

ERCST Report

Review of the EU ETS: Issues and Levers

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1. Overview

1.1. Objective

The objective of this paper is to provide a logic and a framework for the discussion that will take place under the upcoming Review of the European Union Emission Trading Scheme (EU ETS), with a proposal due from the European Commission (EC) in June/July 2026. This paper is not intended as a technical analysis, or search for solutions to individual issues, but to provide ideas on how the agenda for the review

- should be set and organized;
- define elements that need to be considered in response to problems identified.

It must be emphasized that the analysis is intended to be largely qualitative, with quantitative illustrations as necessary. The paper highlights issues that were identified by stakeholders and “levers” (or solutions) that ERCST feels should be examined as part of the review. It pays attention to the “readability” of the paper for a policy audience that is currently overwhelmed with information.

It intends to produce a non-exhaustive list of issues, one that is inclusive, rather than filter issues, to allow policy makers and stakeholders to make their own informed decisions. Inclusion of an issue, or suggested lever, in this paper is not intended as an endorsement, while absence should more likely be attributed to a lack of space, rather than a negative judgement.

1.2. EU ETS review

The EU ETS, intended as a simple market approach to provide a price signal for asset allocation under constraints regarding the concentration of CO₂ in the atmosphere, has become a complex machine, with interactions sometime difficult to understand and predict. The EU ETS is formally scheduled for review, with a proposal from the EC expected in mid-June or beginning of July, as mandated by Article 30 of Directive 2003/87/EC¹, as amended by Directive (EU) 2023/959². It is expected to review, among other items:

- Market Stability Reserve (MSR);
- Inclusion of removals (CDRs) in the EU ETS;
- Carbon leakage protection, including how to address exports in the context of Carbon Border Adjustment Mechanism (CBAM)/EU ETS;
- Cap trajectory.

¹ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union (consolidated text).

² Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC.

However, given the political discourse in the EU and the current industrial crisis, the EC has introduced an early proposal for a change in the MSR. It is very targeted and seems to want to lower the temperature in the EU ETS review discussion by addressing competitiveness, albeit indirectly, and rectifying what has been in view of ERCST, an unjustified provision, not aligned with the spirit of the MSR to invalidate (another name for cancel) all EU Allowances (EUAs) over 400 million in the MSR. However, the change in the invalidation/cancelation will not bring short-term relief to the market.

Further, it is unlikely that the EU ETS review will be limited to the issues listed above, and the history of reviews of the EU ETS would support that. Once opened, pretty much everything becomes fair game and there are some fundamental issues that need examination.

The discussion of the review needs to take place and needs to be deep and substantive. We cannot, and should not avoid fundamental questions:

1. How different is the EU ETS that is profiling post 2030, the environment in which it exists, and what are the issues and levers.
2. Is the EU ETS fit-for-purpose, and what are the KPIs that define that. How do we define if the EU ETS is “fit for purpose”:
 - environmental delivery;
 - socio economic dimension.
 - o Does the EU ETS provide sufficient incentive for investment in the low carbon economy?
 - o Does it lead to decreasing the CO₂ intensity of the economy or to deindustrialization?
 - market functioning.
3. Does the EU ETS create in 2040 a functional EU economy if other jurisdictions do not essentially decarbonize to the same degree? Will the EU be competitive with low carbon products or will it become an island? Is there an end game under certain conditions - is there a need to define a moment when a plan B needs to be envisaged?

We believe that question 3 is outside the scope of this paper, but needs to be highlighted, while questions 1 & 2 highlight issues that must be part of the EU ETS review.

1.3. Scope of analysis

This paper is organized along the following logic:

1. Paints a picture of the current background in which the EU ETS functions.
2. Identifies the issues that are being raised in the context of the EU ETS discussions, and categorizes them into t “buckets”:

- Political vs technical issues (a somewhat subjective classification as all issues when it comes to CO₂ have a political angle to them).
3. Nature of the “levers”:
- Temporary measures vs measures that address the issues structurally;
 - Measures within the EU ETS itself vs those that complement the EU ETS.

2. The EU ETS: the current perspective

2.1. Role of the EU ETS in decarbonization

The role that the EU ETS has played in decarbonization and transition must be the starting point in any discussion of the EU ETS review. The sectors covered by the EU ETS have reduced emissions intensity primarily in the power sector, where the ETS played a fundamental role in driving coal-to-gas switching while the deeper decarbonization of the electricity sector via renewables also relied on significant public support. This has taken place in the context of a Gross Domestic Product (GDP) growth of about 27%.³

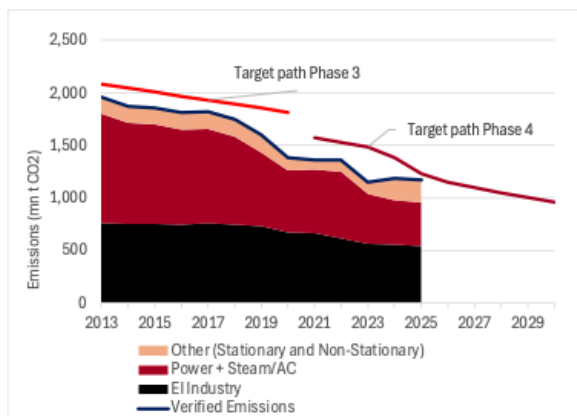
For energy-intensive industries, however, the picture is fundamentally different. Emissions reductions have been more limited due to the lack of commercially viable abatement technologies (for example in primary aluminum production) at scale and exposure to international competition. In these sectors, the ETS has not yet managed to drive the envisaged degree of decarbonization.

The EU ETS is the cornerstone of the EU climate policy and while the calls for reform are loud, clear and well justified, the EU ETS provides overall regulatory continuity (with some instability such as those brought about by RepowerEU) and a market-based approach. It continues to be the tool of choice, so far, barring a change in climate change policy, and in the absence of credible alternatives being offered.

All these are facts that cannot be ignored and need to be factored into any EU ETS review discussion.

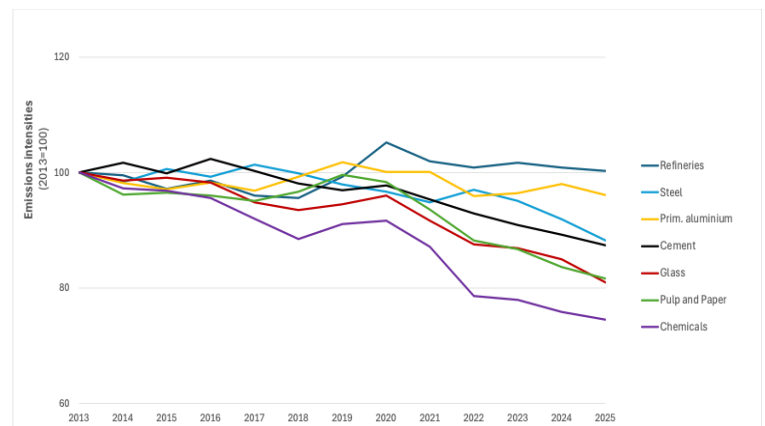
³ Source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=National_accounts_and_GDP&utm_

Figure 1 EU ETS verified emissions 2013-2025*⁴



*EI industry includes: Aluminium, Cement, Chemicals, Fertilizers, Glass, Steel, Other non-metallic, Pulp and Paper, Refineries

Figure 2 EU ETS emissions intensities in selected sectors 2013-2025⁵



2.2. EU ETS review in the context of the EU climate change regulatory environment

There are several important pieces of EU climate change regulation that are in play this year, including the EU ETS review, the CBAM review, the post-2030 architecture and Regulation on the Governance of the Energy Union and Climate Action. All these proposals will address issues that are overlapping and interrelated, but as it currently stands, they have different timelines (the starting date is different). This would imply that it is highly likely that they will cross the finish line at different times. Keeping coherence among the outcomes and ensuring that they work together, and hopefully reinforce each other, is very important, but not necessarily obvious under these circumstances. For illustration purposes, ERCST has produced a study entitled ‘Future of Emissions Trading in the EU: EU ETS - CBAM Strawman’⁶ which outlines the interaction between CBAM and EU ETS.

In addition, a proposal was introduced that will impact the MSR, while updated benchmark values for free allocation are expected separately. As a matter of both principle and practicality, we view these issues as part of a coherent EU ETS discussion, but we need to flag the danger of a review of the EU ETS in slices, rather than one coherent piece of legislation. This can’t be right, effective, or efficient.

Finally, with competitiveness and energy security becoming increasingly high on the EU policy agenda, the upcoming review is taking place in a very changed context, one which tries hard to

⁴ Source: ERCST 2026 State of the EU ETS Report (forthcoming).

⁵ See footnote 4.

⁶ ERCST (2025), Future of Emissions Trading in the EU – EU ETS–CBAM Package: A Strawman, European Roundtable on Climate Change and Sustainable Transition, Brussels, December 2025.

recognize competitive concerns without visibly modifying the direction of travel on climate change – but things can only be stretched so far, before they break. The Antwerp process and the Draghi and Letta reports highlight that perspective.

It is not news that there have been calls for the EU ETS to be suspended, pending the review. This was startling, coming from several EU members states and important parts of EU energy intensive industry, reflecting concerns around price levels and the impact of costs on European competitiveness.

The EC proposal on MSR⁷ will stop the invalidation/cancellation clause, which can only be viewed as softening the constraints (as it impacts the cap). The CBAM Omnibus bill was also an effort in that direction as well as the decision to postpone the phase out of Internal Combustion Engine (ICE) cars and vans. At the member state level, Italy has postponed its coal phase out to 2038⁸.

2.3. EU ETS sectors: different circumstances

The sectors covered under the EU ETS are in very different circumstances, both in terms of costs and competitive pressures. The power sector is on the way to decarbonization, having benefited from significant public support. While not totally insulated from fears of carbon leakage and loss of customer base, the level of exposure is significantly lower than for energy intensive trade exposed industries.

The industrial sector is at a much early stage of decarbonization with higher abatement costs, more demanding technology development and deployment, and with significant exposure to carbon leakage because of competitive pressures. The business case for trade exposed sectors is not available and is different from the power sector.

- In the power sector, the price is set by the marginal supplier; all other suppliers get rewarded and the consumers internalize it, with a lower risk of carbon leakage.
- For trade exposed sectors, the business case is not only dependent on a carbon price that would make decarbonization measures logical, but also need to include provisions that ensure the global competitiveness of the enterprise. The cost for operators includes more than carbon costs:

ETS costs for operators = *Net EUA shortage (net direct costs) + Net indirect costs + Capex (to reduce EUA liabilities) + Opex (to “run” the lower emission projects/operations).*

2.4. ETS in the decarbonization journey

Most of the measures that shape today the EU ETS, especially those that involve the MSR architecture and functioning, were put in place at a time when there was a significant surplus in

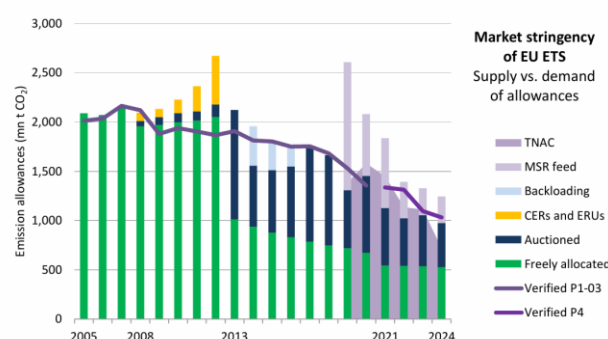
⁷https://climate.ec.europa.eu/document/download/ea54bb9d-505e-47ec-b81e-f635443182d3_en?filename=COM_2026_153_1_EN_ACT_part1_v4.pdf

⁸ <https://www.reuters.com/sustainability/climate-energy/italy-postpone-shutdown-coal-powered-plants-by-13-years-2026-03-31/>

the market and design corrections were necessary (a design flaw did not allow for flexibility on the supply side). The MSR was meant to address the concerns, which at that time were oversupply and low prices. For clarity purposes, ERCST does not recognize EUA price levels as a KPI for the success of the EU ETS, which is a market-based approach and will determine prices based on the supply/demand balance.

Currently, the situation has changed significantly with the EU ETS having been short year-on-year since 2021, is expected to be short in the future, and run out of allowances around 2039. Prices have also increased significantly.

Figure 3 Supply-demand balance and evolution of TNAC⁹



While EUAs prices have increased, the EU ETS costs were mitigated to some degree through free allocation. This situation has also changed now with the introduction of CBAM (in certain sectors) and the phase out of free allocation which is leading to rapidly increasing effective prices (carbon costs). This has also impacted non-CBAM sectors as a result of the benchmark updates and the

potential triggering of Cross Sectoral Correction Factor (CSCF) (according to Veyt analysis not due until mid 2030s), along with the cost impact of the free allocation phase-out on downstream sectors.

The EU ETS will run out of liquidity and that will have to be dealt with by those sectors of industry that will continue to have emissions past the date when the EU ETS runs out of allowances. This needs to be contrasted with the position of importers, as it is unclear how the CBAM will function when there are no EUAs.

While liquidity in the market is not an immediate concern, it must be seen as one that will become real soon, most likely in the first half of the 2030s.

2.5 ETS in a global context

The overall geopolitical situation has changed significantly since the EU ETS architecture was modified, especially with the introduction of the MSR, as since the introduction of the European Green Deal and the adoption of the Fit for 55 Package.

Globally, fossil fuel-based energy prices had spiraled upwards already before and accelerated with the start of the war in Ukraine, especially impacting the EU. This has affected in a very significant manner the competitive posture of the EU economy broadly, and especially EU industry. The war

⁹ Source: ERCST 2025 State of ETS Report.

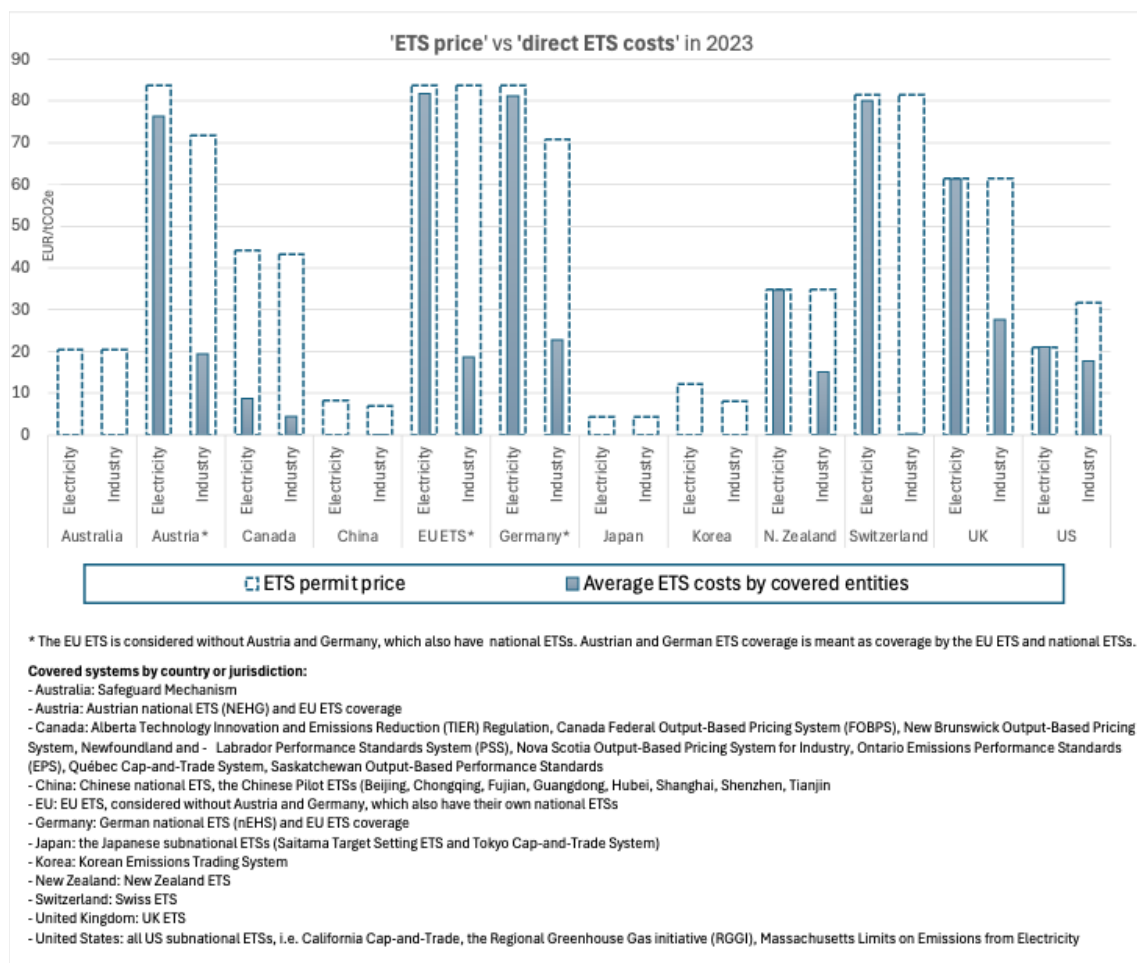
in Iran has now compounded this situation and is likely to have longer term consequences than it is currently envisaged by most observers. Energy costs in Europe are therefore 2-3 times higher than in China and other countries that do not face the same costs and barriers.

The increase in carbon costs is adding to this competitive burden at a very challenging moment for the EU economy. From a macro-economic perspective, the current financial situation is very different from where the EU was after the introduction of MSR which saw an increase in EUA prices. Fiscal outlays for COVID and the war in Ukraine, the resources used for the power decarbonization, all these have put the EU in a much more precarious financial situation. Public funds are not available as readily as they used to be, at a time when the EU has to pay for industrial decarbonization. According to Climate Commissioner Hoekstra, energy prices are expected to stay high and the capacity of EU Member States to soften the impact is limited due to financial constraints.

As public money is becoming scarce, other sources for funding the transition would need to be considered, or a combination of the three: the transition can be paid by public money, consumer money (with the consumer under pressure due to inflationary pressures, increased energy costs, etc.) or business (with the heavy industrial base under considerable competitive pressure).

When the EU ETS was introduced, it was envisaged that other jurisdictions would take similar steps and that it would result in a linked emission trading system. While there has been on the face of it an increase in the coverage of ETSs around the world, with the exception of the United Kingdom (UK) and Switzerland, the EU ETS is by far the more demanding in terms of level of effort for compliance. The reality of the impact is very different from the visible coverage that one can assume from a cursory examination of emission trading coverage. It is illustrated in Figure 4 below, which shows the effective price (cost) and visible price (EUA price) of decarbonization in several jurisdictions, with the EU cost being much higher than in other jurisdictions, outside of the UK and Switzerland.

Figure 4 'ETS price' vs 'direct ETS costs' incurred by covered entities, in 2023¹⁰



3. Issues and levers

The following is a non-exhaustive list of problems/issues, and the possible/potential levers to address them, that have been raised by different stakeholders, in the context of a discussion of the EU ETS.

The issues that have been raised can be categorized as more technical or as matters of policy/principle, whether they are EU ETS related or not, and whether they need to be seen as temporary fixes, or not. In many cases such a differentiation will be arbitrary to a certain degree, especially as all issues related to CO₂ scarcity become, by default, at some point political.

¹⁰ Source: ERCST, based on data by OECD, Table 2.A.1. in OECD (2025), Effective Carbon Rates 2025: Recent Trends in Taxes on Energy Use and Carbon Pricing, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris, <https://doi.org/10.1787/a5a5d71f-en>

3.1. Energy prices

Issue

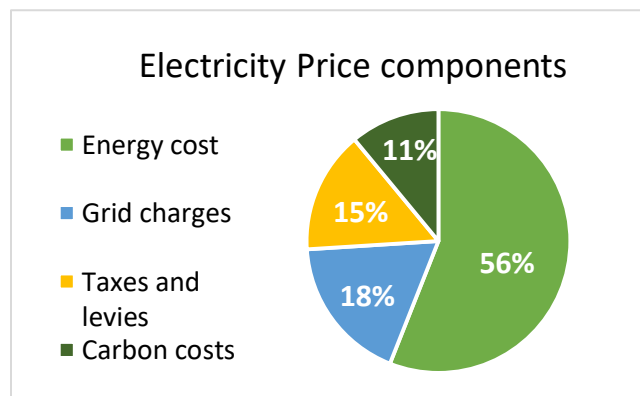
Stakeholders often refer to energy prices as being one of the key competitive handicaps that EU industry has compared to other jurisdictions, and point to the EU ETS as one of the culprits.

Energy prices have been higher in the EU for a while, and they are indeed a significant disadvantage for the EU industry. There is clearly a correlation between climate policy and the energy matrix in the EU and energy costs - coal phase-out and the deployment of renewables are two examples.

However, it must be emphasized that while energy prices are high, there are many other issues that drive it, unrelated to EU ETS, especially geopolitics and choices associated with that, as well as the EU's natural endowment. The EU will be at a natural disadvantage, economically and for energy security, in a world where economical alternatives to fossil fuels are not fully explored and utilized.

What most stakeholders refer to more specifically are electricity prices. Given the EU electricity market design, carbon costs are included in all generation due to marginal price of electricity market design.

Figure 5 EU electricity bill breakdown (average)¹¹



There is therefore an impact of carbon of around 11% overall on the electricity bill (household and industry average), not negligible, but not the largest factor (see Figure 5).

Levers

The main levers for electricity prices do not come from CO₂ pricing. However, CO₂ does play a role (see Figure 5), and as EUA prices increase, they will play an increasing role. So,

moderating EUA prices, at least until the grid is decarbonized, can have an impact on electricity prices.

Electricity price formation in terms of market design, the cost of tax and levy components, and how grid investments are distributed in time are all very political issues, not technical ones – and certainly not in the EU ETS domain. So are the energy choices that have been made in terms of availability and use of other energy sources that are currently presented as possible alternatives, including nuclear generation.

¹¹ Source: ERCST elaboration of European Commission data (March 2026).

Cost pass-through in the electricity sector should also be considered carefully as the assumption that utilities can pass through the cost without consequences, because there are consequences in terms of loss of load to foreign competitors and/or demand destruction, as well as new Renewable Energy Systems (RES) developers.

With respect to industrial customers having to bear the cost pass-through, the carbon price dominates the spot market. Electricity generation in the EU is gradually decarbonizing, which means that renewable energy sources set the price for an increasing number of hours. Over time, this will lead to lower carbon cost pass-through in electricity prices. However, due to increasing CO₂-prices, indirect carbon costs will prevail. This applies both to the electricity spot market and to long term Power Purchase Agreements (PPAs) available for industry.

Solutions to address the impact of CO₂ prices on electricity, technical, but with strong political implications have been discussed, and some introduced recently. As an illustration, the Government of Italy has raised the possibility, for gas produced electricity to:

- Decouple electricity from CO₂ costs;
- Reform price-setting mechanisms;
- Protect households & industry.¹²

3.2. Carbon price and cost

Issue

In climate change policy discussions, stakeholders often refer to carbon prices as being an issue. But language matters. We would like to start by clarifying the difference between carbon price and carbon cost, and the role that each play. This will help identify the issues and then the respective levers.

First, it is important to clarify that carbon costs attributable to the EU ETS are just one component of carbon/climate costs. Other climate change policies result in material costs. The Energy Efficiency Directive (EED) imposes mandatory energy audits and efficiency upgrades on industries and reduces energy consumption and therefore emissions – but it comes with a cost. The Renewable Energy Directive (RED) introduces additional costs by mandating targets for renewable energy adoption, requiring investments in infrastructure, technology, and grid upgrades to integrate renewable sources – which reduce energy consumption, and associated emissions. The discussion in this paper is limited to carbon costs from the EU ETS.

¹²<https://temi.camera.it/leg19/provvedimento/d-l-21-2026-misure-urgenti-per-la-riduzione-del-coste-dell-energia-per-la-competitivita-delle-imprese-e-la-decarbonizzazione-delle-industrie.html>

There is a correlation between carbon price and carbon cost. EU ETS cost can be the same as EUA prices multiplied by level of emissions, but can also be different. Measures, such as free allocation, were put in place to ensure that the price of EUAs and the cost of compliance with the ETS are different. Figure 4 above shows the relationship between carbon costs and carbon prices.

Carbon price and cost play different roles. Carbon price provides a signal for mitigation actions for decarbonization. A strong carbon price is needed to give a price signal for mitigation measures to be put in place. Prices are also important politically as many stakeholders and policy makers have come to identify the success of the EU ETS with the price level. On the other hand, prices are also politically sensitive due to their social impact, as witnessed in the EU over the last years.

Going back to the role that carbon prices play as a signal for decarbonization, lowering carbon prices will also create challenges for some who have taken action to decarbonize. In addition, when discussing prices, an important factor is that for investments to take place there needs to be some level of, if not predictability, at least of stability, in carbon prices. Therefore, stability and price level are issues that can be identified for carbon prices.

While certainly not the only determinant of competitiveness, carbon cost does impact competitiveness. The components of the EU ETS carbon costs are broader than ETS costs:

ETS costs for operators = Net EUA shortage (net direct costs) + Net indirect costs + Capex (to reduce EUA liabilities) + Opex (to “run” the lower emission projects/operations).

Competitiveness in the industrial base of the EU is currently the issue that is taking the spotlight, and for our discussion, the impact of the EU ETS on competitiveness (to be discussed in section 3.3) also needs to be highlighted.

To summarize, when referring to the impact of the EU ETS on competitiveness, stakeholders refer to carbon prices, when the issue is that of costs.

Indirect Cost Compensation (ICC) is an important element when it comes to carbon costs. The power sector's ETS costs are passed through to power consumers as part of the electricity bill, regardless of whether you use fossils or renewable energy. Thus, there is no direct link between indirect emissions from the use of electricity and the indirect costs in the electricity price. For particularly energy-intensive industries operating in a global market, parts of these indirect ETS costs can be compensated through the ICC mechanism to avoid carbon leakage.

The current ICC framework is established under the ETS State Aid Guidelines adopted by the EC in September 2020, which apply for the period 2021–2030 and coincide with Phase IV of the EU

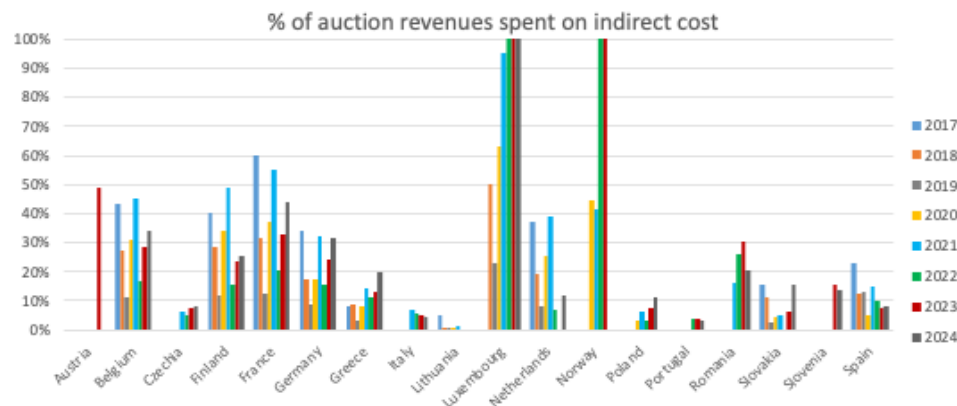
ETS. Under the existing guidelines, ICC is implemented by Member States on a voluntary basis and requires prior approval by the Commission under EU State Aid rules.

ICC eligibility is limited to sectors assessed as being most exposed to significant indirect carbon costs, and compensation levels are calculated using harmonized parameters, notably maximum allowed aid intensity, electricity consumption benchmarks, and national CO₂ emission factors, which determine the level of CO₂ price effect on national electricity prices.

In sum, the effect is a partial compensation of the indirect CO₂ costs in the electricity price. Moreover, it is not harmonized, and it depends on the resources and priorities of EU Member States.

It is open for Member States to implement stricter requirements in their national ICC schemes, for instance related to the beneficiaries' use of the compensation. Several countries require that companies use a certain share of the annual compensation on measures to reduce emissions and energy use. Finally, it is unclear what will happen to the ICC post 2030 and with regards to the inclusion of indirect costs in CBAM.

Figure 6 Percentage of auction revenues spent on indirect cost¹³



Levers

Carbon prices

EU ETS carbon prices could be impacted in several ways (not an exhaustive list):

1. Modify (lower) the Linear Reduction Factor (LRF) and with it the level of scarcity in the EU ETS. This implies a decision that may also have consequences for reaching the 2040 targets, and possibly the Climate Law objective (as it currently stands). This is a pure political decision.

¹³ Source: see footnote 4.

2. MSR design. The market has not seen any release from the MSR and has come to believe that it is a one-way street and meant to remove EUAs from the market, with a large percentage permanently.
 - a. Removing the invalidation/cancellation will also change scarcity in the EU ETS as the invalidation/cancellation clause changed the level of the EU ETS cap through the back door and impacts prices. With decreasing levels of free allocation, price and costs will converge.
 - b. Change the MSR absorption rate – that is the rate at which EUAs are moved into the MSR.
 - c. Release rate and trigger of the MSR.
 - d. Re-examine canceled/invalidated EUAs in the MSR and bring back in the market the whole lot (3.2. billion canceled/invalidated allowances since MSR kicked-in), or, at least, that portion that can be labelled as “good surplus”, i.e. surplus resulting from mitigation actions. This would help to address upcoming liquidity challenges.
 - e. A modified MSR can play a market management function.
3. Introduction of international credits one-for-one, which are likely to come at a lower price.
4. Price corridor. This will ensure some level of stability in the price signal by keeping the price within certain boundaries.
5. Introduction of a price management system – akin to the functions of a carbon bank, this will be price management, through existing, or new institutions. An MSR (modified) could be seen as a candidate to fulfill the price management function.

Carbon costs

Carbon costs can be impacted through several measures that could be considered:

1. The amount of free allocation available
 - a. Level of the LRF. This will impact the amount of free allocation available in absolute terms. This will also impact prices due to the relaxation of the LRF and have an impact on costs.
 - b. MSR design and functioning will impact the price and indirectly the cost, especially as free allocation is decreasing.
 - c. Split between amounts available between auctioning and free allocation – more free allocation can be made available, lowering costs.
 - d. The shape of the CBAM curve – backloading the introduction will impact the amount of free allocation available.
 - e. Benchmarks – modifying the benchmark value in the free allocation formula changes the number of free allowances given. As they set the number of allowances granted per unit of product, based on intensity of the most efficient installations, a higher benchmark value would lead to more free allocations and vice versa, all else equal.

- f. Evaluate the correlation between free allocation and CBAM. Given that CBAM is also increasing its coverage downstream, it is important to understand the role that CBAM and free allocation play, and whether they are complementary or a substitute.
- g. CSCF could have an important impact on free allocation and therefore costs, with some uncertainty as to when it might be triggered.

2. ICC: Several models for a post-2030 ICC mechanism have been tabled and discussed by various stakeholders and will need to be examined. A more harmonized and EU level approach to ICC is also something that needs to be examined. Clarity on CBAM and on the post 2030 status will help provide understanding and credibility to the EU ETS framework.

3. Funds made available through different mechanisms, such as the Modernization Fund and the proposed Temporary Decarbonization Fund, which is meant to partially address export concerns. This is a second-degree impact and cannot be seen as the equivalent of a free allocation approach, especially since access to receiving such funds is often limited and uncertain, depending on a number of eligibility requirements that not every sector has the ability or the technology available to satisfy. Funding also does not provide solutions to sectors that do not yet have viable abatement options.

3.3. Competitiveness in EU & global markets

Issue

Section 3.2 highlighted the impact that carbon cost can have on competitiveness, and with it, on carbon leakage. Carbon leakage is the result of competitiveness pressure resulting from costs from EU ETS and other policies – carbon leakage and competitiveness are concepts that cannot be separated. That is true for the internal EU market, and even more so for the global market.

However, while the increasing impact of carbon cost on competitiveness is a reality, another reality that needs to be emphasized is that other factors play a very important role in the challenges that the EU faces in terms of industrial competitiveness– e.g. energy prices.

The EU ETS will impact cost and competitiveness through direct and indirect cost. The effect of indirect carbon cost through the electricity market is an important factor currently for industries that are electro-intensive. It will be increasingly important as we electrify and until that time when the grid is decarbonized. It could also be mentioned as a factor affecting global competitiveness. The impact of indirect costs through carbon price embedded into electricity is being addressed through ICC mechanism. For illustration purposes we must refer to Figure 5 which shows the impact of the EU ETS on electricity prices.

For direct costs, until 2026 free allocation provided a significant level of protection against competitive pressure due to carbon pricing. In the EU, the expectation is that the CBAM will take the relay but as highlighted in Section 3.2 above there is a significant amount of debate regarding the role that free allocation and CBAM are called to play in dealing with competitiveness and carbon leakage – are they complementary or is one a substitute for the other, as the generally accepted view would have it?

A key issue is not only the level of carbon costs, but the workability of the CBAM as a whole. The phase-out of free allocation is happening while the effectiveness of CBAM has not yet been proven.

What is clear is that in the EU, with the expressed desire from EU institutions to phase out free allocation and phase of CBAM, the situation is changing as the effective price (cost) is starting to increase. For the international market there is no provision currently that addresses exports specifically at this stage. A solution is promised as part of the proposal for the Revision of the EU ETS due in June/July. When competing in international markets the cost introduced by the EU ETS is a factor, as it is a cost that competitors in other jurisdictions do not incur, and, in general, costs cannot be passed through.

In 2018, exports accounted for 22% of EU iron and steel production value, 18% for aluminum, 14% for fertilizers. For cement, the EU average masks significant Member State variation — several Member States have seen export shares exceeding 50% of domestic production in recent years. The Commission's own Impact Assessment estimated a 6.8% loss in export market share for CBAM-covered sectors in the absence of export provisions — likely more for the most export-dependent installations.

The fact that carbon costs are an issue from a competitiveness point of view can be illustrated in a number of ways, using different sources. The impact is not insignificant. Table 1 below shows different impacts relative to a reference price of the commodity in different sectors, as well as on profits.

Table 1 Calculation of direct carbon costs as a % of a reference price and profits in four sectors¹⁴

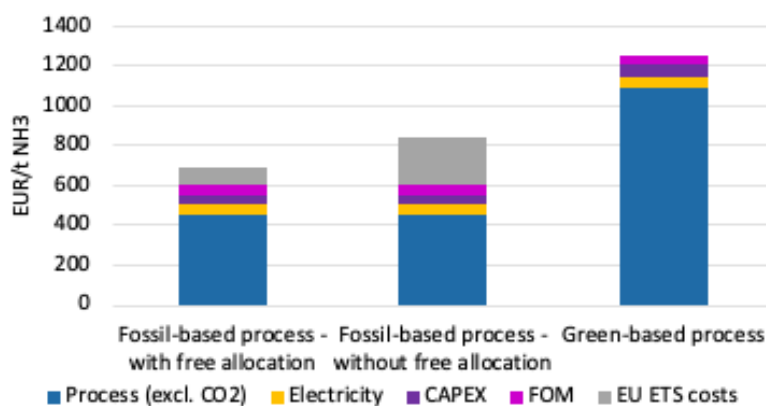
Sector			Steel	Cement	Fertilisers	Aluminium
Product ⁽¹⁾			<i>Cold rolled flat steel</i>	<i>Clinker</i>	<i>Ammonia</i>	<i>Prim. Aluminium</i>
Gross direct carbon costs (assuming 0 FA) as a share of product reference price (%) - (full cost pass through)	low price	carbon	10%	54%	18%	7%
	high price	carbon	20%	71%	32%	13%
Gross direct carbon costs (assuming 0 FA) as a share of profits ⁽²⁾ (%) - (full cost pass through)	low price	carbon	76%	87%	69%	56%
	high price	carbon	87%	93%	82%	73%
Calculation assumptions						
Direct carbon intensity (tCO ₂ /t of product) ⁽³⁾			1,85	0,87	1,91	1,87
Product reference price (EUR/t of product) ⁽⁴⁾			1144	53	608	1.815
Profitability indicator ⁽⁵⁾			3,6%	17,9%	10,1%	5,8%
Assumed carbon price (EUR/tCO ₂) ⁽⁶⁾		low	71,6			
Assumed carbon price (EUR/tCO ₂) ⁽⁷⁾		high	150			

At an EUA price of €125 by 2030 and no free allocation, carbon costs have been estimated to exceed 50% of average cement production costs (Marcu et al. 2025)¹⁵. Even at 2024 ETS prices with free allocation still partially in place, carbon costs already represented 8–10% of total cement production costs at €55/EUA, rising to 12–15% at €90/EUA. For fertilizer plants that depend on export markets during the EU off-season to maintain viable capacity utilization, it is not an abstract risk but a near-term threat to continued operation.

¹⁴ *Source/Notes:* ERCST based on the following sources/notes: (1) The following CN and prodcom codes per product are taken into account: Flat steel: CN 7209, prodcom 24104130, 24104150; Cement clinker CN 252310, prodcom 23511100; Ammonia fertiliser CN 2814, prodcom 20151075; Primary aluminium CN 7601, prodcom 24421130, 24421153, 24421154, 24421155; (2) Profit estimated as the product of product price with the average profitability indicator of the sector; (3) Vidovic, D., Marmier, A., Zore, L. and Moya, J., Greenhouse gas emission intensities of the steel, fertilisers, aluminium and cement industries in the EU and its main trading partners, Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/359533, JRC134682; (4) EU27 average 2020-2024 EUR/t for relevant prodcom codes, from Eurostat prodcom statistics 'Sold production, exports and imports' (ds-059358); (5) Profitability indicator estimated as the ratio between gross operating surplus and turnover, based on Eurostat structural business statistics (average for last three years of available data). (6) 2021-2023 average EU carbon, based on World Bank Carbon pricing dashboard data; (7) Estimated carbon price in 2034.

¹⁵ Marcu, A., Mehling, M., Cosbey, A., and Fleury, L. (2025). Solutions for Exports of EU CBAM-Covered Goods, ERCST.

Figure 7 Production costs for fossil-based and green ammonia under different scenarios (2030)¹⁶



ERCST's own modelling (Marcu et al. 2024)¹⁷ of two representative CBAM products quantified how this dynamic plays out:

- For cold-rolled steel (CN 7209), carbon costs would create a cost premium over world prices of 18% by 2030, rising to 35% by 2034 — at which point export markets for this product would effectively cease to exist.
- For calcium ammonium nitrate (CAN), the cost premium over world prices reaches 27% by 2030 and 49% by 2034, again implying an effective extinction of global export markets. For fertilizers the problem is compounded by seasonality: plants must export during EU off-season winter months to maintain viable capacity; loss of those exports impairs overall operational viability, not just incremental market share.

Levers

While the objective of the Review of the EU ETS is multi-faceted, ensuring the competitiveness of the EU industry will be one of the key asks from many stakeholders.

There are a number of ways that could be explored that will impact the competitiveness of EU industry:

1. Ensure that carbon costs are minimized. This has been explored in section 3.2 and will not be repeated here.
2. Ensure demand for low carbon products. Current EU climate change policies are moving producers to manufacture low carbon products, be they steel, aluminum, cement, etc. However, there is no demand for these products which remain more expensive than the current products, and largely with the same intrinsic properties. A few examples for illustration include:
 - Hydrogen-based “green steel”: 40% more expensive (McKinsey estimates);¹⁸
 - Low-carbon cement (with carbon capture or alternative binders): ~50–100%+ cost increase;

¹⁶ Source: ERCST, 2026 State of EUETS Report, Compass Lexecon.

¹⁷ Marcu, A., Mehling, M., Cosbey, A., and Svensson, S. (2024). *Review of Carbon Leakage Risks of CBAM Export Goods*. ERCST. Tables 4.1 and 4.2, pp. 18–19.

¹⁸ Source: McKinsey Technology Trends Outlook 2022 Report ([mckinsey-tech-trends-outlook-2022-full-report.pdf](https://www.mckinsey.com/industries/technology-and-digital/articles-and-insights/mckinsey-tech-trends-outlook-2022-full-report)).

- Green hydrogen: Typically, 2–4× cost of fossil-based hydrogen;
- Low-carbon ammonia: ~30–100% higher cost.

This points to the fact that there needs to be a demand for low carbon products that has to be created. The Industrial Accelerator Act (IAA) is a step in the right direction and includes public procurement provisions and some products standards. Product standards and product accounting are approaches that could be examined in the review.

3. Use of mechanisms such as Carbon Contracts for Difference (CCfDs), which could be important for some projects such as Carbon Capture and Storage (CCS) and CDR.
4. Introduction of a material measure to address exports for CBAM sectors. The cost of carbon in most cases cannot be passed through in global markets and as such a solution, other than what has been proposed in the CBAM Review EC proposal, has to be put forward: carbon costs need to be discounted from exports up the benchmark in order to keep EU products competitive.

3.4. Energy security

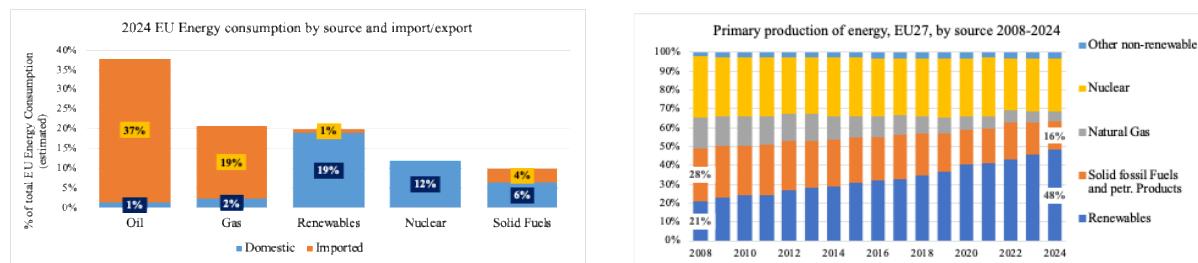
Energy security is not raised as a challenge but as direct benefit driving from the implementation of the EU ETS. The argument is that the EU ETS drives decarbonization and, given the war in Ukraine and in Iran, it proves the benefits of decarbonization and the impulse of the EU ETS price signal which incentivizes sources of energy that ensure EU security of supply. At the same time, it disincentivizes the use of domestic endowment.

This is briefly illustrated by the two figures below. y.

Figure 8 shows the exposure that the EU has to energy imports with significant percentage of fossil fuels being imported; **Error! Reference source not found.** shows the increase in renewable energy as a percentage of the energy supply in the EU.

While it must be mentioned that a significant amount of renewable deployment was due to favorable power purchase agreements based on public money, the EU ETS price signal worked in a complementary manner, which combines two key objectives of the EU: increase in energy security and decarbonization. However, the speed at which this transition proceeds must take into account diversification and ensure that supply and infrastructure is available for both existing and new sources of energy.

Figure 8 EU energy consumption by source and import/export, 2024¹⁹. Figure 9 Primary production of energy, EU27, by source 2008–2024²⁰



3.5. Technology neutrality

The EU ETS, as a market, provides a price signal and is technologically neutral as matter of principle. However, broadly speaking, the lack of technology neutrality in EU climate policy, which is real, cannot be attributed to the EU ETS, maybe with the (minor) treatment of bio energy.

This topic must be discussed in the context of EU and national policies that accompany the EU ETS and skew the preference to certain technologies and approaches. It can be attributed to the decision that was made to force decarbonization almost in parallel for all sectors, “all sectors must contribute”, which runs contrary to what should be an ETS principle of decarbonizing up the MACC curve. The introduction of layers of policy on top of the EU ETS price signal will clearly detract from the pure efficiency of a market approach, and that is clearly a political decision that permeates the EU approach to climate change policy, and not only climate change.

3.6. Demand for low carbon products

Issue

The EU has reached a point in the drive towards a low carbon economy where the power industry has made significant strides towards decarbonization. Electrification has – and will continue to play – a very important part in the economic transition and is one of the many necessary conditions for the transition to succeed.

The next step is a much more difficult nut to crack: industrial decarbonization. As an accompanying condition, this also requires that there is market for these products, which are generally more expensive than regular products. While still evolving and imperfect, with much work remaining to achieve effective outcomes, a policy framework has taken shape to address the supply side of low carbon industrial output.

¹⁹ Source: Eurostat (2026), ERCST Calculations. Bar heights reflect Eurostat data: energy mix (gross available energy) and production mix. The domestic/imported split per source is an ERCST calculation: domestic share derived from each source's share in EU primary energy production; imported share is the residual. Electricity imports excluded to avoid double-counting.

²⁰ Source: Eurostat (2026), Simplified energy balances, data extracted March 2026; ERCST calculations.

Levers

What clearly needs to be examined is what has to be put in place to create demand for low-carbon products, focusing on product carbon intensity standards as a promising option that has yet to be deployed effectively at the European level. The concept of such standards – which define mandatory carbon performance requirements for goods – has gained renewed attention considering ongoing challenges in European and global climate policy.

Creating markets for low-carbon products is a missing pillar of EU industrial policy, and product carbon intensity standards are needed to bridge the gap between forcing low-carbon production and rewarding it in the marketplace.

Figure 10 and Figure 11 outline some of the logic and steps, the need for policy integration, and how these fits in the overall EU climate policy.

Figure 10 Creating markets for low-carbon products, a missing pillar of EU industrial policy²¹

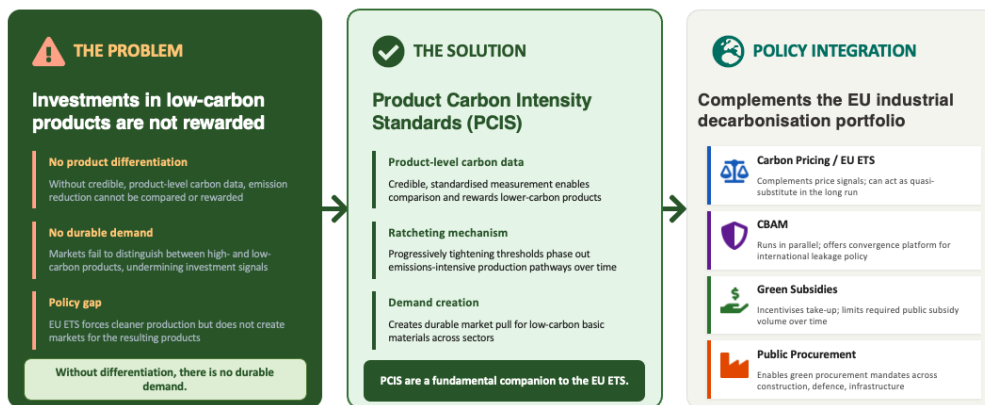
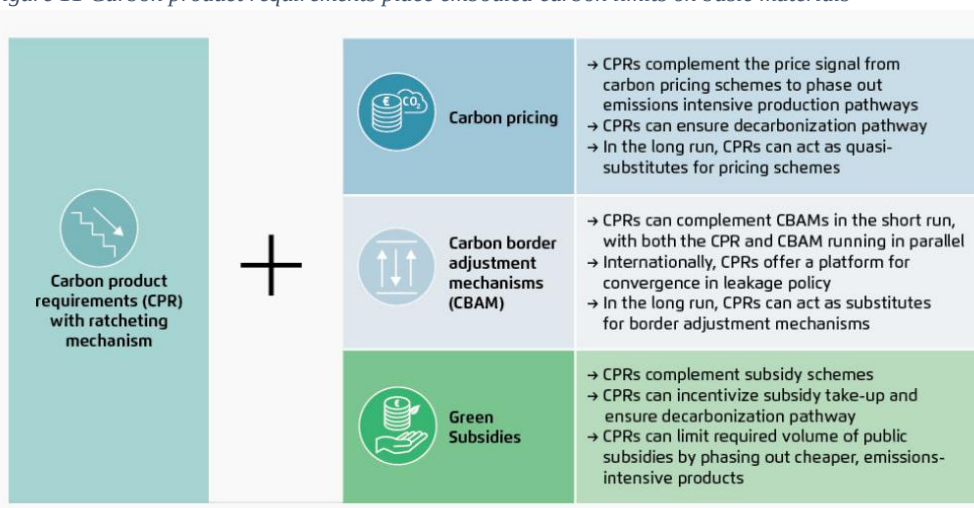


Figure 11 Carbon product requirements place embodied carbon limits on basic materials²²



²¹ Source: ERCST, Product Standards.

²² Source: Agora Industry, Carbon Intensity Product Standards, March 2026, ERCST.

While the idea is not new, having been previously proposed in international forums (including sectoral agreements under the Kyoto Protocol), recent developments make it timely to revisit this approach and include the discussion as part of the EU ETS review. It is clearly not an intrinsic EU ETS measure and one that also has political overtones.

On March 4, 2026, the EU Commission adopted its legislative proposal²³ for an Industrial Accelerator Act. One of the central elements of the IAA is creating lead markets and Union-origin requirements for certain low carbon products such as steel, cement, and aluminum.

These products are considered low-carbon if they comply with requirements defined in Delegated Acts under relevant EU legislation, notably the Construction Products Regulation and the Ecodesign framework. Additionally, the EU Commission is empowered to adopt Delegated Acts to create voluntary classification systems based on greenhouse gas (GHG) intensity for certain industrial products placed on the EU market, with verified emissions data and clear methodologies for calculating and classifying products according to their carbon performance²⁴.

The IAA mentions that ‘to provide environmental integrity and administrative feasibility, it is important to rely on well-established and monitored emissions accounting methodologies.’

To boost the creation of lead markets, the IAA establishes that public procurement procedures launched after January 1, 2029, must require minimum shares of low-carbon materials.

The IAA builds on the Sustainable Products Regulation and the Construction Products Regulation. The Battery Regulation goes further by introducing mandatory carbon footprint declarations and threshold values for batteries.

The introduction of carbon intensity product standards will also require a careful review of existing carbon accounting standards, especially as these relate to the product level.

3.7. Burden on the EU ETS vs other sectors

Issue

In the EU climate framework, emissions and removals are divided across three main pillars: the EU ETS1, the Effort Sharing Regulation (ESR) and the Land Use and Land Use Change, and Forestry (LULUCF) Regulation.

Currently, the effort distribution between ETS, ESR, and LULUCF is not fixed in a single formula or document. Instead, it is politically decided as part of the EU’s overall climate target-setting process and then translated into separate legislation for each pillar.

²³ EU Commission Press corner https://ec.europa.eu/commission/presscorner/detail/en/ip_26_515

²⁴ The methodologies for calculating greenhouse gas intensity shall rely on established emissions-accounting frameworks and data already available under the EU ETS and CBAM.

For illustration purposes, in the 2030 target, the EU-wide target of –55% was agreed and possible pathways to reach it were modelled through Impact assessments by the EC. The target was enshrined in the European Climate Law.

Subsequently, the EU had to translate it into operational law. The split emerged via the Fit for 55 Package. This involved revising the EU ETS, the Effort Sharing Regulation, and LULUCF²⁵. After political negotiations the following split emerged:

- EU ETS: cap tightened to achieve a –62% reduction by 2030 compared to 2005 levels;²⁶
- ESR: –40% reduction by 2030 compared to 2005 levels;
- LULUCF Regulation: target of 310 Mt CO₂ equivalent of net removals by 2030.

Levers

The speed of decarbonization and the burden on the EU ETS sectors is a broad EU policy decision. It requires that a number of issues be addressed, including when the technology for EU ETS is available, how economical it is, and how much and at what pace can it be scaled up. Another element that needs to be seriously examined is the provision that the international situation and the efforts undertaken by other countries to address climate change should be factored in. Has this been a real factor in decision making process or really a formality?

A number of approaches can be considered:

- Multiple sector-specific targets: under this model, separate objectives are defined for the EU ETS, the ESR, and the LULUCF sector. This ensures a clear distribution of responsibilities and provides regulatory certainty for each sector, while allowing policymakers to account for differences in abatement potential, costs, and socio-economic impacts. At the same time, this approach can reduce overall cost-efficiency, as it limits the ability to optimise emissions reductions across the economy and may lock in relatively more expensive mitigation pathways in certain sectors.
- Single, EU-wide target, without predefined sectoral splits: in this scenario, emissions reductions would be driven primarily by market mechanisms and cost-efficiency considerations, allowing decarbonisation to take place where it is cheapest. While this

²⁵ Council of the EU (2023) [https://www.consilium.europa.eu/en/press/press-releases/2023/03/28/fit-for-55-package-council-adopts-regulations-on-effort-sharing-and-land-use-and-forestry-sector/#:~:text=The%20new%20effort%20sharing%20regulation%20\(ESR\)%20sets,2005%2C%20for%20the%20sectors%20that%20it%20covers.](https://www.consilium.europa.eu/en/press/press-releases/2023/03/28/fit-for-55-package-council-adopts-regulations-on-effort-sharing-and-land-use-and-forestry-sector/#:~:text=The%20new%20effort%20sharing%20regulation%20(ESR)%20sets,2005%2C%20for%20the%20sectors%20that%20it%20covers.)

²⁶ EUI (2024) The EU Emissions Trading System: two decades of scope evolution [https://fsr.eui.eu/the-eu-emissions-trading-system-two-decades-of-scope-evolution/#:~:text=Set%20up%20in%202005%2C%20the,insights%20for%20effective%20system%20monitoring.&text=The%20EU%20carbon%20pricing%20mechanism,in%20circulation%E2%80%9D%20\(TNAC\).](https://fsr.eui.eu/the-eu-emissions-trading-system-two-decades-of-scope-evolution/#:~:text=Set%20up%20in%202005%2C%20the,insights%20for%20effective%20system%20monitoring.&text=The%20EU%20carbon%20pricing%20mechanism,in%20circulation%E2%80%9D%20(TNAC).)

could lower the overall cost of achieving the EU's climate objectives and simplify the policy framework, it might lead to an uneven distribution of effort across sectors.

3.8 Flexibility

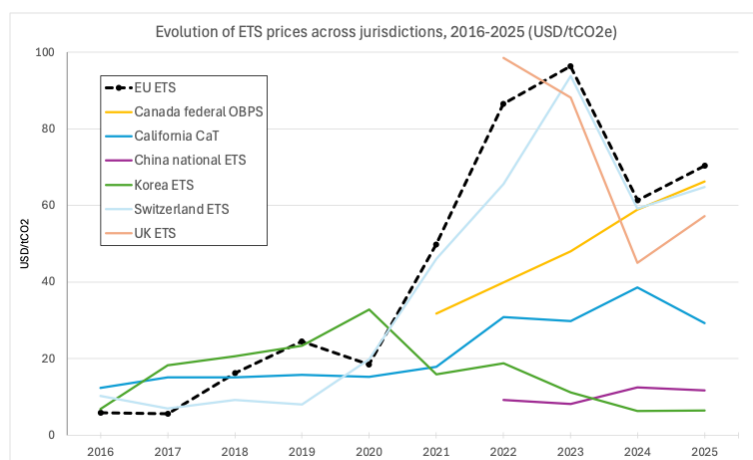
Issue

There is frequent reference to the lack of flexibility when it comes to the EU ETS. This is not necessarily expressed clearly and openly, and the meaning is quite unclear.

It could be interpreted as related to several issues:

1. The lack of options for price/cost containment. When the Linking Directive was introduced in 2004 it was seen as a first attempt to create a global carbon price as well as providing a cost containment measure. In combination with other factors, such as the financial crisis which affected demand, and the flaw in design that did not allow for supply side flexibility in the auctioning schedule, it actually contributed to a steep decline in EUA prices. For those that see EUA price and not the amount of CO₂ in the atmosphere as the real KPI for ETS success, the Linking Directive and international credits elicit strong negative reactions. However, as Figure 12 shows, EU ETS prices are significantly higher than other jurisdictions, with the exceptions of the UK, Switzerland.

Figure 12 Evolution of visible (explicit) ETS prices across jurisdictions, 2016-2025 (USD/tCO₂-e)²⁷

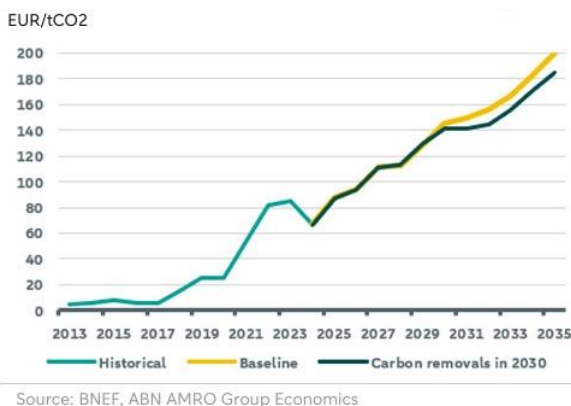


The introduction of additional options and flexibility could contribute to cost containment. This can be done through the introduction of CDR and/or international credits. The impact of introducing CDRs is illustrated in

Figure 13 below.

²⁷ Source: ERCST, based on data from World Bank Group, State and Trends of Carbon Pricing Dashboard.

Figure 13 Inclusion of removals by 2030 – impact on carbon price²⁸



2. The need to achieve net zero and net negative objectives is set in the climate law. Therefore, together with hard to abate emissions there will also be a new for negative emissions (removals) to achieve these objectives.

According to the impact assessment underpinning the 2040 climate target, industrial residual emissions are expected to be in the range of 89-181 Mt CO₂ by 2040²⁹, while domestic permanent removals would in the most

optimistic scenario be in the range of 49-75 Mt³⁰. Further flexibility is therefore needed to compensate for residual emissions in the EU ETS post 2030.

3. The inflexibility that the current governance brings in, all based on automatic quantitative triggers, has been seen as a positive by many stakeholders as it brought predictability to the EU ETS governance. These provisions included the MSR's two thresholds as well as the indiscriminate removal and then invalidation/cancellation of EUAs in the MSR, irrespective whether they were "good surplus" from mitigation actions or "bad surplus" from economic retrenchment. This was also reflected in the inability of the current governance to react rapidly and effectively to changes in the EU ETS market, as well as changes in the market of the real economy, i.e. products. The result was quite significant. Between January 1, 2023, and 1 January 1, 2025, a cumulative total of 3,167,386,717 EUAs were canceled/invalidated under the MSR.

²⁸ ABN AMRO Group Economics, 2025. Scenarios shaping EU ETS prices, 16 September 2025.

²⁹ See Table 5 'Sectoral net GHG emissions' in SWD(2024) 63 final, PART 1/5, https://eur-lex.europa.eu/resource.html?uri=cellar:6c154426-c5a6-11ee-95d9-01aa75ed71a1.0001.02/DOC_1&format=PDF

³⁰ See Table 7 'Industrial removals and net LULUCF removals' in SWD(2024) 63 final, PART 1/5, https://eur-lex.europa.eu/resource.html?uri=cellar:6c154426-c5a6-11ee-95d9-01aa75ed71a1.0001.02/DOC_1&format=PDF

4. Given the changing energy matrix in the EU, peaking plants play an important role and their treatment under the EU ETS should be examined.

Figure 14 Annualised Price volatility of EUA and selected commodities, 2020-2025³¹



5. EUA prices have not been excessively volatile when compared to other commodities. However, given the expected decrease in liquidity in the EU ETS, this can only be expected to increase in the future.

Levers

Flexibility issues (current or potential) could be impacted through several levers:

- International credits in the EU ETS. This may impact prices and costs. If well managed, through governance, quantity and quality filters, it can be an option that should not be thrown out without examination and justification.
- Article 29 dedicated to preventing major price shocks has not been triggered but it will become increasingly relevant, and its parameters should be examined to ensure that they are relevant at current conditions and process .
- Art 27a provides exemption for peaking plants from the EU ETS under certain conditions. The parameters for Art 27a should also be examined if they are still fit-for-purpose.
- The integration of negative emissions in the EU ETS, both domestic and international, both technological and nature-based solutions are options that should be considered as it is virtually impossible to achieve the Climate Law targets without them.
- While the current governance of the EU ETS, which uses volumetric triggers has made a positive contribution to correcting past problems with the EU ETS functioning, a more flexible governance, introducing provisions and functions akin to a “central bank” should be examined and considered.

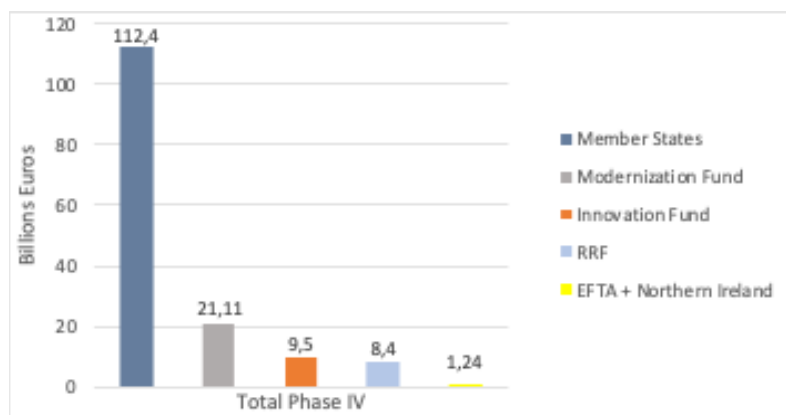
3.9 Funding for decarbonization

³¹ Sources: World Bank Commodity Price Data (Pink Sheet) for Brent crude oil, European natural gas, and gold; ICAP for EU Emission Allowances (EUA); Ember/ENTSO-E for EU wholesale electricity prices; Federal Reserve Bank of St. Louis (FRED/Coinbase) for Bitcoin. Annualized volatility calculated by ERCST.

Issue

With the decrease in free allocation, the funds being taken out of EU ETS sectors increase and the costs to EU ETS covered sectors also increase. In 2024, total EU ETS revenues reached €38.8 billion, of which €24.4 billion went directly to Member States³². Some of the EU ETS revenue goes to Member States, and some will be used for the various funds, as illustrated in Figure 15.

Figure 15 Total EU ETS generated income in Phase IV and distribution between budgets (2021-2024)³³



With industrial decarbonization now being in the spotlight, the funds necessary are significant and many stakeholders feel that what is available will simply not be enough. The EU need for decarbonization is according to I4CE³⁴, €842 billion per year on average in 2025–2030, which makes the EU ETS revenues, which are not insignificant, very

small indeed and leave a large gap.

Since someone has to pay the bill (shareholders, taxpayer or consumers) there is an on-going debate as to where these funds will come from, whether the EU ETS generated money is being recycled, and whether it is being recycled effectively to those that bear the cost and need to decarbonize at the same time.

³² European Commission. (2025). Report from the Commission to the European Parliament and the Council on the functioning of the European carbon market in 2024 (COM(2025) 735 final). https://climate.ec.europa.eu/document/download/ddc1b1de-652b-49ed-8f15-d9fa8badd39f_en?filename=com_2025_735_en.pdf

³³ Source: ERCST 2026 State of the EU ETS Report (forthcoming)

³⁴ Institute for Climate Economics (I4CE). The State of Europe's Climate Investment 2025.

Figure 16 EU ETS reported MS auction revenues EU 27 per category (2025 reporting, 2024 data) (%)³⁵

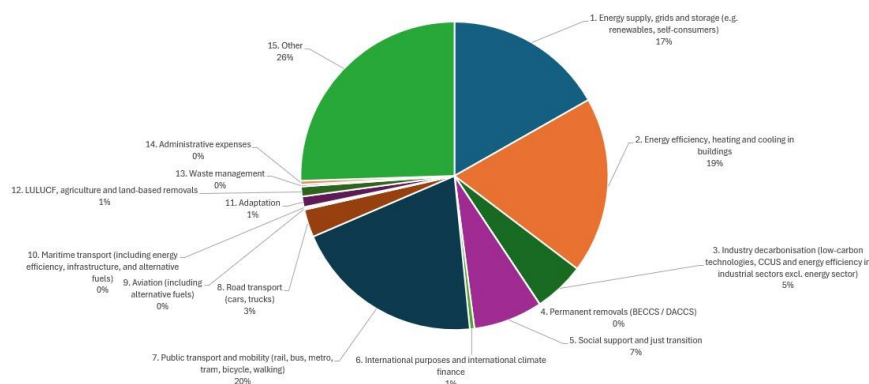


Figure 16 shows the use of auction revenues by Member States. Following the 2023 revision of the ETS Directive, Member States now report revenue use

through a set of harmonized spending categories, which makes it possible to identify the policy orientation of ETS-funded expenditure more clearly across countries.

A key point is that the use of EU ETS revenues has become significantly stricter over time. Under the previous framework, Member States were encouraged to use at least 50% of auction revenues for decarbonization and energy-related purposes.

Since the 2023 ETS reform, Member States must use 100% of the revenues, or an equivalent financial value, for climate action and energy transformation. Whether this is actually happening is still to be seen. The new harmonized reporting template introduced in 2024 groups expenditure into 15 categories, which shows that ETS revenues are used for a wide range of transition purposes, including energy, buildings, transport, industry decarbonization, adaptation and social support. The Commission also notes that Member States do not have to spend the revenues in the same year in which they are generated, so part of the revenue may remain unallocated, committed for later use, or only be reported in future years.

Levers

The use of EU ETS revenue is an important topic that needs to be addressed. The tools available for financial support will need to be part of the EU ETS review.

The consideration of a mandate that (a significant percentage of) funds be available to those that have paid into the EU ETS revenue should be on the agenda for the review, including coordination at the members state level.

It must be remembered that that funding is not only necessarily for CAPEX only, but also for OPEX – barring that, this cannot be seen as viable and sustainable business proposition. CCfDs

³⁵ Source: See footnote 4.

are a promising instrument but to make it effective the amount of funds behind it must be examined, well understood, and aligned with the needs.

Coordination between the various support mechanisms needs to be also examined to ensure compatibility and complementarity. Since conditionality has been raised in the context of a number of issues, its operationalization should be examined, including how recognition can accrue to those that paid for compliance, including the impact on the balance sheet.

3.10 Market functioning

Issue

One of the KPIs for an EU ETS “Fit for purpose” is a good market functioning with good liquidity and good price discovery. That is being called into question as liquidity decreases, especially post 2030. Figure 17 illustrates the current view on market functioning, where liquidity and volatility are not flagged as problematic as this time.

Figure 17 Market functioning trackers, 2025³⁶

Indicator	2023/24	2024/25
Volume	Green	Yellow
Open interest	Yellow	Yellow
Auction participation	Green	Yellow
Auction coverage	Yellow	Red
Auction-spot differential	Yellow	Yellow
Cost of carry	Yellow	Yellow
Ask-bid spread	Green	Green
Volatility	Yellow	Green
Hedging	Red	Green
Liquidity	Green	Yellow

Volatility is also not excessive when compared to other commodities as seen from Figure 14 above.

The impact of market speculation and/or abuse was also brought up by several stakeholders. In its Communication on Energy Prices “Tackling rising energy prices: a toolbox for action and support”, published on 13 October 2021, the European Commission highlighted that questions have emerged around the functioning of the European carbon market. To examine more closely patterns of trading behaviors and the potential need for targeted actions, the Commission asked the European Security and Market Authority (ESMA) for a first preliminary assessment of European carbon which was followed by the publication of a report on its analysis of the trading of emission

allowances. The ESMA report found several issues that needed further research and analysis and made several recommendations.

Both these issues can be addressed within the direct regulatory framework of the EU ETS and will in general be seen as technical issues even if the solutions may be more political.

³⁶ Source: ERCST 2025 State of the EU ETS Report, Bloomberg.

Levers

There are different ways in which market liquidity will be impacted, including by:

- Linking ETS1 and ETS2 will create more underlying commodity,
- Linking with UK and other jurisdictions,
- Introduction of international credits,
- Introduction of CDRs,
- Revisit the MSR, including the possibility of moving from a volumetric to a price system,
- Revisiting the LRF,
- Revisiting the MSR invalidation/cancellation policy, including (partial) re-examination of canceled/invalidated allowances.
- Governance: introduce the functions of market management. The way the EU ETS is shaping up will need different governance - one that can react to the changing nature of the EU ETS, as well as respond to the impact of the EU ETS on the EU economy. It is a tool that maybe not used, but one that should be available if necessary. This should be considered for addressing competitiveness, liquidity, the integration of negative emissions. It is a normal function in any strategic market, which is what the European Central Bank (ECB) does for the Euro.

With respect to market volatility, the ESMA report recommendations should be examined and implemented, especially recommendations that pertain to market transparency. As mentioned in Section 3.8, Art 29a, which intends to address price fluctuations, should also be re-examined.

3.11 Accompanying conditions

The importance of accompanying issues cannot be emphasised enough. The EU ETS provides a price signal for decarbonization and an incentive to produce low carbon products. However, for this signal to be effective and impactful, it needs to also be accompanied by other conditions in the EU economy.

Issue

Changes such as moving off fossil fuels in the power industry, decarbonizing industrial production and transportation also need to be accompanied by (not an exhaustive list):

1. The availability of competitively priced low carbon energy and other products such as H₂;
2. Increased electrification. This is an important condition but as Figure 18 and Figure 19 below show, growth has been flat;

Figure 18 Rate of electrification in industry, transport and households/commercial sectors, 1990-2023³⁷

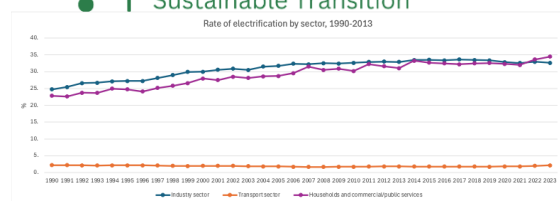
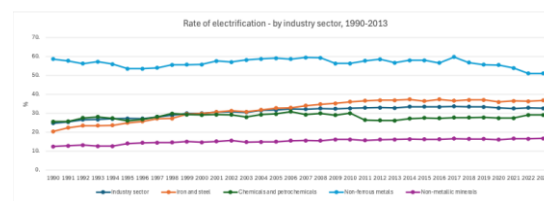


Figure 19 Rate of electrification in industry; overall and in specific industries, 1990-2023³⁸



3. Demand for low carbon products;
4. Deployment of infrastructure for the utilization of alternative options for the production and use of low carbon options, be they electricity grid distribution, hydrogen production (see Figure 20 below) and transportation, CO₂ transportation and CO₂ storage capacity, etc.

Figure 20 Committed low-carbon hydrogen production in the EU versus announced pipeline until 2030 and REPowerEU target³⁹

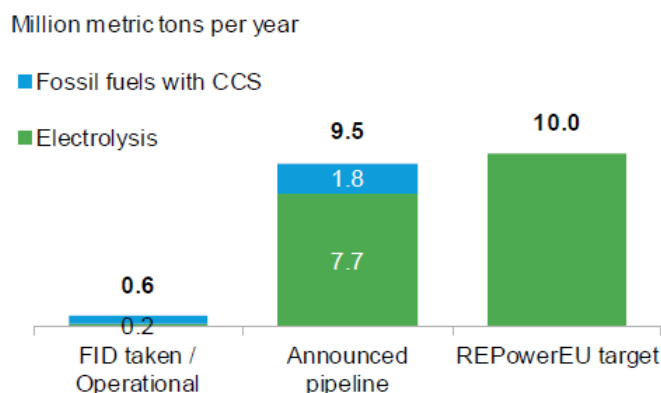


Figure 20 shows how far the reality of H₂ delivery pipeline is from the EU proposed targets.

Levers

The EU ETS does not exist in a vacuum and was not created to create a new market or only to ensure that there is an incentive to create a supply of low carbon products. It does both these things, but it was created to help with the

decarbonization of the EU economy and society, and as such its contribution cannot be seen in isolation.

In addition, it cannot drive decarbonization on its own. Its role is to provide a price signal, and its contribution is simply not enough, as there are other things that need to be in place for the EU ETS contribution to be valuable and useful.

³⁷ Source: ERCST, based on Eurostat dataset 'Rate of electrification [nrg_ind_re_custom_20810690]'

³⁸ Source: ERCST, based on Eurostat dataset 'Rate of electrification [nrg_ind_re_custom_20810690]'

³⁹ Source: BloombergNEF Note: Data from BloombergNEF's hydrogen project database as of May 7, 2024. 'CCS' refers to carbon capture and storage.

These conditions/issues discussed above, are not an EU ETS matter, but an EU policy matter and need to be addressed through other policy instruments. For illustration purposes the need to create a market for low carbon products and the conditions that seem necessary were discussed in section 3.6 above.

4. Takeaways

The EU ETS has had a special place in the effort to combat climate change and undertake the transition to a low carbon society. In the last 25 years, it has undergone significant changes to address problems that had emerged during its functioning. To a large degree, it has changed what is the most difficult thing to change: societal and corporate culture.

We are, however, entering into a new era, with the most difficult time of the transition ahead. The next decade is crucial if the EU is to remain a prosperous industrial society and an example for the rest of the world.

This is why this upcoming review has a special role and carries a special responsibility. Based on the analysis above we can provide a few takeaways:

- The EU ETS may not be loved by everyone, but short of altering its stance on climate change policy or coming up with an alternative instrument that is better, the EU ETS is the EU's best choice – even for those that love to hate it.
- However, the EU ETS must evolve to ensure that the transition is sustainable – that is, the environmental, economic and social axis must move in synchronism. This is the definition of sustainability. Otherwise, we only pay lip service to sustainability.
- The speed of decarbonization and accompanying conditions are important to make the transition sustainable. The surrounding conditions are not an afterthought, they are not a “nice to have” – they are essential, and their importance cannot be emphasized enough. Conditionality works in many directions
- The EU ETS that emerges needs to take into account current conditions, which are significantly different, and one could say, more difficult, from the last Review. That includes, but not only, the financial firepower of the EU, geopolitical circumstances, and the competitive stance of EU industry vis-a-vis its main trade competitors.

- The Review must also consider the end game – what is the place and role of an EU decarbonized society in the world close to mid-century (which is not very far away)?
- The Review should ask all the hard questions and start looking for permanent, structural solutions, not temporary, quick and easy fixes – at this time there cannot be any sacred cows. If we get it wrong, many players may not be around for the next round. A few issues that have been raised may be radical, but that should disqualify them from an examination and answer:
 - Is the EU ETS the right instrument in the second half of the 2030s and if not, what is the after-EU ETS solution?
 - Can CBAM, the guarantor of the EU ETS and industry competitiveness deliver, or do we need to look at more tailored CBAM solutions?
 - The number of EUAs is declining, but the number of CBAM permits is infinite – is this right from an environmental, ethical and competitive point of view? And what are the market implications?
 - Is the MSR still needed in its current function?
- To a large degree the EU ETS has always kicked the ball downfield (i.e. the measures put in place have always been designed with the assumption that it was waiting for others to join the same level of effort and through similar means). While there has been movement, the EU is still far in front which implies an increased focus on climate diplomacy and giving serious consideration that the outcome of the Review factors in what others do relative to the EU.
- The world is moving faster-and-faster and to be able to adapt, and respond, the governance of the EU ETS is critical, especially now when the easy, low hanging fruit have been picked.