot up. Other factors that further complicate the challenges faced by European producers include Chinese overcapacity in steel, intensifying trade tensions with the US, resulting in higher tariffs and greater uncertainty in global markets. Trade balance developments in cleantech goods are mixed: wind turbines and electric vehicles (EVs) show surpluses, whereas photovoltaics (PV) and heat pumps run deficits. At the same time, net import levels are falling across all technologies except electric vehicles, indicating that efforts to relocate or reshore supply chains to Europe remain ineffective.

CROSS-CUTTING

Existing policies: So far, the EU policies supporting a positive trade environment for industry have been insufficient and left industrial enterprises exposed to rising global risks. However, some of the more recent initiatives attempt to rectify this issue. These include the Carbon Border Adjustment Mechanism (CBAM), imposing a carbon price on certain imported goods to align their carbon costs with those faced by EU producers. CBAM is being gradually phased in from 2023 and is expected to be revised in 2026 as part of the CID. The Critical Raw Materials Act from 2024 strengthens the EU's security of supply by enhancing domestic extraction, processing, recycling, and diversification of critical raw materials essential for strategic industries. Another initiative strengthening the position of EU producers is the Ecodesign for Sustainable Products Regulation, which sets EU-wide rules to make products placed on the EU market more sustainable across their full life cycle, improving the quality of domestic exports and preventing the imports of lower quality products.

Adequacy of the Clean Industrial Deal: Trade-related challenges are acknowledged in the CID, but concrete corrective measures remain limited. Deteriorating trade balances in key energy-intensive sectors reflect structural cost disadvantages that the CID only partially addresses. Key policies include negotiation and implementation of various **free trade agreements** (with notable progress on deals with India and Mexico) and introduction of **Clean Trade and Investment Partnerships**, which are a new type of international arrangement, whose role is to secure sustainable supply chains for clean technologies, critical raw materials, and green investment. Moreover, the upcoming implementation of the **Steel and Metals Action Plan** aims to boost both competitiveness and sustainability of these sectors by improving their access to affordable clean energy and putting in place protective measures to counteract global overcapacities.

No **key gaps** are detected, as the improvements in trade cannot be driven strictly by regulations, but should stem from increased competitiveness of domestic production.

Annex: Clean Industrial Deal coverage of the enabling conditions

This table contains all initiatives (legislative and non-legislative) announced in the Clean Industrial Deal (EC, 2025b). Initiatives marked with an asterisk were included in the European Commission Communication “Delivering on the Clean Industrial Deal” (EC, 2025a).

									CROSS-CUTTING		
	Clean Energy	CRM	ICM	Electrifi-cation	Circularity	Energy Efficiency	Clean Tech	Lead Markets	Finance	Fair Transition	Trade
Affordable Energy Action Plan	■					■					
Affordable Housing Plan								■			
Aggregate demand for CRM (mechanism) – building on AggregateEU		■									
Alternative Fuels Infrastructure Facility (AFIF) funding under Connecting Europe Facility*							■	■			
Bioeconomy Strategy				■							
Carbon accounting methdology								■			
CBAM Delegated and implementing acts	■		■	■	■	■	■	■	■		■
CBAM review; proposal for extension	■		■	■	■	■	■	■	■		■
CBAM simplification	■		■	■	■	■	■	■	■		■
Chemicals Industry Package			■	■	■	■					
Circular Economy Act		■			■						
Clean Corporate Vehicles								■			
Clean Industrial Deal State Aid Framework	■		■	■		■	■		■		
Clean Trade and Investment Partnership		■									■
Conclude, sign and implement pending Free Trade Agreements											■

									CROSS-CUTTING		
Construction Products Regulation – cement label creation								■			
Critical Raw Materials Act – first list(s) of Strategic Projects		■									
Ecodesing Work Plan adoption (incl. LCA assessment / labels for e.g. cement products)					■	■		■			
EIB cleantech guarantee scheme*							■		■		
EIB Grid manufacturing package							■				
EIB one stop shop for grant application and financial structuring advice									■		
EIB pilot programme – counter guarantees for PPAs	■										
EIB wind package (manufacturing support)*							■		■		
Electricity Market Design	■										
Energy Taxation Directive	■										
Energy Union Taskforce*	■										
Erasmus+										■	
EU critical raw material centre		■									
European Fair Transition Observatory										■	
European Grids Package	■										
Extension of the Gas Storage Regulation	■										
Flexibility for the automotive sector to comply with the 2025 targets - targeted change of the Regulation (EU) 2019/631*								■			
Foreign Direct Investment Screening Regulation – Review							■				
Gas Market Task Force	■										
Green VAT initiative									■		

									CROSS-CUTTING		
Guarantee Notice									■		
Guidance on CfD design	■								■		
Guidance on innovative technologies and forms of renewable energy deployment	■							■			
Guidance on lowering energy taxation	■										
Guidance on network tariff methodologies – future proof network charges for reduced energy system costs	■										
Guidance on social leasing for clean products								■			
Guidance on the establishment of areas for grid and storage infrastructure	■										
Guidance to MS and retailers on promoting remuneration for flexibility	■										
Guidelines for assessing mergers									■		
Guidelines on Foreign Subsidies Regulation											■
Horizon Europe - support for fit-for-deployment projects							■		■		
Hydrogen Bank – Hydrogen Mechanism	■			■							
Hydrogen Bank third call	■										
Improvement of Just Transition Fund under next MFF										■	
Industrial Accelerator Act	■				■		■	■			■
Industrial Action Plan for an Automotive Sector							■				
Industrial Carbon Management Strategy – Implementation			■								
Industrial Decarbonisation Bank				■					■		
InvestEU Regulation									■		
IPCEI design - support hub							■		■		

									CROSS-CUTTING		
Life-cycle assessments with labels (under ESPR or CPR) – covered by ESPR work plan								■			
Low Carbon Hydrogen Methodology	■										
Measures regarding black mass – added to the List of Waste		■									
Measures to address global overcapacities: steel safeguards											■
Monitor import and export of metal waste and scrap – customs surveillance instrument*					■						■
Next MFF and Competitiveness Fund				■			■	■	■	■	
Nuclear Illustrative Programme (PINC) – 8th programme*	■						■				
Pilot (for Indsutrial Decarbonisation Bank) with 1 billion EUR auction on the decarbonisation of key industrial processes				■					■		
Public Procurement Framework								■			
Quality Jobs Roadmap										■	
Recommendations to MS to adopt tax incentives to support the CID									■		
Renewable Energy Directive (MS transposition)	■										
Renewable fuels of non-biological origin – review of the delegated act	■										
Review Cohesion Policy*										■	
Review EU ETS Directive	■		■	■	■	■		■	■		
Review of State aid GBER rules for social enterprises and recruitment of disadvantaged workers										■	
Review of the General Block Exemption Regulation									■		
Review support model for sectorial skills initiatives (inlcuding Academies, Pact for Skills, Alliance for Apprenticeships, Centres of Vocational excellence)										■	

									CROSS-CUTTING		
Savings and Investment Union									▬		
Scaling up the Innovation Fund (projects with a Sovereignty Seal under the STEP regulation)				▬					▬		
Short term: 100 billion for clean-manufacturing under current MFF							▬		▬		
Skills Portability Initiative										▬	
Steel and Metals Action Plan			▬	▬	▬	▬					▬
Sustainable Transport Investment Plan								▬			
TechEU investment programme with EIB							▬		▬		
Trade Defence Instruments (TDI) tools to be applied when necessary											▬
Trans-Mediterranean Energy and Clean Tech Initative (T-Med)											▬
Trans-Regional Circularity Hub					▬						
Union of skills										▬	

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