ITC INFOTECH

Business-friendly Solutions

WHITEPAPER

ENSURING CBAM COMPLIANCE THROUGH DIGITAL INNOVATION

Starting in Q1 2026, the European Union's (EU's) Carbon Border Adjustment Mechanism (CBAM) will significantly impact global trade economics. The CBAM is a policy tool to address 'carbon leakage.' It also aims to level the playing field and encourage industries worldwide to adopt cleaner technologies. As a result of CBAM, exporters of steel, aluminum, cement, fertilizers, hydrogen, or electricity to the EU will face carbon pricing equivalent to what EU producers already pay—potentially adding 20–30% to costs for exporters to the EU, if they haven't prepared.

The European Commission has already indicated that organic chemicals, polymers, and potentially all products covered by the EU ETS will eventually fall under CBAM.

This isn't a distant regulatory threat; the CBAM definitive period commenced on January 1, 2026, making it imperative that businesses leverage the expertise of technology partners to address new requirements and remain competitive.

What CBAM means for business?

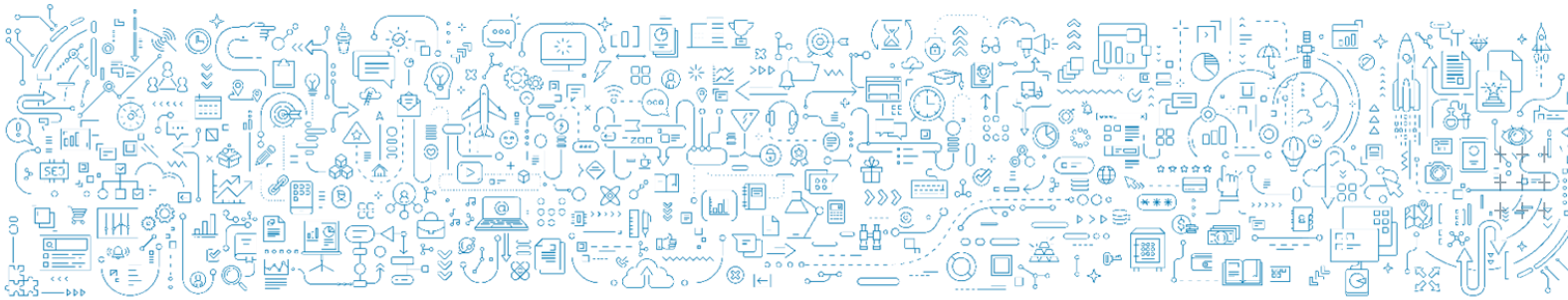
CBAM establishes a new cost reality for exporters to the EU market. The mechanism ensures that imported goods face the same carbon price as EU-produced products under the Emissions Trading System (ETS). This eliminates the competitive edge of producing in countries with less strict environmental rules.

For EU-based importers and producers, this results in increased operational complexity and the risk of supply chain disruptions. They must track embedded emissions across their entire value chain, purchase CBAM certificates quarterly, and obtain independent verification of all emissions data from their suppliers.

For exporters in developing economies, the impact is even more significant. Suppose their production depends on traditional fuels and that they lack emissions-tracking infrastructure. In that case, they will face the dual challenge of higher costs in the EU market and substantial compliance investments.

Exporters who are unable to provide verified emissions data will be assigned default values based on the EU's least efficient producers, often resulting in much higher carbon costs than their actual emissions would warrant.

The strategic implications go beyond mere compliance. CBAM will influence supply chain choices, possibly compelling companies to either invest in decarbonization technology, move production to regions with carbon pricing mechanisms, accept less competitiveness in the EU market, or shift away from EU markets entirely.



Timeline and requirements

Phase 1 Transitional period (October 1, 2023 – December 31, 2025):

Companies and importers are required to submit a quarterly report detailing the greenhouse gas (GHG) emissions associated with the specified items imported into the EU during the transitional phase of CBAM implementation (October 1, 2023 – December 31, 2025), including both direct and indirect emissions. However, there are no financial obligations during this phase. Instead, this period focuses on establishing reporting procedures for full implementation.

Phase 2 Full implementation (January 1, 2026, onwards):

From Q1 2026, the regulation becomes financially consequential.

Importers must purchase CBAM certificates linked to ETS carbon prices to account for the embedded emissions in their imported products. The emission data reported will be verified by an independent and accredited verifier starting in 2026.

In 2026, certificates must cover 80% of embedded emissions, increasing to 100% by 2034 as the EU phases out free ETS allowances.

All non-EU countries, except those linked to the EU ETS (Iceland, Liechtenstein, Norway, and Switzerland), are subject to CBAM requirements. Notably, this impacts major exporters such as India, China, Turkey, Russia, and the United Kingdom.

Financial impact

As already observed, companies unable to provide verified emissions data are assigned default values based on the EU's worst-performing producers—often 30-50% higher than those of modern facilities. This penalty system increases costs and strongly encourages transparency in emissions and investment in verification infrastructure.

Missing deadlines, providing inaccurate data, or failing to surrender sufficient certificates triggers fines of €50-€100 per ton of unreported emissions, plus mandatory certificate purchases at penalty rates.

EU-based producers will face higher costs if they continue to rely on conventional fuels, which could harm their global competitiveness. Meanwhile, producers outside the EU, especially in developing countries, will be significantly impacted by this regulation, as these additional costs will challenge their competitiveness against producers in countries with more stringent emissions standards and carbon pricing.

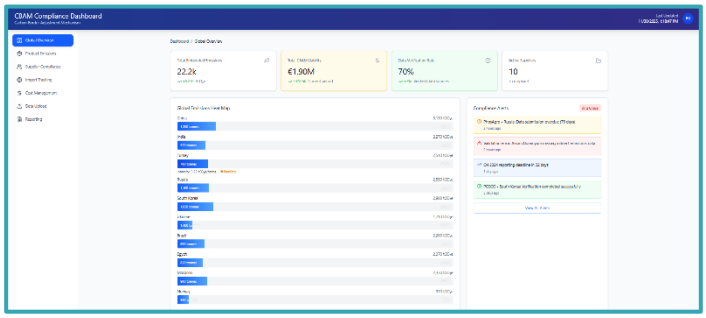
Companies that invest in emissions reduction, secure carbon-pricing credits in their home markets, or restructure supply chains around lower-carbon inputs can significantly reduce their CBAM burden. The EU permits deductions for carbon prices already paid in the country of origin, offering benefits to exporters from jurisdictions with carbon pricing systems.

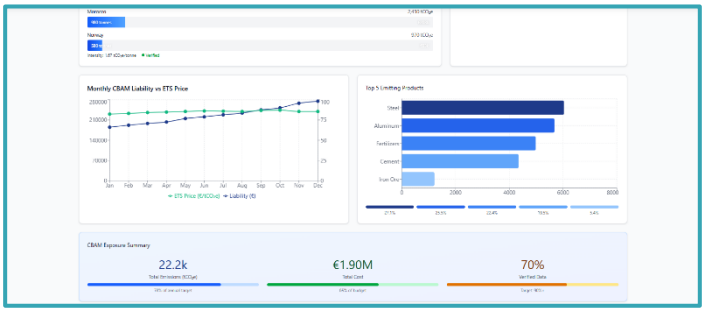
How ITC Infotech transforms CBAM compliance into a competitive advantage?

At ITC Infotech, we recognize that businesses today face growing pressure to comply with changing environmental regulations while maintaining operational efficiency and market competitiveness. That's why our digital solutions are carefully designed to make regulatory compliance easier, with a particular emphasis on the EU's CBAM.

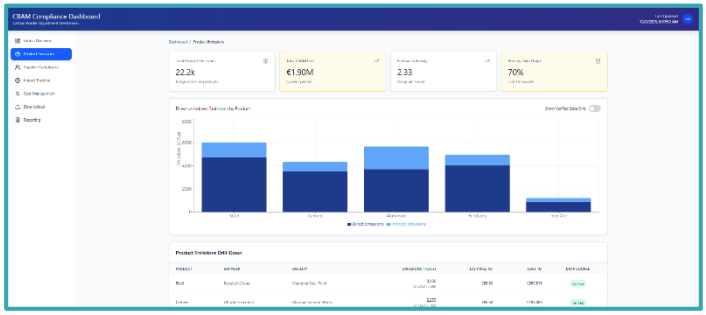
Companies using our CBAM compliance platform significantly reduce reporting time, minimize penalty risk, and uncover hidden carbon cost optimization opportunities within the first year.

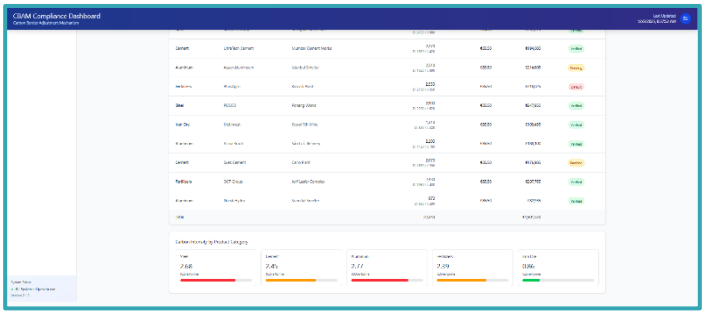
Sample Snapshots from ITC's CBAM Compliance Dashboard



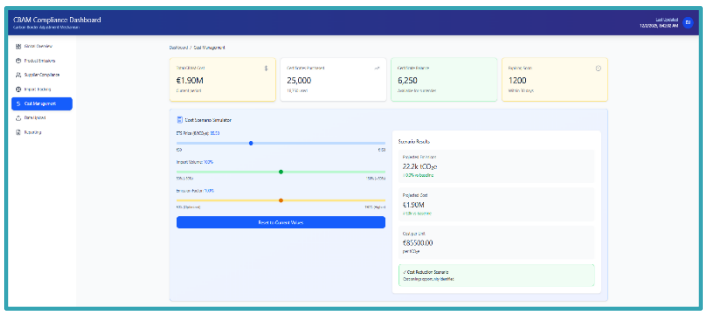


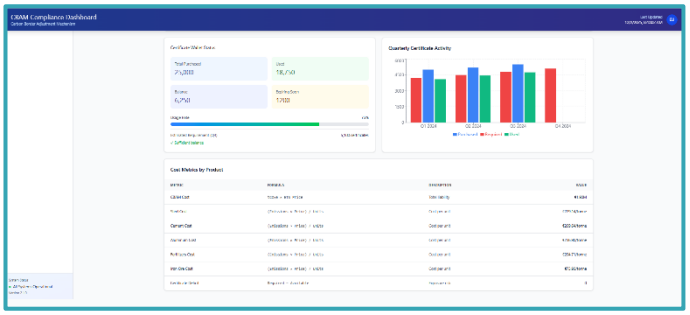
Global Overview





Product Emissions





Our approach delivers three strategic outcomes:

Digital emissions verification platform and automated compliance excellence:

Our integrated platform connects directly to your ERP, supply chain management, human resource management, and financial systems, automatically calculating embedded emissions, generating quarterly reports, managing certificate purchasing, and maintaining audit trails for verification.

Carbon intelligence for strategic decision-making:

Beyond compliance, our analytics engine reveals which products, suppliers, and processes drive your carbon costs—enabling data-driven decisions about decarbonization investments, supplier selection, and product portfolio optimization. Our CBAM Tax Calculator projects costs under multiple scenarios (different ETS prices, production changes, and supplier switches), providing finance teams with the visibility to budget accurately and negotiate strategically.

Enterprise integration without disruption:

Our platforms are built to ensure seamless compliance while minimizing disruption and avoiding penalties. We enable your business to gain uninterrupted market access by automating and optimizing processes related to emissions reporting and carbon cost management.

Looking ahead: CBAM as a template for global carbon border measures

CBAM marks the first wave of what is likely to become a global trend. The United States is exploring similar border adjustment mechanisms as part of its climate legislation, while the UK, Japan, and Canada have expressed interest in similar approaches. Companies that develop strong systems for emissions tracking, reporting, and verification now will be better prepared to adapt quickly as other major markets adopt comparable regulations.

Furthermore, the scope of CBAM is expected to broaden. Forward-thinking companies are adopting enterprise-wide carbon accounting systems that can expand as regulations change, rather than narrow point solutions focused solely on today's six product categories.

The core change CBAM signifies is permanent: carbon emissions are now a tracked, reported, and financially material component of global trade, as critical to customs clearance as tariff codes or country-of-origin certificates. Organizations that identify this shift early and invest in the infrastructure to handle it will not only stay compliant but also gain strategic benefits in market access, supply chain efficiency, and customer relationships.

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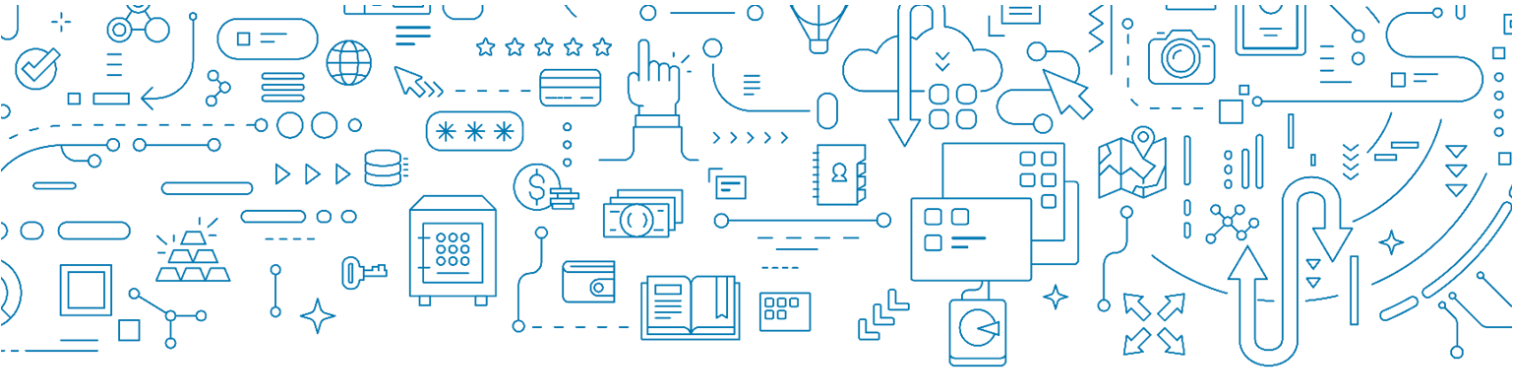

About ITC Infotech

ITC Infotech is a leading global technology services and solutions provider, led by Business and Technology Consulting. ITC Infotech provides business-friendly solutions to help clients succeed and be future-ready, by seamlessly bringing together digital expertise, strong industry specific alliances and the unique ability to leverage deep domain expertise from ITC Group businesses. The company provides technology solutions and services to enterprises across industries such as Banking & Financial Services, Healthcare, Manufacturing, Consumer Goods, Travel and Hospitality, through a combination of traditional and newer business models, as a long-term sustainable partner.

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