

# EU ETS and CBAM review: Recommendations for accelerating the transition of Europe's chemicals sector

## Executive summary

The forthcoming review of the EU Emissions Trading System (ETS), together with the Commission's end-2027 review of the Carbon Border Adjustment Mechanism (CBAM), provides a critical opportunity to strengthen Europe's carbon pricing framework while accelerating the transition to a competitive, fossil-free and circular chemicals sector.

This briefing sets out our initial recommendations for the EU ETS review and the future CBAM review. We have developed these recommendations drawing on the insights and discussions generated through our convenings on the future of the EU ETS, CBAM and chemicals decarbonisation, as well as the wider thinking and analysis emerging from civil society. They set out how the forthcoming legislative reviews can strengthen the environmental integrity of the EU's carbon market while accelerating the transition to a fossil-free and circular chemicals sector.

The recommendations call for preserving a robust carbon price, strengthening conditionality and transparency for free allocation, strengthening benchmark methodologies, strategically investing ETS revenues, progressively expanding CBAM across the chemicals value chain, and preserving CBAM as a robust climate instrument. Together, these reforms would strengthen the polluter pays principle, provide long-term investment certainty and accelerate industrial transformation.

As this briefing has been prepared ahead of the publication of the European Commission's ETS review proposal, it represents our initial position and will be updated following publication of the proposal to reflect the legislative text and support the subsequent negotiations in the European Parliament and Council.

Key recommendations include:

1. [Preserve the environmental integrity of the EU ETS](#) – Preserve the current ETS cap trajectory, Linear Reduction Factor (LRF) and Market Stability Reserve (MSR), while rejecting measures that weaken the carbon price or reduce incentives for domestic emissions reductions.

2. **Carbon leakage protection should accelerate industrial transformation** – Continue the agreed phase-out of free allocation, progressively replace it with CBAM, and make any remaining free allocation conditional on credible progress towards deep industrial decarbonisation.
3. **Reform benchmark methodologies to reward climate leaders** – Strengthen ETS benchmark methodologies so that free allocation better reflects the performance of the most efficient installations and rewards transformational emissions reductions.
4. **ETS revenues should accelerate chemicals decarbonisation** – Use ETS revenues strategically to finance deep industrial decarbonisation and wider climate action, rather than subsidising continued fossil fuel dependence.
5. **The ETS should accelerate the transition away from fossil carbon** – Strengthen incentives to reduce dependence on virgin fossil feedstocks while reserving carbon capture for genuinely unavoidable emissions.
6. **Expand CBAM progressively across the chemicals value chain** – Progressively extend CBAM to additional chemical products and downstream value chains where implementation is robust and feasible, while continuing to replace free allocation as the EU's primary carbon leakage protection mechanism.
7. **Preserve CBAM as a climate instrument** – Ensure the Commission's end-2027 CBAM review maintains the mechanism's environmental integrity, international credibility and role in supporting domestic decarbonisation.
8. **Increase transparency around ETS free allocation** – Improve transparency and accountability across the free allocation system through stronger public reporting on allocation methodologies, decisions, transfers and environmental conditionality.

## Introduction

The forthcoming review of the EU Emissions Trading System (ETS), together with the European Commission's end-2027 review of the Carbon Border Adjustment Mechanism (CBAM), represents one of the most consequential climate and industrial policy processes of this legislative mandate. Together, these legislative reviews will determine whether the EU strengthens its carbon pricing framework at a time when rapid industrial decarbonisation is essential, or risks weakening one of its most effective climate policy tools.

The chemicals sector should be central to this debate. It is one of Europe's largest industrial sources of greenhouse gas emissions and one of the largest recipients of free allocation under the EU ETS, yet around 70 per cent of that free allocation currently remains outside the scope of CBAM<sup>1</sup>. Since 2013, emissions from chemical installations that have remained in operation have fallen by only around 7 per cent<sup>2</sup>, with

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1. Carbon Market Watch, [Bad Chemistry: How the Chemical Sector Escapes EU Carbon Pricing](#), (July 2026), p. 2.

2. Carbon Market Watch, [Bad Chemistry](#), p. 3.



much of the sector's overall emissions reduction instead reflecting lower production and plant closures rather than sustained investment in cleaner production. Emissions even increased again in 2024<sup>3</sup>, underlining the need for stronger incentives to drive structural decarbonisation rather than industrial decline.

At the same time, chemicals are indispensable to Europe's wider transition, supplying the materials needed for renewable energy technologies, batteries, electric vehicles, building renovation, healthcare and many other strategic value chains. Defossilising the sector is essential for achieving the EU's climate objectives, reducing dependence on imported fossil fuels and enabling the wider clean transition. The scale of the challenge is considerable. According to the European Commission's impact assessment for the 2040 climate target, the chemicals sector alone is expected to require around €150 billion of investment between 2031 and 2040<sup>4</sup>. Creating long-term regulatory certainty and strong investment incentives through the ETS and CBAM will therefore be essential to unlock this transition.

The ETS is central to this transformation by putting a price on pollution and creating long-term incentives to reduce emissions and invest in cleaner production. Parliament and Council should preserve a strong carbon price by rejecting proposals that dilute the ETS, prolong free allocation beyond what is necessary, or weaken incentives for emissions reductions. Instead, the legislative process should strengthen carbon leakage protection by linking it more closely to industrial transformation, ensure that public support rewards genuine decarbonisation, and preserve the ETS as the cornerstone of EU climate policy.

CBAM has a critical role to play in supporting this transformation. As free allocation is progressively phased out, CBAM will increasingly become the EU's primary carbon leakage protection mechanism. If designed and implemented well, it can reinforce the carbon price signal while ensuring European producers are not disadvantaged by imports from jurisdictions with weaker climate policies. For the chemicals sector, however, expanding CBAM presents particular challenges due to its highly integrated production processes, complex value chains and extensive trade in intermediate products. The Commission's end-2027 review of CBAM provides an opportunity to progressively expand CBAM where robust implementation is feasible, while ensuring it continues to complement rather than weaken the incentives created by the ETS.

This briefing draws on NGO discussions on the future of the EU ETS, CBAM and chemicals decarbonisation, translating emerging areas of civil society consensus into recommendations for the European Commission, European Parliament and Council of the EU. It sets out how the forthcoming EU ETS review and the future review of CBAM can strengthen the environmental integrity of the EU's carbon market while accelerating the transition to a fossil-free and circular chemicals sector.

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3. Carbon Market Watch, Bad Chemistry, p. 3-4.

4. European Commission, [Impact Assessment](#) accompanying the Communication: Securing our Future – Europe's 2040 Climate Target (2024).



# 1. Preserve the environmental integrity of the EU ETS

## Recommendation

The European Parliament and Council should preserve the current ETS cap trajectory, Linear Reduction Factor (LRF) and Market Stability Reserve (MSR), and reject proposals that weaken the carbon price or introduce international offsets or carbon removals into the compliance framework. The ETS should continue to prioritise domestic emissions reductions in line with the polluter pays principle and achievement of its long-term legal climate targets.

## Rationale

Deep industrial decarbonisation will require large first-of-a-kind investments involving significant upfront capital costs and technological risk. The ETS should provide a stable long-term investment signal for deeply decarbonised production, rather than continued reliance on fossil-based production. The sector's competitiveness challenges primarily stem from high energy prices, ageing production assets, dependence on fossil feedstocks, global overcapacity and resulting downward pressure on international prices, rather than the carbon price itself. Weakening the ETS would therefore do little to address the underlying drivers of declining competitiveness while reducing incentives to modernise Europe's industrial base through electrification, renewable energy and circular production.

Although maintaining a robust carbon price is essential to ensuring that investments increasingly flow towards low-carbon chemical production, it is not sufficient. It should operate alongside wider industrial policy measures that reduce investment risk and accelerate deployment of low-emissions production technologies.

Upholding the environmental integrity of the ETS should therefore remain the starting point for the legislative process, rather than being compromised in response to short-term industrial pressure.

# 2. Carbon leakage protection should accelerate industrial transformation

## Recommendation

The agreed phase-out of free allocation should continue without delay, with CBAM progressively replacing free allocation as the primary carbon leakage protection mechanism. Any remaining free allocation should only be granted where companies demonstrate measurable progress towards deep industrial decarbonisation through robust environmental conditionality, ensuring public support rewards installations undertaking genuine industrial transformation rather than maintaining fossil-based production pathways.

## Rationale

Free allocation was introduced as a temporary measure to address carbon leakage, not as a permanent subsidy. As it is progressively phased out, any remaining free allocation should increasingly reward industrial transformation through robust environmental conditionality. Without stronger conditions, it risks delaying investment in cleaner production, weakening the polluter pays principle and undermining the credibility of the carbon price signal. The progressive phase-out of free allocation is essential to preserve a



robust carbon price signal, with CBAM progressively assuming its role as the EU's primary carbon leakage protection mechanism. Any remaining free allocation should increasingly reward industrial transformation through robust environmental conditionality.

This is particularly important in chemicals, where only one of Europe's 33 steam crackers has announced a project aimed at fundamentally reducing ETS emissions<sup>5</sup>.

Since 2021, around one third of chemical companies have received more free allowances than their verified emissions<sup>6</sup>, demonstrating that current allocation rules do not consistently target genuine carbon leakage risk or create sufficient incentives for industrial decarbonisation, while the seven largest beneficiaries together received around 13 million surplus allowances, worth approximately €938 million.

Conditionality should be linked to credible Climate Neutrality Plans (or equivalent mechanisms), supported by transparent reporting, clawback mechanisms and investments in electrification, renewable process heat, renewable hydrogen, circular feedstocks and resource efficiency.

### 3. Reform benchmark methodologies to reward climate leaders

#### Recommendation

The ETS review should strengthen benchmark methodologies so that free allocation better reflects the performance of the most efficient installations and more effectively rewards transformational emissions reductions.

#### Rationale

Benchmarks should reward leading emissions performance rather than average industry practice.

The recent benchmark revision in June 2026 demonstrated that existing methodologies can still increase benchmark values - and therefore free allocation - for certain chemical products despite the need to strengthen decarbonisation incentives.

Any future sector-specific fallback benchmarks should strengthen environmental integrity rather than increasing free allocation beyond what is justified by actual emissions performance. This is particularly important given the average European steam cracker is around 47 years old<sup>7</sup>, highlighting the need for benchmarks that reward the deployment of new low-emissions production technologies rather than protecting ageing fossil-based infrastructure.

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5. Agora Energiewende (2026): [How Europe's carbon market can boost clean investment. Design options for the 2026 EU ETS Review](#), page 13.

6. Carbon Market Watch, Bad Chemistry, p. 11-14.

7. Carbon Market Watch, Bad Chemistry, p. 6



## 4. ETS revenues should accelerate chemicals decarbonisation

### Recommendation

ETS revenues should be used strategically to finance deep industrial decarbonisation alongside wider climate mitigation and adaptation measures, and should not subsidise continued fossil fuel dependence.

### Rationale

The transition of the chemicals industry will require significant investment in renewable electricity, electrified steam cracking, renewable hydrogen, circular feedstocks, renewable process heat, industrial symbiosis and associated grid infrastructure. According to the Commission's impact assessment for the 2040 climate target, the chemicals sector alone is expected to require around €150 billion of investment between 2031 and 2040<sup>8</sup>, underlining the importance of using ETS revenues strategically to accelerate industrial transformation.

ETS revenues should also complement wider industrial policy instruments that help unlock investment, including strategic infrastructure, innovation funding and demand-side measures that strengthen markets for low-emissions industrial products.

## 5. The ETS should accelerate the transition away from fossil carbon

### Recommendation

The legislative review should strengthen incentives that reduce dependence on virgin fossil feedstocks while ensuring carbon capture is reserved for genuinely unavoidable emissions.

### Rationale

Unlike many industrial sectors, emissions from chemicals arise both from energy use and from fossil carbon embedded within products. Around one third of ETS emissions from the chemicals sector arise from fossil fuel combustion<sup>9</sup>, with the remainder largely linked to fossil carbon embedded in production processes and products. Effective decarbonisation therefore requires addressing both the sector's energy use and its continued dependence on virgin fossil feedstocks.

The ETS should increasingly reward electrification, renewable electricity, sustainable non-fossil carbon sources, circular feedstocks and resource efficiency, while reserving carbon capture and storage for genuinely unavoidable process emissions where no technically and economically feasible alternatives exist.

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8. European Commission, Impact Assessment accompanying the Communication: Securing our Future – Europe's 2040 Climate Target (2024).

9. Carbon Market Watch, Bad Chemistry, p. 6.



## 6. Expand CBAM progressively across the chemicals value chain

### Recommendation

CBAM should progressively expand to additional chemical products and downstream value chains where robust implementation is feasible, while continuing to replace free allocation as the EU's primary carbon leakage protection mechanism.

### Rationale

The chemicals sector presents particular challenges for CBAM. Its highly integrated production processes, complex value chains, diverse product mix and extensive trade in intermediates make the calculation of embedded emissions and the definition of product scope more complex than in many other covered sectors.

Around 70% of free allocation currently received by the chemicals sector falls outside CBAM<sup>10</sup>, as only fertilisers and hydrogen are currently covered by CBAM, creating a growing policy gap as free allocation is phased out. Without a progressive expansion of CBAM, an increasing share of the sector would remain outside both carbon border protection and any agreed pathway for phasing out free allocation. A relatively limited number of basic chemical value chains account for the majority of sector emissions, suggesting that a targeted first phase of CBAM expansion could capture much of the sector's emissions while keeping implementation manageable. A phased approach should therefore prioritise expanding coverage across chemical value chains, rather than isolated products, in order to maximise emissions coverage while minimising circumvention risks and market distortions<sup>11</sup>.

At the same time, global overcapacity has intensified price competition, placing significant pressure on European chemical producers. While CBAM cannot address these structural market challenges on its own, it can help ensure that imported products face a comparable carbon cost, reducing carbon leakage risks and helping to create a more level playing field for low-emissions investment in Europe.

The Commission should progressively expand CBAM to additional chemical products and value chains, prioritising products with significant emissions, high trade exposure and clear carbon leakage or circumvention risks. Expansion should maximise emissions coverage while remaining supported by robust emissions accounting, minimise unintended market distortions, and take account of upstream and downstream value chain interactions to reduce opportunities for circumvention.

CBAM should continue to support the uptake of renewable electricity and renewable hydrogen by ensuring embedded emissions are accounted for in a way that reinforces, rather than undermines, industrial decarbonisation. Embedded emissions methodologies should remain transparent and sufficiently robust to minimise opportunities for selective reporting, resource shuffling and other forms of circumvention.

ETS and CBAM should continue to operate as complementary instruments. As CBAM expands and free allocation phases down, the ETS should provide a robust carbon price signal while CBAM reinforces carbon

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10. Carbon Market Watch, *Bad Chemistry*, p. 2.

11. Sandbag, [Chemicals in the CBAM: Time to Step Up](#) (2025).



leakage protection. Together, they should preserve the polluter pays principle, provide a predictable investment framework and maintain a level playing field for European producers while upholding high environmental integrity.

## 7. Preserve CBAM as a climate instrument

### Recommendation

The Commission's end-2027 review of CBAM should preserve the mechanism's environmental integrity and international credibility, ensuring it continues to reinforce domestic decarbonisation while maintaining robust implementation, high-quality emissions accounting and effective international cooperation.

### Rationale

CBAM should not be understood solely as a defensive trade instrument. It is also one of the EU's most influential climate policy instruments beyond its borders, creating incentives for emissions reductions internationally while reinforcing the EU's role as a global climate standard setter. Maintaining this credibility requires robust MRV requirements, transparent implementation and high environmental integrity, alongside meaningful international cooperation and support for developing countries. Weakening CBAM in the name of simplification or short-term competitiveness would undermine both its domestic and international effectiveness.

## 8. Increase transparency around ETS free allocation

### Recommendation

Increase transparency and accountability across the ETS free allocation system by improving public reporting on benchmark methodologies, free allocation decisions, waste gas allocation mechanisms, allowance transfers between installations, and the implementation of environmental conditionality.

### Rationale

Greater transparency would improve accountability, strengthen confidence that public support is driving genuine industrial transformation, and enable policymakers, investors and civil society to better assess whether free allocation continues to serve its intended purpose across the chemicals sector. This is particularly important given the limited public transparency around key elements of the system, including whether free allowances linked to waste gas transfers are actually passed between installations and whether compensation is paid, making it difficult to assess whether allocation rules are being implemented as intended.

### Contact us

To discuss these recommendations or learn more about Climate Catalyst's Chemicals Programme, please contact [nikolas@climatecatalyst.org](mailto:nikolas@climatecatalyst.org).

