

THE EU CARBON BORDER ADJUSTMENT MECHANISM (EU CBAM)

UK Energy Day 2024

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THE CBAM WILL APPLY TO IMPORTS FROM ALL NON-EU COUNTRIES

(INCLUDING THE UK)

*Excluding Iceland, Norway,
Liechtenstein and Switzerland*

THE EU ETS



Each tonne of CO₂ emitted in the EU costs ~€70

The price is volatile and reflects supply and demand. Unlike other commodity markets, we know that supply of EUAs will hit zero around 2040. **Prices are widely expected to increase over time.**

CARBON LEAKAGE



According to the European Commission:

“Carbon leakage refers to the situation that occurs if, for reasons of costs related to climate policies, businesses in certain industry sectors or sub-sectors were to transfer production to other countries with less stringent emission constraints.”



THE EU CBAM OVERVIEW

Carbon Border Adjustment Mechanism:

The EU CBAM aims to tackle carbon leakage and create fair competition for EU industries

Implications for importing industries:

To comply with this regime, entities need to:

1. Measure
2. Report
3. Verify (after 2026)
4. Procure (after 2026)

The embedded emissions of goods exposed to the EU CBAM

A costly policy

Exposed entities will be required to buy CBAM Certificates to cover their embedded emissions, **the cost of these certificates will be completely correlated to the price of EUAs**



CBAM SECTORS

Initial sectoral scope



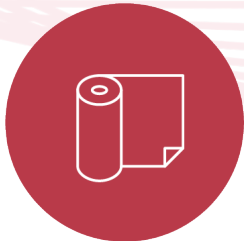
CEMENT



FERTILISERS



IRON AND STEEL



ALUMINIUM



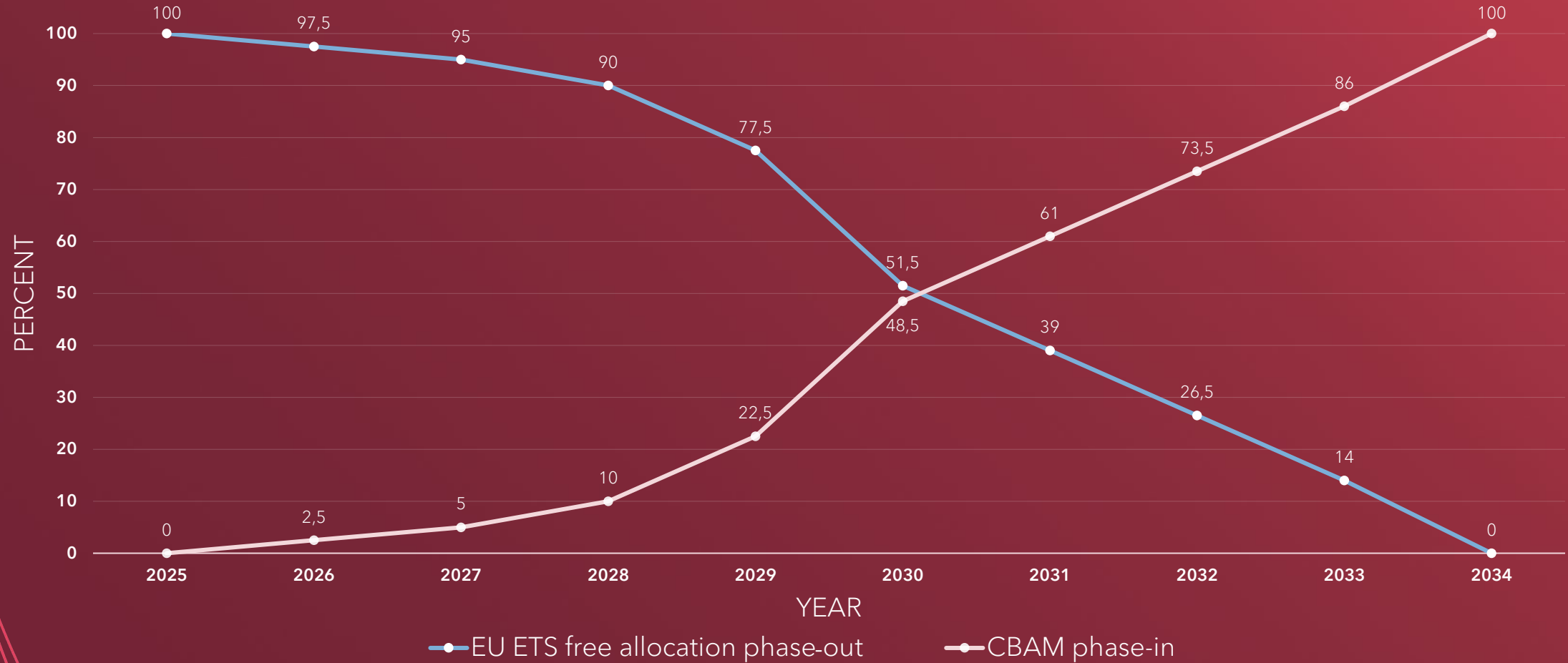
ELECTRICITY



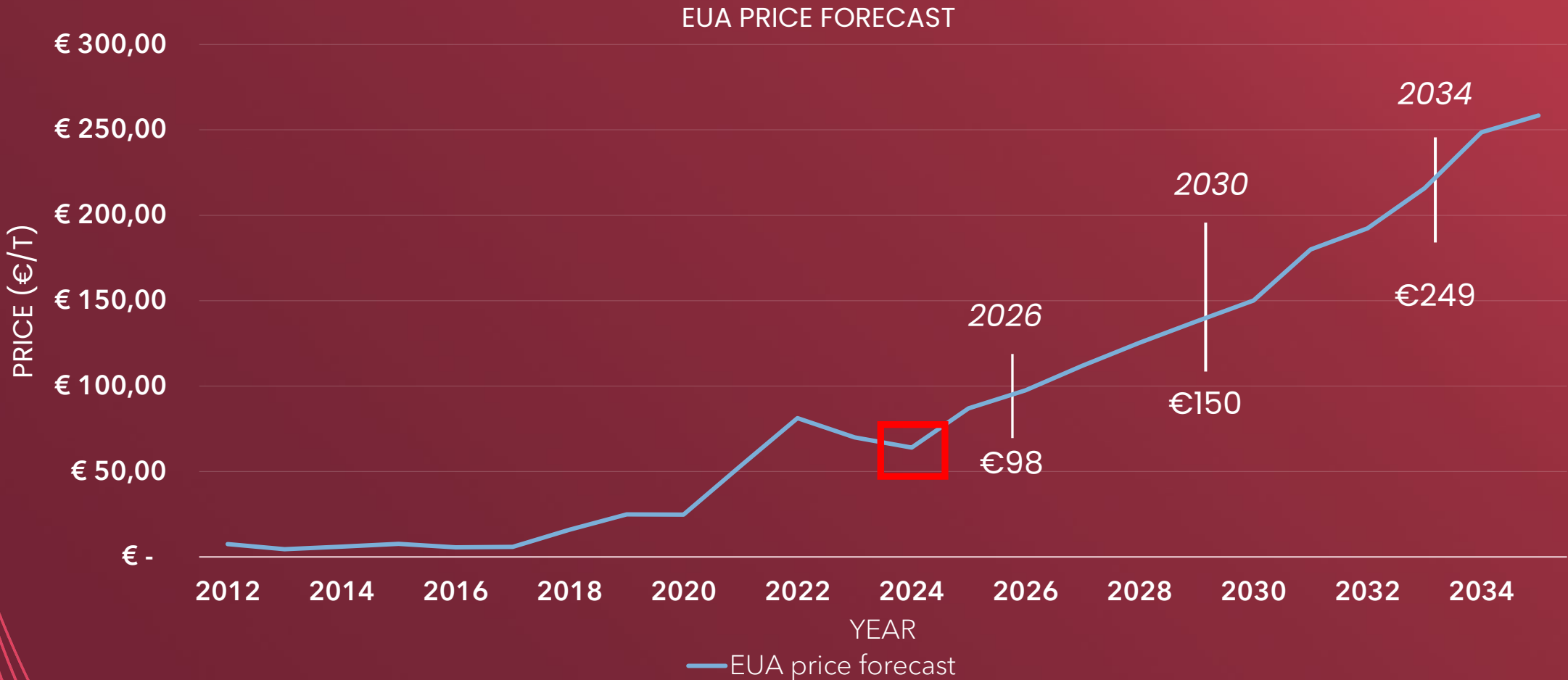
HYDROGEN



THE CBAM PHASE-IN



EU ETS AMBITION = HIGHER EUA PRICE

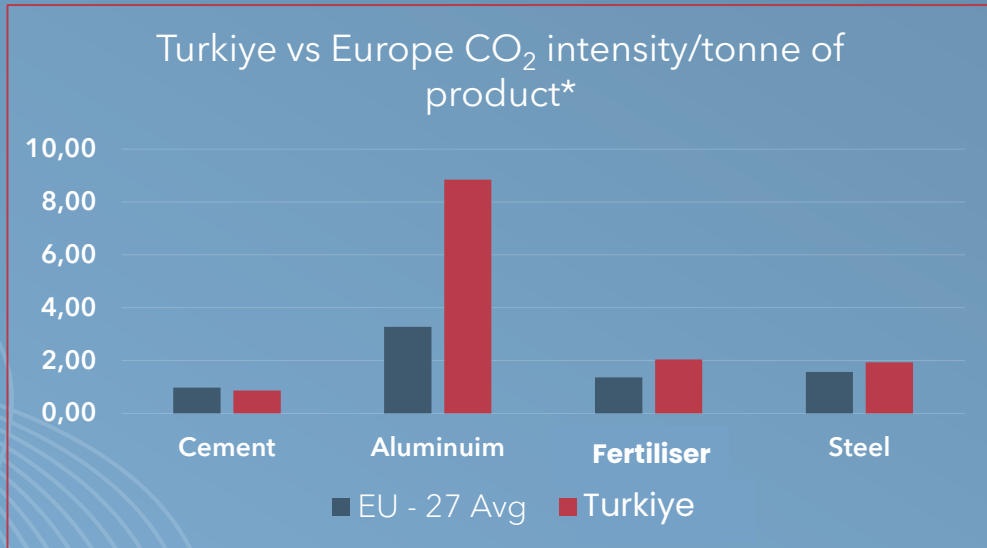


Source: Redshaw Advisor's EUA Price Forecast Assessment (RALEPA)





CBAM's Impact: **Turkiye**



Key take-aways for Turkish companies importing to the EU:

Turkish Aluminium is ~170% **more** carbon intensive than EU aluminium

Turkish cement is slightly **less** carbon intensive than EU cement

*JRC 2023 Technical Report

2030 – CBAM cost per 100k tonnes of goods

Using average EF for Turkiye (% increased cost of good – Q3, 2024 prices)



Clinker: €7,554,000 (+227%)



Fertiliser €18,340,000 (+26%)



Steel €18,568,000 (+21%)



Aluminium €112,553,000 (+45%)

2034 – CBAM cost per 100k tonnes of goods



Clinker €21,378,000 (+719%)



Fertiliser €50,464,000 (+72%)



Steel €47,232,000 (+52%)



Aluminium €205,087,000 (+82%)



CASE STUDY

Cold-Rolled Steel (CN 7209)





COST CASE STUDY ASSUMPTIONS

Every import is different

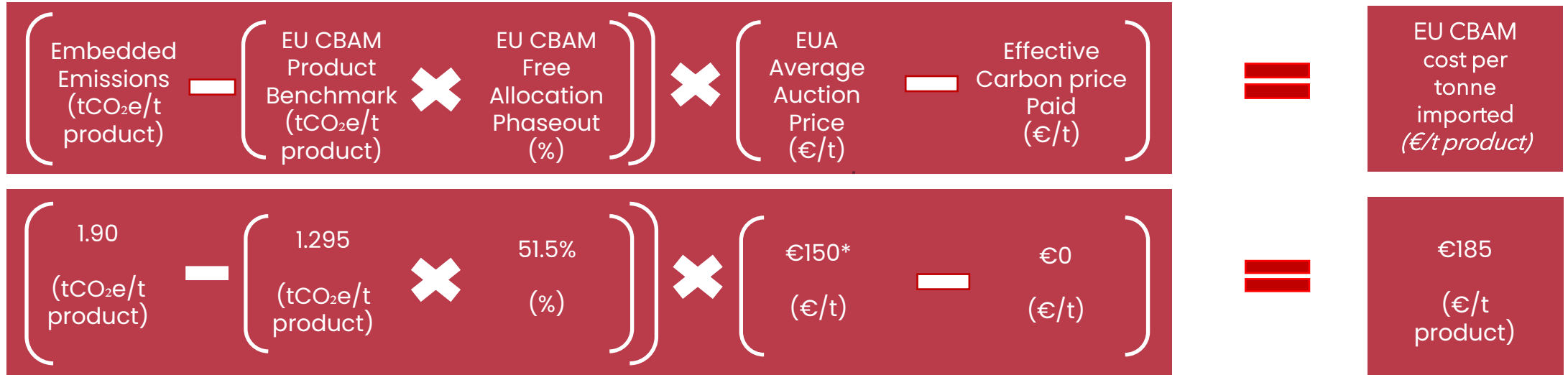
- CO₂ intensity (tonnes CO₂ emissions/tonne of product), a.k.a. Embedded Emissions, varies by installation, company and country
- The volume and source of imported products varies
- The carbon price (EUR/t CO₂) already paid (based on domestic CO₂ costs) also varies

So, we have assumed:

- Our model includes direct and indirect emissions when calculating EU CBAM exposure
- For embedded emissions, we use **1.90 tCO₂/t**, an indicative world average for CN 7209 (Cold-Rolled Steel)
- We use a CBAM Benchmark, for years 2021 - 2025, of phase 4 of the EU ETS, which is **1.295 tCO₂/t**, in 2026, using benchmarks for coke, sinter and hot metal in proportion to their contributions to cold-rolled steel
- We assume **400kt** of imports and no domestic carbon price is paid



EU CBAM CASE STUDY



Variable	Values
Product	<i>Cold-Rolled Steel (CN 7209)</i>
Embedded Emissions	1.90 tCO ₂ e/t product
Year	2030
CBAM Phase-in Rate:	0.515
Tonnes of product imported to EU	400,000 tonnes
EU ETS average auction price in Year	€150*
Effective carbon price paid	€0

Year	EUA Forecast	Phase-in rate	EU CBAM Cost (€/t product)	Tonnes of product	Expected Total EU CBAM cost
2025	€86	0%	€ -	400,000	€ -
2026	€97	2.5%	€ 63	400,000	€25,240,000
2027	€112	5%	€ 76	400,000	€30,430,000
2028	€125	10%	€ 93	400,000	€37,280,000
2029	€137	22.5%	€ 124	400,000	€49,860,000
2030	€150	48.5%	€ 185	400,000	€74,360,000
2031	€174	61%	€ 244	400,000	€97,880,000
2032	€192	73.5%	€ 299	400,000	€119,940,000
2033	€215	86%	€ 371	400,000	€148,520,000
2034	€248	100%	€ 472	400,000	€188,920,000
				Total:	€772,460,000

*Based on Redshaw Advisor's EUA Price Forecast Assessment (RALEPA)

Numbers are rounded and indicative

EU CBAM: Macroeconomic Impact

CBAM's impact on trade*:

The EU CBAM is anticipated to lead to:

- **Loss** of 11.9% of imports in 2030 of CBAM covered sectors
- **Loss** of 6.9% of exports in 2030 of CBAM covered sector
- There is a **loss** of employment in sectors covered by the CBAM, by - 1.2%. The effects on other downstream sectors is minimal

Other concerning trends:

Peter Liese, MEP, said (June 2024), he is 'quite concerned' about the EU de-industrializing due to carbon policy, citing BASF permanently scaling back EU operations due to green regulation, and instead going to the US



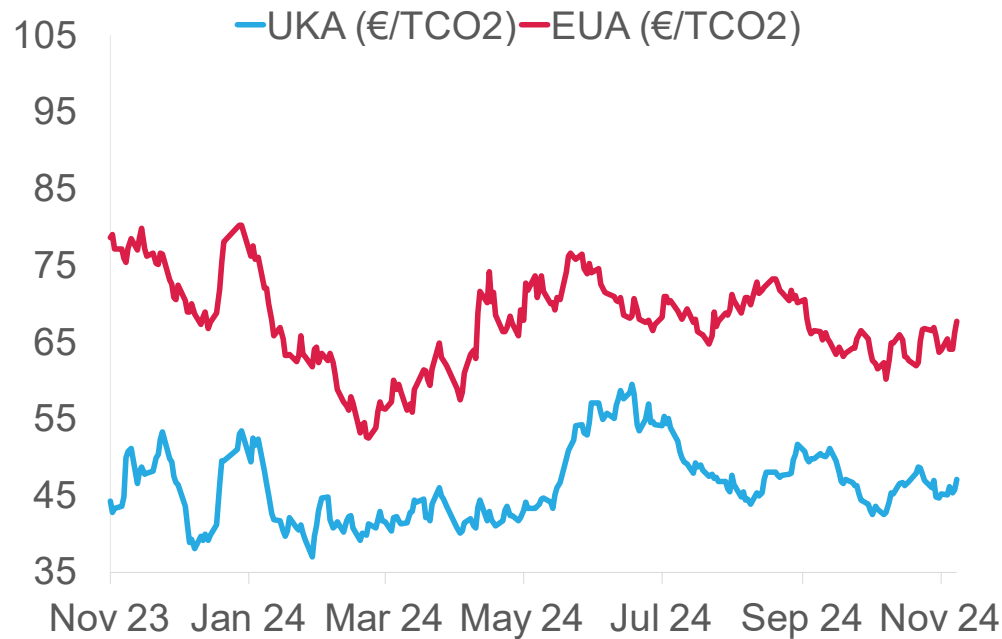
Specific challenges for UK exporters to the EU

UKAs are trading at a €20 discount to EUAs

- According to analysts, this discount is likely to persist until 2027
- Even if the discount disappears, the EU CBAM is still a significant hurdle for trade

If the UKA discount persists:

- HM Treasury could forgo ~£3.5 billion in revenue over the 2025-30 period
- This could result in UK industry paying up to £0.2-0.8 billion into the EU budget over 2026-30



Possibility for EU - UK ETS linkage remains, but won't be easy...

- Different scope, benchmarks, auctioning schedule, standardisation (removals), Supply Adjustment Mechanism (SAM), ambitions (LRF), etc.



CBAM: Catalyst for Change



Global Responses

- **UK CBAM** will be entering force by 2027
- Australia, the US, Taiwan, and others are consulting on incorporating **their own CBAMs**



EU and UK relationship

- **Creating additional hurdles** for EU and UK ETS linkage
- Possible discouragement of UK exporting power to the EU



Much to come

- We are **only a year into the transitional phase**, most of the change is still on the horizon



Q&A

Download our EU CBAM guide:



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CARBON BORDER ADJUSTMENT MECHANISM & REDSHAW ADVISORS LTD

The EU CBAM poses an immediate and serious operational threat for organisation that import goods covered under this regime into the EU.

Redshaw Advisors is committed to enhancing strategic decision-making ability by creating up-to-date transparency on the CBAM legislation, direct and indirect cost forecasting, MRV (Measure, Report, and Verify) requirements, and risk management recommendations for organizations exposed to the EU CBAM.



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The mission of the award-winning team at Redshaw Advisors is to help companies successfully navigate the ever-expanding global environmental markets and achieve their climate ambitions.

Redshaw Advisors has demonstrated and delivered on this mission across numerous industries and landscapes. As a true 'first mover' in the carbon markets, Redshaw Advisors retains decades of compliance market expertise. Founded by Louis Redshaw in 2014, Redshaw Advisors has grown to become one of Europe's leading environmental markets advisory and procurement businesses across the compliance, voluntary carbon, and renewable energy markets, winning awards for our work in all three sectors.



OUR CBAM TEAM



Louis Redshaw
CEO



Bill Goldie
Environmental
Markets Advisor



Dan Maleski
Environmental
Markets Advisor



Stephen Lewis
Senior Trader



Schedule a call with our CBAM advisors to discuss the following key questions:

- How do I know if my company is subject to CBAM?
- How much will my exposure to the EU ETS change as a result of CBAM?
- What is the penalty if I don't comply?
- Will I need a new registry account?
- How will I measure and report my emissions?
- What will the financial impact be as a result of this regulation?

How Redshaw Advisors can help:

- Provide training on the EU CBAM
- Create financial models on the impact of the EU CBAM
- Assist with strategic decision-making
- Consult on the EU CBAM reports



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