

## Energy UK Explains: the cost of the UK-EU relationship for energy

October 2024

### Key points

- **The UK and EU have deeply interconnected energy systems.** The UK remains part of a broader European energy system that supports security of supply and the transition to Net Zero.
- **The UK’s post-Brexit energy relationship with the EU introduced significant barriers to trade.** If left unaddressed, these barriers will lead to higher energy bills and run the risk of disincentivising investment in clean homegrown energy.
- **Unless the UK moves toward closer cooperation with the EU on energy and climate, it may lead to additional costs of up to £10bn this Parliament** through higher energy bills and lower Treasury revenues.
- **This amount is set to increase from 2030** as the UK loses out on the advantages of an integrated energy system, jeopardising our ability to capitalise on clean homegrown energy by becoming a net exporter of electricity.

Measure	Estimated cost	Timeframe
Impact of explicit trading on wider electricity wholesale costs	£120 million-£370 million (based on 2022 prices, but lower as prices fall) <sup>1</sup>	Annually
Impact of inefficient trading on investment in multipurpose interconnectors	£13 billion across North Sea countries <sup>2</sup>	Present-2050, with most of the cost in the 2030s and 40s
Foregone revenue caused by low UK ETS allowance prices	£3.5 billion-£8 billion <sup>3</sup>	Over next parliament
EU CBAM charges (carbon price differential paid on export to the EU in all relevant sectors)	£800 million <sup>4</sup>	2026-2030 estimated figure.
Foregone revenue from exports due to curtailment of GB renewables due to EU CBAM	£900 million-£2.4 billion at current power prices <sup>5</sup>	Annually, increasing over time to reach this level in 2040.
Administrative cost for GB exporters of completing CBAM certificates	Small fee per transaction	For the duration the EU CBAM applies to GB

<sup>1</sup> [Energy UK \(2022\) UK-EU Energy and Climate Cooperation: Why heightened engagement is imperative for Net Zero.](#)

<sup>2</sup> [Energy UK \(2024\) The Power of Partnership: UK-EU energy cooperation for a clean, secure future.](#)

<sup>3</sup> [Frontier Economics \(2024\) Linking UK and EU carbon markets.](#)

<sup>4</sup> [Frontier Economics \(2024\) Linking UK and EU carbon markets.](#)

<sup>5</sup> Energy UK analysis based on [AFRY \(2024\) EU CBAM impact study focused on electricity imports from Great Britain.](#)

## The reality of post-Brexit trade

- Following Brexit, the UK moved to a set of less efficient trading arrangements with the EU.
- Whilst some sectors were able to redirect trade flows to work around these new barriers, this wasn't possible for energy.
- The UK is no longer part of the EU, but it is part of a broader European energy system. The UK and EU remain deeply interconnected in terms of energy: from electricity to gas, the pipes and wires which run under the North Sea support both security of supply and the transition to Net Zero.
- Whilst energy is still traded on a daily basis between the UK and EU, the broader cost of our relationship has gone up. These costs are borne by consumers through higher energy bills, and lower revenues collected by the Treasury.
- Over time, these divergences are likely to become even more important. The UK is set to become a net exporter of electricity by 2030, and barriers to trade will make it harder for the UK to fulfil its potential to become a clean energy superpower.

The key barriers to trade over the next few years include:

## Less efficient electricity trading arrangements

- Less efficient electricity trading arrangements post-Brexit have increased the cost of day-to-day trading, with knock-on impacts on wholesale electricity prices and inevitably higher costs on bills.
- The annual increased cost of trading over interconnectors following the move from implicit to explicit trading post-Brexit is estimated to have increased day ahead interconnector trading costs by £17m annually.<sup>6</sup>
- The cumulative impact of less efficient trading arrangements is estimated to have added between 0.25% to 0.7% onto electricity costs.<sup>7</sup> In 2022 alone this was between £120m to £370m and at current prices is estimated to be £500m over this parliament.
- Inefficient trading also poses a barrier to investment in complex infrastructure such as Multipurpose Interconnectors (MPIs), where offshore wind farms are linked to multiple countries at the same time. There are currently two MPIs planned between Great Britain and the EU. The inability to resolve ongoing trading issues puts both of these at risk, in addition to investment in a 2GW offshore wind farm between GB and the Netherlands.
- Energy UK analysis of European Commission data suggests that investment in MPIs would reduce the cost of meeting the wider North Sea target for offshore wind of 300GW capacity by 2050 (as agreed in the Ostend Declaration) by up to £13bn.<sup>8</sup>

---

<sup>6</sup> [LCP Delta \(2024\) Power Insights: The Decline of GB Interconnector Efficiency.](#)

<sup>7</sup> [Energy UK \(2022\) UK-EU Energy and Climate Cooperation: Why heightened engagement is imperative for Net Zero.](#)

<sup>8</sup> [Energy UK \(2024\) The Power of Partnership: UK-EU energy cooperation for a clean, secure future.](#)

## Low UK ETS prices and the impact of the EU CBAM

- The UK Emissions Trading Scheme (ETS) is 10 times smaller, more volatile and, since mid-2022, has been priced lower than the EU ETS. A lower UK carbon price leads to reduced revenues for Treasury and lessens the incentive to decarbonise.
- Analysis by Frontier Economics projects that HMT will receive between £3.5bn and £8bn less over the course of the next Parliament than if UK and EU carbon prices were linked.<sup>9</sup>
- The same paper projects that the introduction of the EU CBAM will lead to £800m being paid to EU member states on export across all impacted sectors between 2026 and 2030.<sup>10</sup>
- AFRY Management Consulting suggest that the EU CBAM will lead to up to 50% greater curtailment on the GB network, which will amount to about 8GW of offshore wind being curtailed annually by 2040.<sup>11</sup> As this electricity would otherwise be exported, this amounts to foregone UK exports amounting to £900m-£2.4bn per year at current wholesale prices,<sup>12</sup> although the actual cost will depend on actual renewables capacity, the degree of curtailment and prices realised in the market.
- The administration costs of complying with the EU CBAM (e.g. completing certificates) will add a cost to each transaction, representing a cumulatively large barrier to cross-border trade in sectors including power.

## Fixing the UK-EU relationship: creating growth and removing barriers to trade

- Recognising the impact inefficient electricity trade has on the UK and EU, the Trade and Cooperation Agreement (TCA) signed post-Brexit instructs both sides to explore a technical solution known as ‘multi-region loose volume coupling’ (MRLVC).<sup>13</sup>
- However, MRLVC has never been implemented before in any jurisdiction and remains unworkable in the opinion of Transmission System Operators in the UK and EU and power exchanges (responsible for electricity trading between both sides).<sup>14</sup> Progress has been repeatedly promised by policymakers, both in the TCA and in updates since, with little action to show.
- Energy UK believes that a new approach to resolving this impasse is required. We support GB interconnectors being recoupled with the EU Internal Energy Market through rejoining the EU’s Single Day Ahead Market Coupling (SDAC) on a contractual basis.<sup>15</sup> This would avoid the UK having to be within the jurisdiction of the European Court of Justice whilst providing the benefits of efficient trading.

---

<sup>9</sup> [Frontier Economics \(2024\) Linking UK and EU carbon markets.](#)

<sup>10</sup> [Frontier Economics \(2024\) Linking UK and EU carbon markets.](#)

<sup>11</sup> [AFRY \(2024\) EU CBAM impact study focused on electricity imports from Great Britain.](#)

<sup>12</sup> Energy UK analysis based on [AFRY \(2024\) EU CBAM impact study focused on electricity imports from Great Britain.](#)

<sup>13</sup> Annex 29 of [UK Government and European Union \(2020\) Trade and Cooperation Agreement.](#)

<sup>14</sup> [EU-UK TSOs Group \(2023\) Responses from the TSO group to the technical questions on Multi-Region Loose Volume Coupling \(MRLVC\).](#)

<sup>15</sup> [Energy UK and others \(2024\) Joint letter on UK-EU price coupling.](#)

- New arrangements must be implemented rapidly to avoid becoming politically sensitive ahead of the expiry of the TCA's Energy Title on 30 June 2026.
- Linking the UK ETS with the EU ETS will create equivalent prices in the two schemes, generating additional revenue in GB, whilst eliminating additional charges on electricity export from GB and possible tariff barriers on CBAM goods.
- Linkage would be subject to negotiation between the UK and EU. Energy UK believes that any negotiation should be swift due to the shared climate ambitions of both sides, highly similar schemes and political will.
- Both sides should also pursue mutual CBAM exemptions to avoid adverse consequences for their market whilst negotiations are ongoing, given the EU CBAM implementation date of 1 January 2026.