Energy UK

The voice of the energy industry

The importance of carbon pricing to the UK

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Executive Summary

Carbon pricing is the cornerstone of the UK's decarbonisation policy. By embedding the cost of climate change into commercial decisions, it harnesses the power of the market to reduce emissions in the most efficient and cost-effective way possible.

The UK has maintained at least one form of carbon pricing since 2002, providing a consistent signal that has accelerated the roll out of clean energy and industrial processes. While early debates in the 1990s and 2000s raised concerns that mechanisms like carbon pricing could constrain economic growth, the UK's experience has demonstrated the opposite. Emissions have fallen by over 50% since 1990 while GDP has grown by 69%, demonstrating that decarbonisation and economic growth can go hand in hand.[1, 2]

Carbon pricing is not a silver bullet, and it's critical that that it exists in tandem with support for companies to invest in industrial decarbonisation and electrification. But the solution to the UK's competitiveness issues will not be found in scrapping carbon pricing. Energy UK analysis shows that removing the UK's Emissions Trading Scheme (ETS) would mean:

- **Increasing UK gas demand and emissions by up to 25%**
- **Increasing gas demand would cause a rebound effect in UK gas prices, negating much of the saving from removing the ETS**. Scrapping the UK ETS would reduce the wholesale price of gas by around 26p per therm, but increased demand would cause an increase in prices of around 12p.
- Increases in the price of gas for domestic heating and CfD top up payments mean that **a typical household would spend an extra £74 per year on gas if the ETS was removed, and overall household energy bills would increase**.
- **Exposing British companies exporting to the European Union (EU) to £10 billion of extra taxes between 2026 and 2035**, as they would be forced to pay the full amount due under the EU's Carbon Border Adjustment Mechanism (CBAM) regime.

It is the last point that is so crucial as to why scrapping carbon pricing would provide only the illusion of supporting the UK's long-term competitiveness. Carbon Pricing is rapidly spreading across the world. Jurisdictions operating an ETS account for 63% of global GDP and more than half the world's population.[3] Of the world's largest trading blocs, carbon pricing already exists in the EU, China, across many US states, and from this year, India also. Jurisdictions like the EU are already implementing a CBAM, which expose imports to their carbon price, ensuring that

[1] Climate Change Committee (2025), Progress in reducing emissions – 2025 report to Parliament
[2] World Bank (2025), UK, GDP Annual Growth (%)
[3] ICAP (2026), Emissions Trading Worldwide ICAP Status Report 2026

domestic production doesn't face unfair competition from countries with weaker environmental rules. As countries like China and India expand and strengthen their carbon pricing regimes, a proliferation of CBAMs could have profound consequences for British exports.

A UK which abandons carbon pricing is a UK left out in the cold, locked out of key markets as others steal a march on the industries of the future. Maintaining a pragmatic approach to carbon pricing, and pursuing a linkage agreement with the EU to ensure decarbonisation can be achieved more quickly and at lower cost, is the only way to deliver an enduring solution to the UK's competitiveness challenges.

+0.1%

GDP growth from UK-EU ETS linkage

+25%

UK natural gas consumption and emissions increase from ETS removal

+£10bn

Cost to UK exporters over the next decade if the ETS is scrapped

Carbon pricing and why it exists

Climate change is caused by greenhouse gas emissions, a byproduct of fossil fuel use. Economists would describe this as a 'negative externality' ie that the production of a particular good imposes external costs that must then be socialised. The simplest way to address this negative externality is to put a price on greenhouse gas emissions. Pricing emissions and making them progressively more expensive incentivises the switch to cleaner alternatives and has proven to be the most efficient and cost-effective way to reduce emissions.

The UK's carbon pricing framework

The UK currently has two carbon pricing mechanisms:

- UK Emissions Trading Scheme (UK ETS)
- Carbon Price Support (CPS)

UK Emissions Trading Scheme

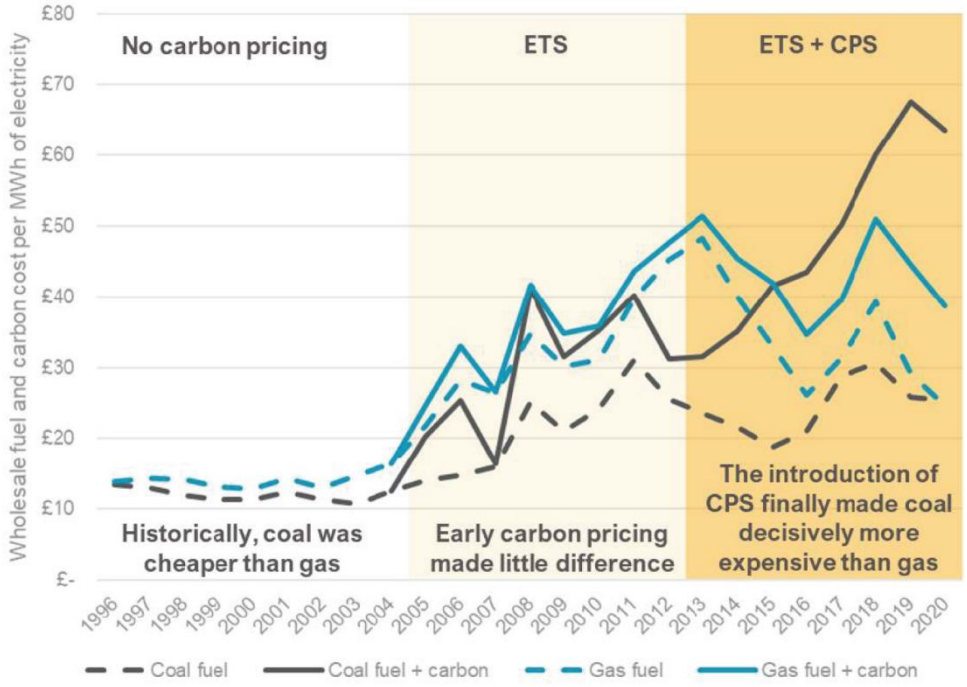
The UK Emissions Trading Scheme is a cap-and-trade system, which replaced the EU ETS in 2021, and covers around 25% of the UK's territorial emissions. It sets a declining limit on total emissions across covered sectors, including power generation, heavy industry, aviation, and shipping, and it requires firms to purchase allowances for every tonne of CO_2 they emit.

The fundamental efficiency of an Emissions Trading Scheme (ETS) lies in its ability to harness the power of the market. By allowing companies with low abatement costs to sell excess permits to companies that face higher costs, it ensures that the overall emission reduction target is met at the lowest cost to the economy. This cost-effectiveness is well evidenced, and studies consistently show that Emissions Trading Schemes are effective, cost-efficient tools for reducing greenhouse gas emissions and reducing participants' exposure to volatile fossil fuel prices.

Carbon Price Support (CPS)

The Carbon Price Support, introduced in 2013, is a carbon tax levied only on fossil fuels used for electricity generation. It was designed to top up the carbon price faced by electricity generation and provide a clear and consistent incentive to move away from fossil fuel generation. The CPS played a critical role in supporting the decarbonisation of the power sector – emissions from power plants have fallen by over 80% since 1990 – and in particular, phasing out coal.

Figure 1: The impact of carbon pricing on coal and gas prices (1996-2020)[4]



The future of the CPS

While the CPS has been crucial in the decarbonisation of the power sector, its importance in dispatch and investment decisions has diminished over time. The Government's recent decision to phase out the CPS is a sensible intervention, and the proposed phase-out date of 2028 recognises the importance of avoiding disruption to UK power trading arrangements or higher charges under the EU CBAM.[5]

The combination of the two carbon prices on electricity – the CPS and ETS – are currently high enough to ensure the UK does not face charges under the EU CBAM. While linking the UK and EU ETS will ensure a permanent exemption for the UK from all CBAM charges, maintaining the CPS at current levels until a linkage agreement is reached is a sensible proposition. Delaying implementation until 2028, as the Government has proposed, will allow a reasonable window of time to finalise and implement a linkage agreement between the UK and EU.

Evidence that carbon pricing works

Emissions reduction and industrial competitiveness

The UK's greenhouse gas emissions have fallen by 50% since 1990, and independent analysis by the Climate Change Committee finds that the majority of this represents genuine domestic abatement rather than the relocation of emissions-intensive activity overseas known as carbon

[4] Energy UK (2024), Closing the Coal Chapter
[5] House of Commons (2026), Carbon Price Support, Statement made on 16 April 2026

leakage.[6] Further evidence supports the effectiveness of carbon pricing in reducing emissions while maintaining competitiveness. Analysis by Bruegel found that the EU ETS – which the UK was part of from 2005-2021 – has been a significant driver of emissions reductions in covered sectors while imposing limited costs on industrial competitiveness.[7] A substantial body of empirical evidence shows that the EU ETS has reduced overall emissions by 14-16% between 2005 and 2020, relative to a no-carbon pricing counterfactual.[8]

Far from being an obstacle to industry, the ETS has acted as a catalyst for investment in cleaner and more efficient production. This was recently demonstrated in the strong support from major European businesses for a reformed and stable EU ETS, in a recent open letter[9] rather than more disruptive measures such as pausing or terminating the scheme.

Carbon pricing and the decarbonisation of the UK's power sector

Carbon pricing has played a major role in shifting the economics of electricity generation. By increasing the cost of coal generation, it made coal more expensive than gas and significantly more expensive than renewable generation. This accelerated the decline of coal use in the UK power system. The UK became the first major economy to phase out coal-fired power in 2024. In just over a decade the UK's power system has been transformed:

- Coal now has been completely removed from the power system
- Gas generation fell from 46% of the electricity mix in 2010 to 27% in 2025[10]
- Renewable generation, particularly wind and solar have increased significantly[11]

This matters enormously for both energy bills and security. From 2010 to 2023, UK investment in wind generation delivered a net benefit to UK consumers of £104.3 billion due mainly to lower demand for gas generation and lower electricity prices from the wind power itself.[12] This signals that carbon pricing continues to play a fundamental role in reducing the UK's exposure to international commodity prices and lowering bills.

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[6] Climate Change Committee (2025), Progress in reducing emissions – 2025 report to Parliament
[7] Bruegel (2026), Europe's emissions trading system is an ally, not an enemy, of industrial competitiveness
[8] See various analyses by Abrell et al (2011), Biancalani et al (2024), Colmer et al (2025), Dechezleprêtre et al (2023), Jaraitė and Di Maria (2016), Klemetsen et al (2020), Löschel et al (2019) and Petrick and Wagner (2014).
[9] Cleantech for Europe, the We Mean Business Coalition, the Corporate Leaders Group Europe and the Business for CBAM Coalition (2026), OPEN LETTER - European Industry needs the predictability of a robust ETS to Compete and Invest
[10] NESO, (2026) Britain's Energy Explained
[11] Ember (2023), The UK's coal to clean journey
[12] Shea, C., Horne, P., and Maslin, M. (2025), Modelling the long-term financial benefits of UK investment in wind energy generation

Carbon pricing in other countries

Carbon pricing is now a mainstream policy tool used across a wide range of international jurisdictions. It has evolved into a globally recognised mechanism for reducing emissions while supporting economic growth and industrial competitiveness. Today, 113 carbon pricing instruments exist around the world, covering around 28% of global emissions.[13]

Carbon pricing has historically been associated with high-income economies and is currently implemented across countries such as the EU's 27 member states, Canada, Australia, New Zealand, South Korea, and many US states. However, it is becoming increasingly common in middle-income economies. The EU ETS was for many years the world's largest carbon market. That is no longer the case. The world's largest carbon market is now found in China, which has implemented a national ETS covering eight billion tonnes of CO_2 (around 60% of the country's carbon emissions).[14] This year alone, new national ETS systems are being introduced in India, Vietnam, and Japan. This means jurisdictions operating an ETS account for 63% of global GDP and more than half the world's population.[15]

As carbon pricing increases domestically, complementary policies are needed to ensure industries remain competitive internationally. Carbon border adjustment mechanisms (CBAMs) are increasingly being developed as a key policy tool to address the risk of carbon leakage and maintain a level playing field for domestic producers.

What is a Carbon Border Adjustment Mechanism (CBAM)?

A Carbon Border Adjustment Mechanism (CBAM) is a policy designed to ensure imported carbon-intensive goods face a similar carbon cost to domestically produced goods, and to encourage cleaner industrial production from international trade partners.

Without a CBAM, industries in countries with strong carbon pricing policies may face unfair competition from imports originating in countries with weaker climate policies. This can lead to carbon leakage, where production shifts overseas rather than emissions being reduced globally. The EU has introduced a Carbon Border Adjustment Mechanism, and the UK Government will also be introducing a CBAM, expected to come into effect next year, to maintain a level playing field for domestic industry.

The spread of carbon pricing globally has a critical implication: countries that do not price carbon risk being exposed to carbon border adjustment mechanisms applied by countries that do. The EU's CBAM, which entered full operation at the start of 2026, is the most significant example. It places a carbon cost on imports of carbon-intensive goods from countries with no or lower carbon pricing. As more countries follow suit, the penalties for those outside the carbon pricing 'trading bloc' will increase. Failure to engage risks creating an avoidable drag on

[13] World Bank (2025), Carbon Pricing Dashboard
[14] ICAP (2026), China National ETS
[15] ICAP (2026), Emissions Trading Worldwide ICAP Status Report 2026

economic growth and UK competitiveness, while undermining the UK's ability to shape the global frameworks that will govern low-carbon trade – an area in which it has both expertise and influence.

Risks of removing UK carbon pricing

Against this backdrop of growing international adoption of carbon pricing, removing the UK ETS would carry significant economic and strategic risks. This would have significant implications for investment confidence, industrial competitiveness, and the UK's ability to take advantage of being a first mover in the clean industries of the future.

Risks to investment certainty

The ETS has been one of the primary commercial drivers of both industrial and energy system decarbonisation in the UK. Companies investing in carbon capture, hydrogen, electrification, and energy efficiency do so in part because the UK ETS creates a clear and consistent price signal that makes clean investment economically viable relative to continued emissions.

Removing the ETS would weaken investment outcomes:

- **Weakened incentives for clean investment**

Removing the UK ETS would remove a cost-effective and foundational pillar supporting investment in low-carbon technologies. Without a credible carbon price, the commercial case for investment in low-carbon technologies would be weakened. The consequences would be felt not only in emissions outcomes, but in the UK's attractiveness as a destination for clean industrial investment. At a time when countries are competing to attract clean manufacturing and infrastructure investment, weakening this signal risks reducing the UK's competitiveness as a location for long-term capital deployment.

- **Increased reliance on gas and limited pass-through of savings**

Crucially, removing the ETS from the power sector specifically would be unlikely to deliver sustained reductions in energy bills. The wholesale price of electricity in the UK is largely set by the marginal cost of gas generation. Removing the carbon price would reduce the operating cost of gas plants; however, the second and third order effects of this in the market would mean that little of this notional benefit would be passed through to consumers.

At the same time, scrapping the UK ETS would incentivise more gas use, which places upward pressure on gas demand and prices, and therefore on electricity, given that gas sets the marginal electricity price for much of the time. Energy UK estimates that scrapping the ETS could increase gas demand by 10% in the short run and up to 25% in the long run, creating a

rebound effect on prices.[16] While removing the UK ETS would reduce the wholesale price of gas by around 26p per therm, the increased demand would cause a rebound in prices of around 12p, negating much of the saving. Beyond the economic inefficiency of removing the UK ETS, increased gas consumption would also be inconsistent with the UK's long-term decarbonisation objectives.

- **Higher CfD costs and distorted power market outcomes**

Some have argued that the ETS should be removed from electricity generation specifically. However, this would introduce several additional risks. Analysis of interconnected market prices between 2024 and 2026 suggests that removing the UK ETS on power would reverse the price spread relative to at least one neighbouring country approximately two-thirds of the time.

While increased electricity exports may appear beneficial, this would likely result in higher levels of gas generation, placing upward pressure on wholesale gas prices, as shown above, and largely offsetting any short-term price reductions resulting from the removal of the UK ETS.

Even where exports may be constrained, potentially by mechanisms such as the EU CBAM, the reduction in wholesale power prices caused by removal of the ETS would have a knock-on effect on CfD payments. As CfD contracts guarantee generators a fixed price, lower wholesale prices would mean higher top up payments to generators. Energy UK analysis suggests that across all contracted CfDs, the removal of the ETS could increase annual payments from £3bn to £5bn.[17] Over time, weakening the carbon price signal would also reduce incentives to invest in lower-cost, zero carbon generation, ultimately leading to higher long-run system costs.

Gas used for heating is not subject to the ETS. This means that any increase in wholesale gas prices due to increased demand will increase gas bills. Energy UK's analysis shows that a typical household would spend an extra £74 per year on gas.[18] For certain vulnerable households using lots of gas to keep their home warm, the increase could be significantly more. And while electricity bills might come down as a result of cheaper gas generation, the increased CfD payments and higher gas bills mean that a typical energy bill might actually increase by £3 per year.

Exposure to carbon border adjustment mechanisms

One of the most immediate risks of removing the UK ETS relates to increased exposure to CBAMs. UK exports to the EU are currently expected to benefit from recognition of the UK's domestic carbon pricing regime, meaning that carbon costs are accounted for at the point of

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[16] Ofgem (2026), Gas Prices: Forward Delivery Contracts - Weekly Average (GB), DESNZ (2026), Traded carbon values used for modelling purposes, 2025, Forest Research (2026), Carbon emissions of different fuels, DESNZ (2026), Natural gas supply and consumption (ET 4.1 - quarterly), Ofgem (2026), Final levelised cap rates model (Annex 9): 1 April to 30 June 2026; Energy UK analysis

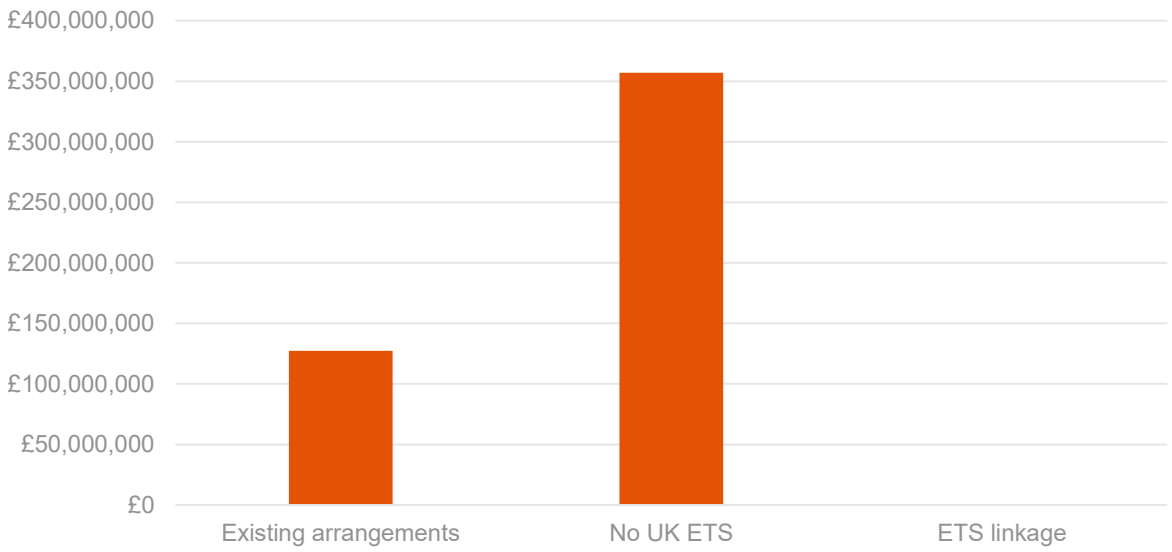
[17] LCCC (2026), CfD Register, DESNZ (2025), Load factors for renewable electricity generation (DUKES 6.3), DESNZ (2026), Plant loads, demand and efficiency (DUKES 5.10), Ofgem (2026), Electricity Prices: Forward Delivery Contracts - Weekly Average (GB), DESNZ (2026), Electricity generation costs 2025; Energy UK analysis

[18] Ofgem (2026), Final levelised cap rates model (Annex 9): 1 April to 30 June 2026; Energy UK analysis

production. If the UK were to remove its ETS, UK exporters would face significantly greater exposure to EU CBAM charges.

Energy UK analysis finds that scrapping the UK ETS would expose British companies to CBAM charges of approximately £10 billion between 2026 and 2035.[19] The sectors most exposed include steel, aluminium, cement, chemicals, and electricity – sectors where UK producers already compete on thin margins in European markets.

Figure 2: 2026 CBAM liabilities for UK steel exports to the EU across different scenarios[20]



Electricity sector and market access risks

The electricity sector faces particular complexity under the EU CBAM. The majority of the EU's electricity imports originate in Britain. Electricity flows continuously across interconnectors and cannot easily be traced to a specific source of generation.

European electricity sector operators, including those with interconnectors to the UK, currently face legal and operational uncertainty around the EU CBAM's treatment of electricity flows. This uncertainty is due to the current absence of detailed implementing guidance, updated default values for the carbon intensity of UK electricity imports and clarity on how carbon prices already paid into exporting jurisdictions will be recognised. These unresolved issues are already presenting risks to interconnector operation and future investment decisions.

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[19] European Commission (2026), Default values definitive period, Eurostat (2026), International trade of EU and non-EU countries since 2002 by HS2-4-6, European Commission, (2026), Price of CBAM certificates, ABN AMRO (2025), ESG Economist - Scenarios shaping EU ETS prices; Energy UK analysis. Assumes 1 EUR = 0.866 GBP

[20] European Commission (2026), Default values definitive period, Eurostat (2026), International trade of EU and non-EU countries since 2002 by HS2-4-6, European Commission, (2026), Price of CBAM certificates; Energy UK analysis. Assumes 1 EUR = 0.866 GBP and exports remain at 2025 levels.

If the UK were to remove its ETS, UK electricity exports would lose any claim to carbon price recognition, exposing interconnector operators to CBAM liabilities, increasing UK energy bills, and threatening the economic viability of existing and planned interconnection assets. This would weaken both the resilience and security of supply benefits that interconnectors provide, while also undermining the investment case for future North Sea interconnector projects and offshore wind hybrid assets, both of which depend on stable cross-border market arrangements.

Maintaining access to emerging international markets

While the EU CBAM is the most immediate risk, it is unlikely to be the last. As countries such as China, India, and others expand their domestic carbon markets and consider introducing border adjustment measures, UK exporters without a domestic carbon pricing regime may increasing face extra costs or reduced access in key global markets. Carbon pricing is becoming a prerequisite for equitable participation in international trade. Removing domestic carbon pricing would therefore not shield UK industry from global competition - instead, it would place UK exporters as a structural disadvantage and limit their ability to compete on equal terms.

Without a domestic carbon pricing framework, the UK risks being positioned outside the emerging international architecture that is shaping future trade rules and standards.

A linked UK–EU carbon market would position both parties as joint architects of an emerging global framework for carbon pricing. As carbon markets expand worldwide, participation within a large, credible, and mutually recognised system represents a significant economic and diplomatic advantage.

Being part of such a framework would strengthen the UK's influence over the design of future carbon pricing and trade mechanisms, while supporting long-term market access for UK exports.

The economic and strategic case for UK-EU ETS linkage

The risks outlined above point to a clear conclusion: the UK's carbon pricing regime should not only be maintained, but strengthened to ensure greater liquidity, stability and long-term credibility. This is particularly evident in the case for linking the UK and EU Emissions Trading Schemes.

The UK ETS and EU ETS are fundamentally similar systems. The UK scheme was directly modelled on the EU ETS and both continue to evolve in parallel, expanding to cover shipping, exploring the role of greenhouse gas removals, and responding to the same underlying pressures around industrial competitiveness and decarbonisation. Taken together, these similarities create a strong and practical foundation for linkage across multiple dimensions.

- **Economic growth and competitiveness:** Government analysis indicates this added flexibility would provide +0.1% to UK GDP[21] by allowing a more efficient signal for decarbonisation to happen where it is most cost-efficient first across the continent. This would be in addition to the benefits of linking the two schemes to eliminate the CBAM exposure faced by UK exporters, maintaining our competitiveness and avoiding more than £1 billion a year in unnecessary costs to exporters by 2030, including for electricity.
- **Market stability and liquidity:** A larger, more liquid carbon market would be less susceptible to price volatility, providing greater investor certainty and supporting long-term decarbonisation investment decisions. Being roughly 10 times smaller than the EU ETS, the UK scheme suffers from low liquidity, making the UK's carbon price more volatile and therefore less useful as an investment signal for the long-term clean energy and industrial transformation the country needs to decouple the economy from volatile fossil fuel prices. According to Frontier Economics,[22] an EU-UK ETS linkage would save €770 million up to 2030 from market liquidity gains alone.
- In addition, linking with the larger EU ETS in the near term would mean the carbon price faced in the UK is likely to be lower than if we continued with a standalone scheme, as the supply of EU ETSs across the EU market is expected to tighten in a smoother manner in the coming years. This is especially the case as the EU is currently looking at ways to limit the impact of carbon pricing on costs without removing the effective signal, by making adjustment to the control of supply, and potentially by increasing ETS auction volumes, or slowing the rate of supply phase-out over time.
- **Strategic cooperation**: Recent political developments also support the case for linkage. The Hamburg Summit in January 2026 signalled a renewed political commitment on both sides to deeper cooperation. ETS linkage to avoid CBAM costs, alongside improved electricity trading arrangements, is among the most concrete and deliverable early steps in that process. Investors are not asking for carbon pricing to be weakened; they are asking for it to be more stable, predictable, and clearly signalled. Linkage helps deliver exactly that.
- **Managing trade-offs:** There are trade-offs involved. Linkage will require closer alignment in areas such as scheme design, carbon market governance, and monitoring and verification standards. This will mean policymakers, industry and civil society will need to be more active in, and keep a closer eye on, Brussels policy. These are legitimate considerations, and they will be central to UK-EU negotiations. But the direction of travel is clear: the costs of fragmentation in the form of higher prices, reduced investment certainty, and greater exposure, increasingly outweigh the costs of alignment.

[21] HM Treasury (2025), Methodology note: assessing the preliminary economic impacts of linking the UK-EU Emission Trading Schemes

[22] Frontier Economics (2025) The shared benefits of an UK–EU carbon market link

Conclusion

Carbon pricing is not an optional add-on to UK climate policy; it is a cornerstone of the UK's economic transition and an area in which the UK has exercised global leadership for more than two decades. The evidence is clear: falling emissions, a thriving renewables sector and the phaseout of coal all demonstrate that carbon pricing works. Removing carbon pricing would introduce significant and tangible risks to investment, export competitiveness, the UK's relationships with key trading partners, and to our ability to reduce the economy's exposure to volatile fossil fuels.

Most fundamentally, Energy UK analysis suggests that removing carbon pricing for electricity in the UK would not bring down energy prices in any meaningful way and would actually increase our system's dependence on natural gas, the very thing that is at the heart of higher energy prices at present.

Proposed solutions:

- **The UK ETS should be maintained**. It is a primary driver of clean investment across the economy, and its abolition would have immediate and lasting damage to the UK's decarbonisation trajectory and its attractiveness for non-fossil fuel investment. This means a shift from short-termism to more forward planning, highlighting the importance of credible long-term scarcity signals. The ETS works not only because it puts a price on carbon today, but because firms believe the ETS emissions cap will continue to tighten. Careful expectation management is essential to preserving the system's credibility. A crucial area to examine should be the use of ETS revenues to facilitate electrification and support vulnerable consumers, something also being looked at in the EU.
- **The UK Government should continue to actively pursue linkage of the UK and EU ETS as a priority** within the UK-EU reset negotiations. Linkage would reduce CBAM exposure, improve market stability, and position the UK as a rule-shaper in the emerging global carbon trading architecture.
- **The Government should ensure that UK CBAM policy is designed coherently alongside the UK ETS**, and that carbon pricing revenues are used transparently to support the industrial decarbonisation and decoupling from fossil fuels that carbon pricing is designed to incentivise.
- **More support should be made available to bolster industrial decarbonisation and electrification.** Carbon pricing is an effective mechanism, but it is not a silver bullet. If carbon pricing is the 'stick', then Government should ensure that 'carrots' are available to support the financial investment needed to decarbonise industry.

Energy UK

The voice of the energy industry

Energy UK is the trade association for the energy industry, representing companies investing billions of pounds to secure our country's current and future energy needs.

From growing start-ups to major electricity generators, grid and infrastructure developers and energy suppliers, our members are driving change across power, heat, transport and flexibility.

We provide a collective voice for the sector working with governments, regulators, charities and other organisations to provide crucial insight that shapes policy, offers solutions and promotes best practice.

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