UK vs EU CBAM:
Pricing, Default Values, and Supply Chain



Carbon Border Adjustment Mechanisms (CBAM) are no longer a distant policy concept on the regulatory horizon - they are rapidly translating into tangible financial pressure on commodity prices, import margins, and supply chain cash flows. With the EU CBAM definitive regime already underway and the UK CBAM set to go live on 1 January 2027, businesses trading across European borders are entering a complex dual-border carbon era.

Drawing from our recent advisory engagements, this article breaks down why UK and EU carbon border charges look so different on paper, how default values behave across regions, and what practical steps businesses must take to avoid costly compliance traps.

1. Why Is the UK CBAM Rate Over 8x Lower Than the EU CBAM Certificate Price?

A headline comparison of current illustrative rates often catches importers off guard: the illustrative UK steel CBAM rate sits at £9.69 per tonne of CO_2e, whereas the EU CBAM certificate price stands around €82.32 per tonne - more than an eightfold difference. However, this headline gap does not mean UK importers will pay one-eighth of the carbon tax. Rather, it reflects three fundamental structural differences in how the two mechanisms are calculated:

- **Free Allocation Discount Methodology (The Primary Driver):** The UK CBAM rate is an illustrative tax rate that already embeds free allocation discounts directly into the headline price. For example, with a 97.5% free allocation factor in 2027, importers only pay on the remaining 2.5% of emissions, which is pre-discounted into the £9.69/t rate. In contrast, the EU CBAM certificate reflects the full market carbon price (€82.32/t), while free allocations (e.g., 95% in 2027 against sector-specific benchmarks) are deducted from the volume of liable embedded emissions during declaration.
- **Underlying ETS Market Prices:** Both border mechanisms mirror their respective domestic Emissions Trading Systems (ETS). As UK ETS allowances currently trade approximately 13% lower than EU ETS allowances, the baseline carbon price feeding into the UK formula is naturally lower.
- **Scope of Indirect Emissions:** During its initial phase from 2027, the UK CBAM excludes all indirect emissions (such as emissions from purchased electricity). Conversely, the EU CBAM mandatorily includes indirect emissions for key sectors including cement, fertilisers, and specific precursors.

2. The Default Value Trap: Global Averages vs Country-Specific Values

When verified supplier emissions data is unavailable, importers must fall back on government-published default values for embodied carbon. Here, the UK and EU diverge sharply in methodology, which creates different winners and losers depending on where your imported goods are manufactured:

Feature / Dimension	UK CBAM Approach	EU CBAM Approach
Default Value Basis	Single global trade-weighted average of embodied carbon per product (excluding intra-EU trade data).	Granular, country-specific default values reflecting national production intensities.
High-Emission Origins (e.g., China, India)	Significantly lower than EU defaults, softening the initial penalty for unverified goods (10%).	Punitive country-specific benchmarks plus escalating mark-ups (up to 30% by 2030).
Low-Emission Origins (e.g., US, Canada)	Potentially higher than EU defaults, as cleaner producers are pulled up by the global average.	More favorable country-specific values reflecting lower domestic grid and industrial carbon intensity.

The key takeaway is clear: UK default values are not universally cheaper. Because they rely on a global trade-weighted average rather than country-specific figures, the cost differential can swing in either direction depending on your supply chain footprint.

3. Why Compliance Costs Are Escalating and the Risks of Unreadiness

Based on our recent advisory work, many businesses remain underprepared for what lies ahead. As enforcement ramps up across both jurisdictions, four structural shifts are driving CBAM costs sharply upward:

1. **Rapidly Shrinking Free Allowances:** Both the EU and UK are phasing out free allowances at an accelerating pace, meaning a progressively larger share of embedded emissions in imported goods will face direct carbon charges.
2. **Punitive Default Value Mark-Ups:** Relying on default values is designed as a temporary fallback, not a long-term strategy. Under the EU regime, default values carry punitive mark-ups rising up to 30% by 2030, while the UK applies initial mark-ups (10%) before transitioning toward country-specific benchmarks later in the decade.
3. **Dual-Border Enforcement from January 2027:** With UK CBAM taking effect on 1 January 2027 alongside the EU's definitive regime, companies moving goods across the UK and Europe

must manage parallel reporting calendars, distinct thresholds, and separate verification workflows.

4. **Downstream Scope Expansion in 2028:** From 1 January 2028, the EU CBAM is proposed to expand beyond basic raw materials to cover over 180 steel- and aluminium-intensive downstream products (such as fasteners, machinery components, and household appliances), pulling thousands of additional manufacturers and importers into scope.

The Commercial Risks of Standing Still

Failing to prepare for CBAM is no longer just a regulatory compliance issue - it can pose immediate commercial and operational hazards:

- **Supply Chain Exclusion:** Exporters and upstream suppliers unable to provide verified product-level carbon data risk being delisted by EU and UK buyers seeking to protect their margins.
- **Inflated Tax Bills:** Importers forced to rely on default values risk paying adjustments 3 to 5 times higher than their actual embedded emissions warrant.
- **Customs Delays & Financial Penalties:** Incomplete or non-compliant carbon documentation can result in shipments being held at the border, while inaccurate or unverified declarations expose importers to substantial statutory fines.

4. Practical Strategy: Choosing Between Default Values and Actual Data

Importers essentially face a strategic choice between two possible compliance pathways:

- **Pathway A — Use Default Values:** Administratively simple with minimal supplier engagement required, but financially expensive - potentially 3 to 5 times higher than reporting actual emissions.
- **Pathway B — Use Verified Actual Data:** Can significantly reduce CBAM certificate and tax liabilities, but demands rigorous installation-level monitoring, accredited third-party verification, and structured data governance.

Advisory Recommendation: Adopt a Tiered, Portfolio-Based CBAM Strategy
Businesses do not need an all-or-nothing approach. Segment your CBAM-covered imports by volume and carbon cost exposure:
• **High-Volume / High-Value goods:** Invest in collecting verified actual emissions data from suppliers. The tax savings may far outweigh verification and advisory costs.
• **Low-Volume / Tail-End Imports:** Rely on default values where the administrative cost of supplier verification is likely to exceed the marginal CBAM charge.

Importers need to start engaging their tier-1 and tier-2 suppliers now. CBAM is already reshaping supply chain competitiveness, and proactive carbon data readiness is the strongest hedge against potential margin erosion.

Talk to Environmental Strategies

We can help you check which imports are in scope, model potential costs and decide what data to ask suppliers for.

For more information and a no obligations discussion, please contact us on info@esltd.co.uk

Official sources

HMRC policy summary • UK rates and worked example • UK default values • UK defaults methodology

EU definitive regime • EU certificate prices • EU default values and benchmarks • EU downstream proposal

EU declaration and surrender deadlines

Regulatory position checked 18 November 2026.