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How can the Emissions Trading System (ETS) work for decarbonisation, resilience and competitiveness?

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INTRODUCTION

The adverse impacts of fossil fuels on the European economy and society have never been clearer. Carbon emissions drive climate change, an existential threat to Europeans' prosperity and livelihoods. As the EU has limited domestic gas and oil resources, it relies on imports, making it vulnerable to supply chain disruptions and higher energy prices. The implicit dangers of the EU's dependence on global oil and gas markets have been evident during major geopolitical crises since the 1970s, and more recently with Russia's invasion of Ukraine and the US war against Iran. On the other hand, the key difference to energy crises of the past is that alternatives to fossil fuels are commercially available.

To address the challenges of carbon emissions and reliance on fossil fuels, the EU established a carbon market in 2005: the Emissions Trading System (ETS). This system caps the total amount of permitted carbon emissions and allocates allowances to European energy, industry, aviation and maritime operators. As EU allowances (EUAs) are limited and can be traded between companies, supply and demand determine the carbon price, incentivising industrial decarbonisation in a way that is cost-efficient, technology-neutral and flexible.

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As part of the European Green Deal, the EU introduced binding targets to reach climate neutrality by 2050 and reduce carbon emissions by 55% by 2030, which required the ETS to become more ambitious. Consequently, carbon prices rose, raising concerns about the impact of a high carbon price on the competitiveness and resilience of European industry, especially in light of increased geoeconomic frictions – such as trade tensions with China and US trade tariffs – and the lack of a global level playing field. The latest 2040 climate target, to reduce net emissions by 90%,[1] necessitates adjustments to the current ETS. The Commission proposal on the ETS revision in July 2026 strove to address some of these contentious issues.

This Policy Brief explores the linkages between the ETS, resilience and competitiveness following the July review. It examines how the EU can strengthen synergies between these central areas and address trade-offs in a way that ensures decarbonisation and the long-term competitiveness of European industry.

BACKGROUND

A steady take-off

From 2005 onwards, the ETS was introduced gradually, to monitor its effects and prepare European industry for the transition. From 2013, the carbon cap was set at an EU level, and the linear reduction factor (LRF) gradually reduced the total number of EUAs. Auctioning became the default method for allocating EUAs, generating ETS revenues for member states to finance climate projects and for the EU's Innovation Fund to invest in innovative

net-zero technologies. As energy-intensive industries (EIIs) that are hard to abate, such as steel, cement, chemicals, aluminium and glass, may move production to third countries (carbon leakage), the free allocation of EUAs to such sectors aimed to reduce their carbon costs.

The problem of surplus allowances keeping the carbon price low led to the introduction of the Market Stability Reserve (MSR) in 2019, which automatically adjusts the number of available allowances to market demand. Under the EU's Fit for 55 Package, LRFs have more than doubled.[2] Under the current legislation, free allowances are to be phased out by 2034 in conjunction with the phase-in of the Carbon Border Adjustment Mechanism (CBAM), which aims to establish a level playing field with global competitors. Consequently, a more ambitious ETS drove a surge in the carbon price, peaking at €105 in 2023 and currently (11 September 2026) standing at around €85 compared with less than €30 before 2020.[3]

Economic effects

Although the economic literature does not yet offer conclusive evidence that the ETS has had a major positive impact on competitiveness, there are strong indications pointing in that direction.[4] Since the introduction of the ETS, carbon emissions from energy and industrial facilities have fallen by around 50%, reducing the EU's dependence on fossil fuels.[5] The current energy crisis would have been significantly more costly for European economies and companies without the decrease of fossil fuel consumption driven by the ETS. The 10% increase in clean-tech patents in the EU in 2009–2010 is attributed to the early ETS.[6] Following the announcement of the Fit for 55 Package, industry's confidence in the carbon market resulted in higher R&D investments in more efficient technologies and higher overall productivity, albeit at the cost of job losses.[7] Energy decarbonisation efforts also included shifts from coal to imported and more expensive gas, due to the downscaling of nuclear power and insufficient scale-up of renewables, power grids and hydrogen infrastructure. Conversely, there is insufficient evidence to claim that the ETS has negatively affected competitiveness. Historically, the carbon price was relatively low. Even when it reached around €70 during 2021–2024, EIIs effectively paid around €1.65, since free EUA allocation still covered most of their industrial emissions.[8]

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Enabling conditions for decarbonisation

Alongside the development of the ETS, the EU has been building a regulatory and financial framework to expand the flexible and digitalised energy infrastructure, support access to clean-tech solutions and stimulate demand for low-carbon industrial products. The 2023 Green Deal Industrial Plan and the 2025 Clean Industrial Deal marked a shift towards a stronger industrial policy to advance a competitive and resilient clean transition, including the Net Zero Industry Act (NZIA), the revised Electricity Market Regulation, the Grids Package, the recent AccelerateEU and Electrification Action Plan, and the proposed Industrial Accelerator Act. These initiatives were backed by financial instruments such as the Recovery and Resilience Facility, Important Projects of Common European Interest, the 2025 Clean Industrial Deal State Aid Framework (CISAF), the sustainable finance agenda and the proposed European Competitiveness Fund.

The EU policy-enabling instruments are relatively new, and their effectiveness remains to be seen.[9] The Innovation Fund has limited capacity to drive industrial decarbonisation,[10] while the EU and member states face fiscal constraints and multiple priorities[11] such as defence spending in response to the Russian threat and tensions with the US under Trump 2.0.[12] Private capital is unlikely to finance EIIs without strong EU and member-state de-risking instruments.

STATE OF PLAY

Preparations for the ETS review

Preparations for the ETS review in July 2026 were marked by policy debates over whether the ETS and the carbon price should remain strong[13] or not.[14] Recent member-state positions on the ETS have largely reflected the progress they have made in industrial decarbonisation so far.[15] The US attack on Iran demonstrated once again that the EU's dependence on imported fossil fuels is costly and dangerous, as this and similar future crises seriously undermine the resilience and competitiveness of the European economy. Nonetheless, the war prompted calls from some member states to weaken or even suspend the ETS altogether,[16] since carbon price, in the short run, adds to the financial burden of their industries. Arguably, the ETS has come under such scrutiny primarily because of politics and short-termism, rather than because it would be a core driver of rising energy costs. The ETS contributes around 10% to electricity prices.[17] In member states with lower carbon intensity, such as Spain, France and the Nordic countries, this share is even lower,[18] making them more resilient to energy price shocks. At the same time, the auctioning of carbon allowances is a source of income for member states. Moreover, ETS-related carbon costs are not affected by war-driven increases in underlying fossil fuel prices, while the ETS is crucial

to reducing industry's exposure to oil and gas price volatility in the first place. In fact, ETS prices have often responded to economic shocks by decreasing, as seen during COVID-19, Russia's invasion of Ukraine and the 2007/2008 financial crisis.

The proposed ETS revision will affect the architecture of the carbon market and is envisaging additional investments in industrial decarbonisation.

ETS July review

Responding to the new 2040 climate target and recent policy debates (mentioned in the previous subsection), the Commission proposed a revision of the ETS Directive in July 2026,[19] covering the supply and allocation of allowances, the integration of carbon removals and international carbon credits into the ETS, and the introduction of new financial tools. Consequently, the proposed revision will affect the architecture of the carbon market and is envisaging additional investments in industrial decarbonisation.

Supply of allowances

The newly adopted 2040 climate target requires a revision of the current LRF, as extrapolating the current rate into the 2030s implies full industrial decarbonisation by 2039, which is not feasible for the EIIs. The 2040 target still requires considerable decarbonisation in the sectors covered by the ETS, particularly the power sector as an enabler of electrification. Nonetheless, the Commission's proposal for MSR reform[20] envisages the permanent retention of surplus EUAs beyond 400 million allowances, instead of invalidating (i.e. cancelling) them as has been the case so far. While additional allowances, if auctioned, could be used to fund industrial decarbonisation, changes to the MSR would increase the supply of EUAs and likely contribute to a lower increase of ETS prices.[21] The fact that the Commission's proposal to end invalidation was not accompanied by a separate impact assessment makes this even more concerning.

Carbon removals

The Commission's proposal to auction 250 million additional EUAs and use the revenue to purchase domestic carbon removals could help decarbonise EIIs, as it could enable investment into carbon capture boosted by a demand for carbon removals. This could also ramp up the availability of carbon feedstock for sustainable chemicals and fuels. However, this approach could also result in an oversupply of EUAs and a diluted carbon price,[22] particularly if carbon removals cost more than the amount of the revenue from auctioned allowances. Such carbon removal prospects would add value only if mature and affordable technologies for permanent carbon removal are available, have no significant environmental impacts and are applied only to hard-to-abate emissions in EIIs.[23]

Free allowances

The Commission's proposal to extend the free allocation of EUAs beyond 2034 is not convincing, considering that the first assessment report on CBAM implementation is expected in 2027. It should be noted that postponing the free allocation phaseout automatically postpones the full enforcement of the CBAM under the current legislation.[24] If fewer EUAs are auctioned, national and EU revenues for the rollout of clean-tech solutions will decrease, and a diluted carbon price signal makes many decarbonisation technologies less attractive. Furthermore, the announced conditioning of post-2030 free allowances on industry's plans to invest in decarbonisation in the EU would work only if such plans are well designed, ambitious and enforceable.

International carbon credits

The Commission's proposal to include international carbon credits in the ETS framework for 2036–2040 carries considerable risks, as outsourcing the EU's own decarbonisation challenges would slow the transition at home and make it more difficult for third countries to account for their own decarbonisation efforts. The proposal envisages a centralised purchasing body to buy top quality international credits instead of allowing industries to directly buy international credits on the carbon market. However, enforcing high-quality standards for such instruments in third countries is difficult. The inclusion of international carbon credits also deviates from the overall goal of channelling more ETS revenue to industrial decarbonisation in Europe. Regardless of the ETS framework, international credits can contribute to industrial competitiveness and decarbonisation efforts in third countries by enabling exports of European clean technologies. Candidate countries deserve particular attention, as international carbon credits could be enforced through accession conditionality while contributing to the climate objectives of an enlarged Union and Ukraine's post-war recovery.

Investments in decarbonisation

On the investment side, the proposed ETS revision includes a requirement that 50% of member states' ETS revenues be earmarked for decarbonisation in ETS industrial sectors, which is a step in the right direction. The introduction of the Industrial Decarbonisation Bank, totalling €100 billion and mostly funded by additional EUAs enabled by the ETS reform, would help accelerate industrial decarbonisation. The ETS booster will be the first phase of the IDB, providing short-term support of €30 billion for industrial decarbonisation between 2028-2030.

The IDB is likely to scale up carbon contracts for difference (CCfDs), building on existing cases such as Climate Protection Contracts in Germany.[25] In the case of CCfDs, industry gains access to subsidies to invest in clean-tech solutions if the ETS carbon price falls too low, ensuring long-term investment predictability for decarbonisation. However, for this approach to work, the allocation of funds needs to be based on clear excellence and prioritisation criteria to ensure that the best bidder in need of public support receives the necessary resources. Ensuring that the most impactful decarbonisation projects are prioritised is especially important in the case of the ETS Booster, given that it would be introduced in 2028 with a rather short timeframe. Otherwise, there is a risk that additional auctions would result in an oversupply of EUAs and dilute the ETS carbon price.[26]

The big picture

Regardless of the envisaged conditionalities and investment prospects, in a volatile political environment driven by short-termism, the current revision of the ETS is a cause for concern, as it could reduce business predictability and serve as a springboard for further scaling back the EU's decarbonisation efforts. The Commission's proposal for the ETS revision has already resulted in lower long term carbon price forecasts (see Table 1) that go below €200, a necessary minimum to successfully complete decarbonisation.[27] Moreover, in the context of high public debt and defence-related priorities, there is always a risk that investments will not be used to foster industrial decarbonisation in the long run. Scaling back carbon price also means more pressure for the use of state aid, as the investment case driven by the price signal is weaker.

European industrial competitiveness is affected by multiple pressures that go beyond the ETS: the EU is resource-poor compared with the US, which is abundant in oil and gas; Europe's ageing population is smaller than China's labour-intensive economy; and the EU is a highly fragmented polity compared with both the US and China. The EU cannot compete globally in terms of labour costs or carbon-intensive products. Europeans may instead need to prepare for the reality that not all EIIs can be maintained if they are not able to regain competitiveness. A viable option worth exploring is to pursue the EU's long-term competitiveness by developing and scaling up export-oriented innovative and clean-tech solutions for the future.

PROSPECTS AND EU POLICY RECOMMENDATIONS

Following the Commission's proposal for the revised Emissions Trading System (ETS), the Commission, the Council and the European Parliament should consider the following recommendations on strategic direction, ETS reform and decarbonisation enablers.

Strategic direction

- **The Council and the Parliament should uphold an ambitious ETS, enabling a strong and predictable carbon price to ensure decarbonisation, meet climate objectives, bring energy costs down, boost innovation and strengthen long-term industrial competitiveness.** To secure an ambitious ETS framework, the EU should recognise immediate carbon costs and energy infrastructure barriers, ensure effective industrial decarbonisation pathways

Table 1. Carbon price forecasts following Commission's proposal for revision of the ETS

	Q3 2026	Q3 2026	2027	2028	2029	2030	2035	2040
Average	82.50	85.20	93.30	99.80	113.00	118.25	153.30	182.10
Median	82.00	85.00	92.00	101.00	110.67	122.55	150.00	178.00
High–low range	13.70	12.20	27.60	41.00	52.00	97.00	67.00	85.00
Previous poll for H2-26 (April 2026)	79.75	79.75	100.90	108.85	120.25	131.45	N/A	N/A
% change	3.4%	6.8%	−7.5%	−8.3%	−6.0%	−10.0%	N/A	N/A

Source: Szabo and Manuell (2026).[28] Based on information retrieved from: ABN AMRO, BBVA, BloombergNEF, BNP Paribas, CAKE/KOBiZE, Capital Economics, Commerzbank, Enerdata, Energy Aspects, GRM, Limak Cement Mkts, LSEG, Macquarie, Rystad Energy, Vertis, Veyt and Volue Insight.

and consider technical, financial and regional specificities. To that end, the EU and member states must ensure that regulatory tools (e.g. NZIA, IAA, AccelerateEU, Grids Package) and financial instruments (e.g. ECF, IDB, state aid instruments) are used coherently, with optimal coordination among member states, energy operators, industries and the financial sector. As part of this process, the EU needs to be mindful of other priorities, such as ensuring economic security, defence and a just transition, and maximise synergies between these agendas, the ETS, resilience and competitiveness.

ETS reform

- **The Commission should conduct an impact assessment before ending the invalidation of surplus unallocated EUAs in the MSR** before making a final decision on how to manage MSR surplus allowances. The assessment should account for the cumulative impacts of the ETS proposal and risks of reducing the carbon price, especially in a volatile political environment. Until the final conclusions of the impact assessment are known, the EU should refrain from ending invalidation in absolute terms and instead address the matter on an ad hoc, temporary and reversible basis.

- **The Council and the European Parliament should ensure that the EU stays on course with the phaseout of free allowances by 2034, coupled with CBAM reforms.** If the 2027 CBAM assessment shows that CBAM is unlikely to be fully effective in safeguarding European competitiveness in the absence of free EUAs, the Commission should prioritise CBAM reform, especially ensuring an adequate scope of covered industries and long-term financial support for exporters. If the assessment clearly demonstrates that CBAM reform would not be sufficient, the Commission should identify which sectors need post-2034 free allowances and define specific industrial decarbonisation targets coupled with financial support mechanisms.

- **The Commission should ensure that carbon removal measures can be permanent, domestic, financially feasible and sustainable before including them in the ETS.** The Commission should carry out a technical and financial analysis and rely on the Joint Research Centre and multistakeholder consultations before reaching such a conclusion. If the conclusions are affirmative, the Commission should include robust carbon removals while prioritising emissions reductions.

- **While keeping the international carbon credits outside of the ETS carbon market, the Commission, the Council and the European Parliament should prioritise the linkage between international carbon credits and candidate countries.** This would enable European advanced manufacturing sectors to benefit from exports of clean-tech solutions and ensure that future member states are part of the solution when it comes to reaching the EU's 2040 climate targets.

Decarbonisation enablers

- **The Commission should propose rules to scale up the use of EU-wide carbon contracts for difference**, as part of the IDB and the ETS booster, to ensure demand from EIIs for clean-tech solutions with the greatest carbon abatement potential, investment predictability for private capital, minimised discrepancies in CCfD implementation across member states and best use of public money given the fiscal constraints.

- **The Commission should assess the impacts of defence spending synergies with European industrial decarbonisation**, including ways to exploit potential dual use technologies (e.g. smart grids, advanced energy storage). For example, it should explore using defence-related financial instruments under the European Competitiveness Fund and ReArm Europe Plan to support the security of supply chains for critical components and energy infrastructure, create demand for European low-carbon products (e.g. clean steel) and drive clean-tech innovation, and help EIIs cope with decarbonisation costs.

- **The Commission should define an EU-wide approach to joint ventures**, ensuring that China's clean-tech investments in Europe are based on technology transfer, transparency, respect for European standards and local employment. While continuing its de-risking efforts to strengthen the EU's industrial base and partnerships with like-minded countries, conditional collaboration with China's industry could enable European industry to decarbonise, access additional capital and technology and boost its innovation capacity.

CONCLUSION

The EU's dependence on fossil fuels is at the heart of the high energy costs that undermine competitiveness, resilience, electrification and demand for low-carbon solutions. Decarbonisation is crucial, and the ETS is key to this transition. As shown by this analysis, the ETS has demonstrated the capacity to boost decarbonisation, clean-tech innovation and productivity. While the short-term costs of decarbonisation in hard-to-abate sectors need to be recognised and addressed by the EU and member states' policy makers, weakening the ETS risks underestimating recently introduced industrial enablers, which need time to realise their full potential. As the EU's energy mix and industry shift away from fossil fuels towards cleaner technologies, the EU must develop and uphold a decarbonisation agenda that accounts for the challenges of today while maintaining a strategic vision for the way forward.

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[1] European Commission, "2040 Climate Target: Reducing the EU's Net Emissions by 90% by 2040", 7 April 2026.

[2] Council of the European Union, "Fit for 55: Reform of the EU Emissions Trading System", 31 January 2025.

[3] Based on: CarbonCredits.com, "Carbon Credit Prices Today 2026" (accessed on 11 September 2026).

[4] Verde, Stefano F. (2020), "The Impact of the EU Emissions Trading System on Competitiveness and Carbon Leakage", *EUI Working Paper RSCAS 2018/53*, European University Institute, Robert Schuman Centre for Advanced Studies, Florence School of Regulation Climate.

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[8] Vangenechten, Domien; Ivanova, Vilislava; Johnston, Rheanna (2026), Facts over Fiction: Why the EU ETS is Key for a Competitive, Secure Europe, E3G.

[9] European Court of Auditors (2024), Green Transition: Unclear Contribution from the Recovery and Resilience Facility, European Court of Auditors, Luxembourg; László Kökény, Zoltán Kmetty, Olivér Hortay, (2025), "Political positioning of Recovery and Resilience Facility (RRF) discourse – The loss of green objectives", Sustainable Futures, vol. 10, 101068.

[10] For 2020–2030, The Innovation Fund and the Modernisation Fund amount to €40 billion and €57 billion, respectively, which makes them insufficient to successfully drive decarbonisation.

[11] For example, state aid firepower of smaller member states can hardly match the likes of Germany and France; Italy's public debt is nearing 150%, making it more difficult to mobilise state aid; and defence spending remains Poland's top priority due to the Russian threat.

[12] European Commission, "Security Action for Europe: European Competitiveness Fund", (accessed on 3 June 2026).

[13] "Open letter – European Industry Needs the Predictability of a Robust EU Emissions Trading System (EU ETS) to Compete and Invest", Brussels, 9 March 2026.

[14] The Antwerp Declaration for a European Industrial Deal (2026), The Antwerp Call to Alden Biesen.

[15] European Parliamentary Research Service (2026), 'Update of the EU emissions trading system for stationary installations, aviation, and maritime', Brussels. Countries with carbon-intensive economies, such as Italy, regions of Germany, Poland and Czechia have made stronger calls to reduce the ETS requirements. Countries advancing renewables, nuclear power or electrification, such as Spain, France, Finland, Sweden and Denmark, tend to favour a more ambitious ETS.

[16] Munster, Ben; Weise, Zia; Giordano, Elena "Italy calls for suspension of carbon price in major attack on EU climate policy", 26 February 2026, Politico.

[17] European Central Bank (2026), Drivers of Electricity Prices Across Households and Energy-intensive Industries and their Importance for the EU's Decarbonisation Objectives.

[18] *Ibid.*

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[20] The July proposal, building on: European Commission (2026), Proposal for a Decision of the European Parliament and of the Council Amending Decision (EU) 2015/1814 as Regards Ceasing the Invalidation of Allowances in the Market Stability Reserve, Brussels.

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[22] *Ibid.*

[23] Öko-Institut (2025), The EU ETS and the 2040 Climate, Berlin.

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[26] Szabo, Manuell, "Update–Poll".

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[28] Szabo, Manuell, "Update–Poll".

NOTES

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