Getting to know CBAM: What is the EU Carbon Border Adjustment Mechanism and why should it matter to you?

An introduction for policy, compliance, and commercial teams

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Executive summary

The EU's **Carbon Border Adjustment Mechanism (CBAM)** is a carbon-pricing policy applied at the border to certain imported, emissions intensive goods. It requires EU importers to report part of the embedded emissions and buy and surrender CBAM certificates. These certificates are priced in line with the EU Emissions Trading System (EU ETS), adjusted for any carbon price paid in the country of origin.

CBAM matters because it turns carbon intensity into a competitive characteristic internationally —affecting market access, cost of supply, pricing, future investment decisions, and ultimately product competitiveness. It also raises the bar for emissions monitoring, reporting, and verification across global supply chains.

This whitepaper explains what CBAM is, why it is important, who it impacts, and the practical challenges market participants face and how the **S&P Global Energy Horizons CBAM Scenario Planner** can help organizations plan and respond.

1. What is CBAM?

CBAM is the EU's mechanism to apply a carbon cost to imports of certain products, mirroring the carbon price EU producers face under the EU Emissions Trading System (ETS). It aims to address carbon leakage, or the risk that production relocates to jurisdictions with weaker climate policies.

Covered sectors (initial scope)

CBAM currently covers cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen, with specific product coverage defined via customs classification (CN code).

How it works

CBAM combines (a) emissions accounting and (b) a financial compliance obligation (a cost):

- A select portion of industrial processing emissions ("specific embedded emissions") are calculated for the imported goods, with methodologies set in the legal framework and related guidance.
- Importers to the EU buy and surrender CBAM certificates whose price is linked to the EU ETS carbon price, with adjustments for carbon prices paid in the origin country. The obligation covers emissions above the EU benchmark (set by the 10% lowest carbon EU installations) and an increasing share of benchmark emissions over time.

Timeline: from reporting to financial impact

CBAM was designed with a transition period from October 2023 to December 2025 (to establish reporting and data flows) and a subsequent definitive phase from January 2026 when financial obligations apply).

2. Why is CBAM important?

A. It changes the economics of cross-border trade

CBAM will impact landed costs for covered goods into the EU by attaching a cost to specific embedded emissions. This will impact the competitiveness of exposed commodities in Europe, potentially reshuffling the relative attractiveness of different providers in contracting and price negotiations.

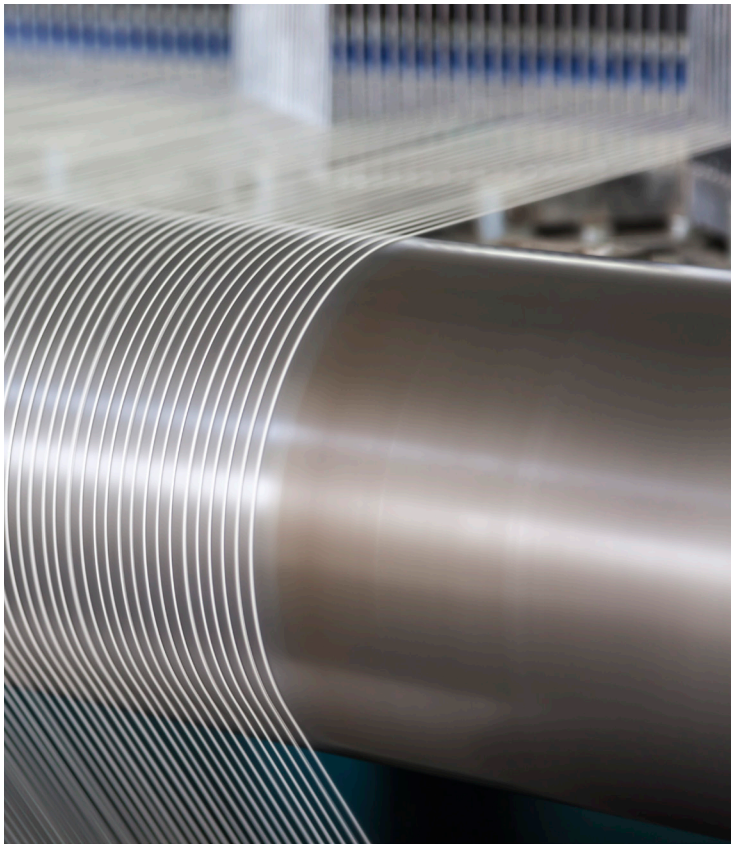
CBAM's impact is especially significant in countries and sectors where trade accounts for a large share of the market, particularly for emissions-intensive, lower value products where carbon leakage is most likely to occur.

B. It increases the value of emissions data

CBAM pushes emissions information from "nice to have" to "must have" regulatory-grade MRV (Measurement, Reporting, and Verification) at the product and facility level. Reporters lacking verified data will have to rely upon default emissions intensity values set by the European Commission with dissuasive built-in markups reaching as high as 30%.

C. It is a bellwether for a broader *carbon tariff* landscape

The potential for proliferation of CBAM-like systems elsewhere, currently planned for 2027 in the United Kingdom and Norway and being considered in Australia, could have profound implications for trade and market access. The potential exists for increasing compliance complexity, cost, and the need for scalable data and planning processes across jurisdictions.



3. Who does CBAM impact?

CBAM's legal obligation sits with EU importers, but commercial and operational impacts propagate upstream and downstream.

Directly impacted:

- **EU importers of CBAM goods:** reporting, certificate purchasing/surrender, audit readiness, and internal controls.
- **EU downstream manufacturers using imported inputs:** cost pass-through, sourcing changes, and competitiveness considerations.

Indirectly impacted:

- **Non-EU producers/exporters selling into the EU:** new requirements to provide emissions data verified by an accredited third party and, increasingly, to demonstrate lower-carbon characteristics to remain price-competitive.
- **Commodity traders and procurement teams:** CBAM becomes a variable in trade economics, arbitrage, and portfolio optimization (origin selection, contract structure, and timing).
- **Strategy and finance functions:** exposure modeling, long-term forecasting, and capex prioritization (abatement vs. supplier switching vs. market reallocation).

4. Key challenges for impacted organizations

1. Data, MRV, and supplier enablement
   - Collecting independently verified embedded emissions data at the right granularity (product/facility) from global suppliers is often the first bottleneck.
   - Where verified facility data is missing, firms can face default-value risk where they are required to use default emissions values, which include dissuasive markups adding up to 30% on the country-average emissions intensity. When the origin country is unknown, reporters must use generic values set at the average emissions intensity of the ten exporting countries with the highest emissions intensity.
2. Regulatory uncertainty and scope evolution

   Implementation details—such as scope expansion to downstream products like automotive parts, treatment of indirect emissions in metals sectors, and complex requirements for claiming zero-carbon energy sources like biofuels—can create heightened regulatory risk and planning uncertainty for product lines and trade routes.
3. Indirect emissions and "what's fair" debates (sector sensitivity)

   For some products—especially aluminum—indirect (electricity) emissions can make up a large share of total processing emissions. Because these emissions are not currently included in the scope of CBAM, producers using low or zero-carbon energy cannot benefit from lower CBAM costs.
4. Commercial integration: pricing, contracting, and margin management
   - Organizations must decide how to reflect CBAM in contracts (indexation, pass-through clauses, data obligations, audit rights).
   - Traders and procurement teams must incorporate CBAM into deal screening and origin selection, particularly as costs scale in the definitive phase.
5. Scenario risk: carbon price volatility and strategic time horizons

   CBAM costs are driven by variables that are inherently uncertain: EU ETS price pathways, origin-country carbon pricing, phase-in factors, and emissions intensity improvements. Market players benefit from being able to stress-test exposures under multiple scenarios and over long horizons (not just near-term compliance).

Conclusion: How the CBAM Scenario Planner helps

The CBAM Scenario Planner from S&P Global Energy Horizons is designed to help companies move from "CBAM awareness" to decision-ready planning by translating regulatory requirements into forecastable landed-cost impacts.

How it addresses the challenges above

- **Cost forecasting by product and origin:** Estimates CBAM costs for specific products by sector and HS/CN code and country of origin, with projections out to 2060 to support long-term strategy.
- **Scenario stress testing:** Allows users to compare outcomes across multiple S&P Global Energy Horizons scenarios (e.g., Base Case and other pathways), helping teams understand downside/upside exposure and key drivers.
- **Decision support for procurement and trading:** Enables comparison of origin options and product choices to identify where switching suppliers, renegotiating terms, or investing in decarbonization could be most impactful.
- **Practical delivery format:** Delivered as a Power BI dashboard, making it accessible for cross-functional users (compliance, procurement, trading, strategy, finance).
- **Tailoring queries with your data:** Users can input their own emissions intensity assumptions for more organization-specific analysis, bridging gaps where supplier MRV is still maturing.

Explore Integrated Carbon Market Solutions

At S&P Global Energy, we help customers create value while supporting their goals for a low-carbon future. We offer a comprehensive suite of solutions that empowers customers to navigate the carbon markets and manage emissions with confidence:

- Robust emissions data sets and methodologies
- Pricing, outlooks and analysis of the carbon and environmental markets
- Registry infrastructure to manage carbon and environmental programs
- Integrated long-term energy scenarios to help organizations navigate uncertainty and volatility and understand how the energy system may evolve across plausible futures, as well as make resilient investment decisions.

S&P Global Energy offers a trusted and truly independent voice in the carbon markets. Supported by our institutional longevity and deep knowledge and expertise, you can develop diversified, multi-faceted, and resilient decarbonization and sustainability strategies—no matter where you are on your low-carbon journey.

Explore our CBAM Scenario Planner resources and request a demo:
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