



EU ETS and Industrial Competitiveness

The price alone is not enough

The EU Emissions Trading System was not built on a flawed idea. It was built on one of the most solid principles in climate economics: if emissions impose a cost on society, that cost should be reflected in business decisions, investments and operating models.



The logic of carbon pricing remains sound. It is disciplined, technology-neutral and, in principle, capable of directing decarbonisation toward where it can be achieved most efficiently.

That is the right starting point, because much of the current debate risks falling into an unproductive opposition. On one side, the ETS is treated as an untouchable pillar of climate policy. On the other, it is presented as the most convenient explanation for Europe's industrial difficulties. Neither position is particularly useful. The ETS has delivered real results,

but the context in which it now operates is considerably more complex than the one in which it was designed.

The relevant question, therefore, is not whether carbon pricing still makes sense. It does. The question is how it should now fit within a broader balance between decarbonisation, industrial development and economic resilience.

A system built in a different political climate

When the EU ETS was launched in 2005, it reflected the policy thinking of its time. The underlying assumption was that climate ambition, market mechanisms and growing regulatory convergence could reinforce each other within a progressively integrated economic environment. Set a cap on emissions, create a tradable market, let the price emerge, allow firms to optimise.

That approach was not wrong. In many respects it was remarkably well-designed. It also proved influential well beyond Europe. Carbon markets now cover roughly 28% of global emissions, even if most of that coverage operates at relatively low-price levels. Europe's direct share of global emissions is limited, but the EU ETS has had a much wider effect as a reference point and institutional model.

The world around it, however, has changed materially. Europe now operates in an environment shaped much less by confidence in market integration and much more by the language of resilience, economic security and industrial policy. Energy costs have become a structural issue. Supply chains are now read as strategic assets. Industrial policy has returned to the centre of the debate — not as a footnote. The United States relies primarily on incentives and tax credits. China combines industrial scale, strategic coordination and a significantly lighter carbon price signal. Other major economies move more slowly, apply much lower carbon prices than Europe, or protect their industrial base more explicitly.

Europe, by contrast, remains one of the few major economic blocs imposing a relatively high and highly visible carbon cost through a mature compliance market.

This does not mean Europe is wrong. It does mean that the assumptions on which the original ETS design was built have shifted. The transition is now judged against a broader standard: can it decarbonise without undermining industrial capacity, investment attractiveness and economic resilience?

The ETS has delivered — and that must be acknowledged

A serious assessment has to begin there. The EU ETS has not been merely symbolic. It has produced measurable results. By 2024, emissions from the sectors covered by the system had fallen by around 50% compared with 2005. The most significant

contribution came from the power sector, where ETS helped accelerate the shift away from high-emission generation and improved the economics of lower-carbon alternatives.

This does not mean the ETS decarbonised Europe on its own. It did not. The reduction came from a broader combination of factors: renewable deployment, regulation, efficiency improvements, changes in fuel economics, technological progress and, at times, weaker demand. But the ETS was an important part of that mix, and it would be intellectually dishonest to deny its role.

The system has also generated significant fiscal capacity. In 2024 alone, the ETS produced approximately €39 billion in revenues, of which around €24.4 billion went to national budgets, while additional resources fed into European instruments such as the Innovation Fund and the Modernisation Fund. These are not negligible figures. They matter because they show that the ETS is not only a constraint mechanism — it is also a potential source of capital for industrial transformation, infrastructure and innovation, provided those revenues are deployed in a coherent way.

Where the pressure comes from

The current tension does not stem from the principle of carbon pricing itself. It comes from the conditions under which that pricing now operates.

The first pressure point is energy cost. Europe enters this phase of the transition with structurally higher electricity and gas

costs than several major competitors. For energy-intensive sectors, this is not a background detail — it is the foundation of the entire cost structure. In this context, carbon pricing no longer sits on top of a relatively neutral industrial platform. It is added to a system already under strain.

The second pressure point is global asymmetry. Carbon pricing coverage has expanded internationally, but price levels remain highly uneven. Many competing jurisdictions continue to rely more heavily on subsidies, industrial policy, local support mechanisms and slower adjustment timelines than on strong carbon pricing. Europe is therefore not competing on a level playing field. It is competing in a world where constraints remain unevenly distributed.

The third pressure point is industrial exposure. The impact of carbon pricing is not uniform. It becomes more significant where energy already represents a substantial share of production costs and where firms compete internationally on relatively narrow margins. In sectors such as steel, cement, chemicals, fertilisers and metals, the ETS is rarely the only problem. But it can become the factor that worsens an already fragile cost position.

The fourth pressure point — and the most immediate — is the accelerating phase-out of free allowances under Phase IV. From 2026, the pace at which industrial sectors lose their free allocations increases significantly. By 2034, free allocations are scheduled to disappear entirely for most sectors covered by CBAM.

For energy-intensive industries that have so far been partially shielded from the full carbon cost, this is not a distant policy signal. It is an imminent cost increase arriving in a period of already compressed margins and uncertain demand. The timeline is set. Industrial readiness is not.

This is why the debate has become sharper. Supporters of the ETS are right to argue that a credible price signal matters and that decarbonisation without economic discipline easily becomes vague or fiscally wasteful. Critics are equally right to argue that, in a structurally asymmetric world, industrial competitiveness cannot be treated as a secondary concern. These positions are not mutually exclusive. They are two readings of the same problem.

The real issue is balance across instruments

That is where the discussion becomes more productive. The ETS has value. The ETS should remain. But its role is not to carry the full weight of the transition alone, nor to intensify without limit. Its role is to operate within a broader policy balance that keeps decarbonisation economically sustainable, industrially credible and politically durable.

This is the point Europe is now beginning to confront more openly. The next phase of the transition cannot rely on carbon pricing alone to do all the work. It requires a more complete framework in which climate policy, energy affordability, industrial capacity and competitiveness safeguards are designed to function together.

What matters in practice is not how far carbon pricing can be pushed in theory, but where it should sit within a real system that must remain investable, productive and politically sustainable. If too much pressure is placed on one instrument while the surrounding system adjusts too slowly, the result is not stronger transition policy. It is weaker industrial tolerance for the transition itself.

Why CBAM matters — and what it cannot do alone

This is where the Carbon Border Adjustment Mechanism becomes strategically important. Its logic is straightforward. If domestic producers face a carbon cost while competing imports do not, the playing field is distorted. CBAM is an attempt to correct that asymmetry and make internal carbon pricing more economically coherent.

In that sense, CBAM should not be seen as a departure from the logic of ETS, but as a necessary extension of it. A carbon price inside Europe becomes far more defensible when it is matched by a mechanism that reduces the risk of penalising domestic production in favour of imports from less constrained systems.

The limits, however, are real and should be named clearly. CBAM protects the internal market reasonably well for the sectors it covers — steel, cement, aluminium, fertilisers, electricity, hydrogen. It does not protect European exporters competing in third markets where no equivalent mechanism exists. A German steel producer selling into Asia or North Africa bears the

full ETS cost with no corresponding adjustment on the other side of the transaction. This is not a design flaw unique to CBAM — it reflects the fundamental difficulty of extending carbon pricing instruments beyond the jurisdiction that created them. But it means that CBAM, for all its strategic importance, addresses only part of the competitive asymmetry that the ETS generates. The export exposure problem remains open, and the policy response to it — whether through alternative instruments, negotiated agreements or bilateral carbon pricing arrangements — has yet to be seriously built.

The transition does not eliminate the question of economic security. It relocates it. Some dependence on imported fuels may decrease; but dependence on supply chains, components and critical materials concentrated elsewhere is growing. The choice is not between cost and no cost — it is between a manageable resilience premium today and a much harder cost of vulnerability to govern tomorrow.

From climate discipline to industrial capacity

If CBAM helps correct the external asymmetry, the Net-Zero Industry Act addresses an internal one: Europe's need to strengthen its own industrial capacity in clean technologies.

For too long, there has been a risk embedded in the European model: pricing carbon faster than building the domestic industrial capacity in the technologies needed to replace it. This is not a failure of

ambition. It is a sequencing problem. The NZIA matters because it begins to shift the conversation from climate discipline alone to climate-linked industrial capability.

But the NZIA also raises a harder question about delivery. Targets for domestic production of solar panels, electrolyzers, wind components and batteries are credible as a direction; they are less credible as near-term industrial reality. Europe is not starting from zero, but it is competing against jurisdictions — China above all, and increasingly the United States through the IRA — that have deployed state support for clean industrial capacity at a scale and speed that European frameworks have not yet matched.

The NZIA sets the ambition. Delivering on it requires patient capital, supply chain development and faster authorisation processes that no single piece of legislation can guarantee on its own — but these are precisely the conditions the NZIA aims to unlock. The point is not to debate whether the framework is the right one. It is. The point is to ensure that the broader ecosystem — financial, regulatory, industrial — moves at the same pace as the carbon pricing timeline, before that timeline forces decisions that Europe's industrial base is not yet ready to take.

Conclusion

The EU ETS has already demonstrated that carbon pricing can contribute meaningfully to decarbonisation. It has produced measurable emission reductions, particularly in the power sector, and has helped establish Europe as the global

reference point for market-based climate policy. That deserves to be acknowledged clearly.

But the next phase requires a broader frame. Europe's challenge is no longer simply to price carbon. It is to make carbon pricing work within a system that also delivers more competitive energy, stronger industrial capacity, technological openness and more credible protection against global asymmetries.

That is why the debate should move beyond the sterile opposition between climate ambition and industrial realism. The more relevant question is how to align them — and how quickly. The ETS remains part of the answer. But a carbon price without a functioning industrial policy, a credible export protection mechanism and a competitive clean energy cost trajectory is not a transition strategy.

It is a stress test.

Europe has the architecture. The work now is to complete it — before the timeline completes it for them.