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REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE

Promoting Enhanced EU ETS Alignment in Türkiye Emerging ETS

This activity is part of the European Union Climate Dialogues Project (EUCDs)

CBAM Declaration and Compliance

Part 1

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30 July 2026





Outline

- Declaration Content
- Calculation of embedded emissions
- Verification of embedded emissions
- How obligation transfer along the supply chain
- The Free Allocation Adjustment (FAA) Mechanism



Main Objectives of the two CBAM Phases

Transitional Phase (Oct 2023 – Dec 2025)	Definitive Phase (Jan 2026 Onward)
Familiarization and Onboarding: To give EU importers and non-EU manufacturers time to adjust to the tracking requirements and set up communication channels for sharing carbon data.	Enforcing Financial Parity: To mandate that authorized declarants purchase and surrender CBAM certificates (pricing tied to the EU Emissions Trading System) to match the carbon footprint of their imports, effectively removing the financial incentive to choose high-carbon foreign goods.
Data Aggregation: To collect accurate, field-level data on the embedded direct and indirect emissions of covered sectors (cement, iron/steel, aluminum, fertilizers, electricity, and hydrogen).	Formalization and Enforcement: To transition from simple reporting to strict compliance, requiring independent third-party verification of actual emissions, mandatory prior importer registration, and enforcing the de minimis threshold (exempting cumulative imports under 50 tonnes per year).
Methodology Refinement — testing/calibrating emissions calculation methods before mandatory verification.	Driving Decarbonization: To incentivize non-EU manufacturers to invest in cleaner production technologies so they can reduce their carbon liabilities when exporting to the EU market.

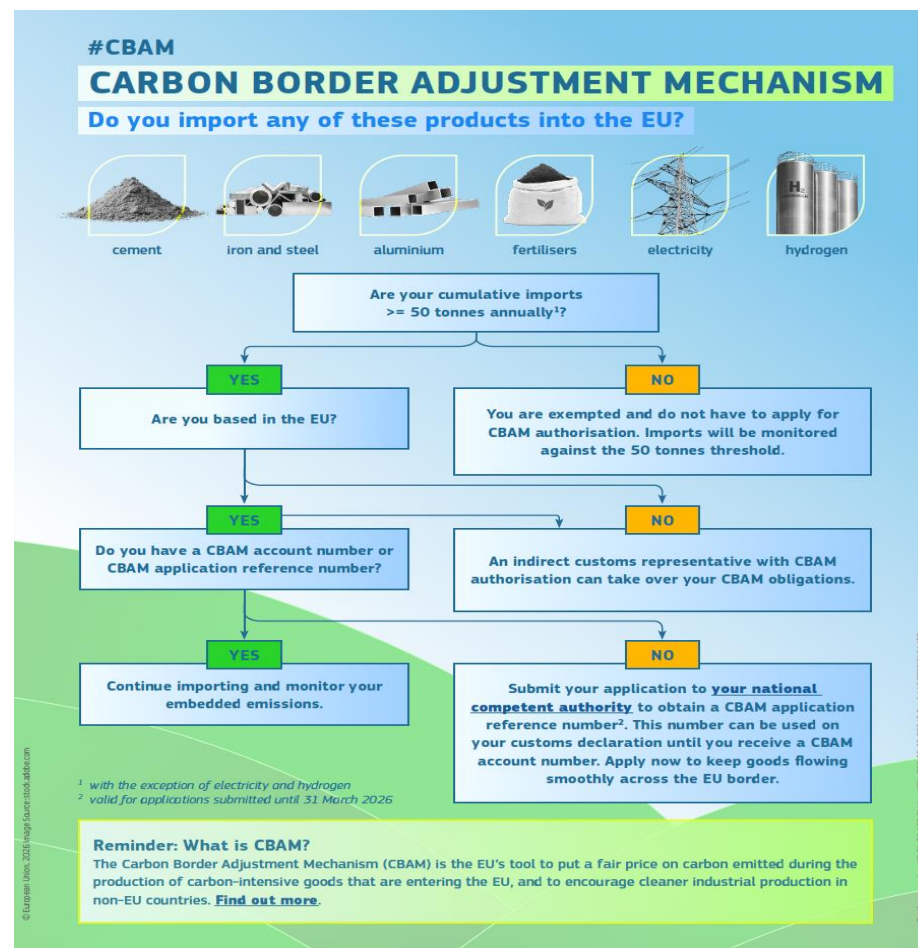


Key Differences between the Two Phases

Compliance Area	Transitional Phase (Oct 2023 – Dec 2025)	Definitive Phase (Jan 2026 Onward)
Financial Obligation	Zero cost. No certificates are purchased or surrendered.	Financial liability. Importers must buy and surrender CBAM certificates.
Reporting Frequency	Quarterly. Reports are due 30 days after each quarter ends.	Annual. A single declaration is due by May 31 of the following year.
Data Verification	Unverified. Data is reported directly without formal audits.	Mandatory. Emissions must be audited by an accredited third party.
Importer Status	Open. Any standard importer can file the quarterly reports.	Restricted. Only "Authorized CBAM Declarants" can import CBAM goods.
Emissions Data	Flexible. Default values and non-EU methods are widely accepted.	Strict. Actual embedded emissions data is required (with minor exceptions).
Exemptions	None. All imports of listed sectors must be reported.	De Minimis. Consignments with a net mass under 50 tonnes are exempt.



Do you import any of these products into the EU?





Declaration Content (Art. 35.2)

Component	Technical Requirement	Legal Basis
Total Quantity	Net mass (tons) or electricity (MWh)	Art. 35.2(a)
Embedded Emissions	Total actual specific emissions (tCO ₂ e per unit)	Art. 35.2(b)
CBAM Certificates	Total number to be surrendered (1 certificate = 1 tCO ₂ e)	Art. 35.2(c)
Verification	Copies of reports issued by accredited verifiers	Art. 35.2(d)



CBAM declaration

The CBAM declaration shall contain the following information:

- Total **quantity** of each type of goods imported during the preceding year (mWh for electricity and in tonnes for other goods);
- The total **embedded emissions** in the goods (tonnes CO₂ emissions/mWh for electricity or, for other goods, tonnes of CO₂ emissions/tonne of each good);
- The total **number of CBAM certificates** to be surrendered;
- Copies of **verification reports**, issued by accredited verifiers.



What are embedded emissions?

- The EU ETS requires operators to pay a price for their own (**direct**) emissions. However, if they consume electricity, they also experience the CO₂ costs included in the price of electricity they purchase (**indirect emissions**). The same applies to the input materials needed for their production process, and which may be supplied by an EU ETS installation. These so-called **precursors** therefore contribute to the CO₂ costs the EU ETS installation faces.
- The **embedded emissions** are defined in parallel to the emissions causing CO₂ costs in the EU ETS: they take into account the direct and indirect emissions of the production process as well as the embedded emissions of precursors. They are similar in concept to a carbon footprint of the goods.



CBAM Embedded Emissions vs. GHG Protocol Scopes

CBAM Embedded Emissions

- Emissions directly linked to the production of CBAM goods
- Includes direct process emissions and, for some sectors, indirect electricity emissions
- Calculated at installation / product level
- Used to determine the CBAM certificate obligation

Relationship with GHG Protocol Scopes

Scope 1 ➡ Fully aligned with CBAM direct emissions

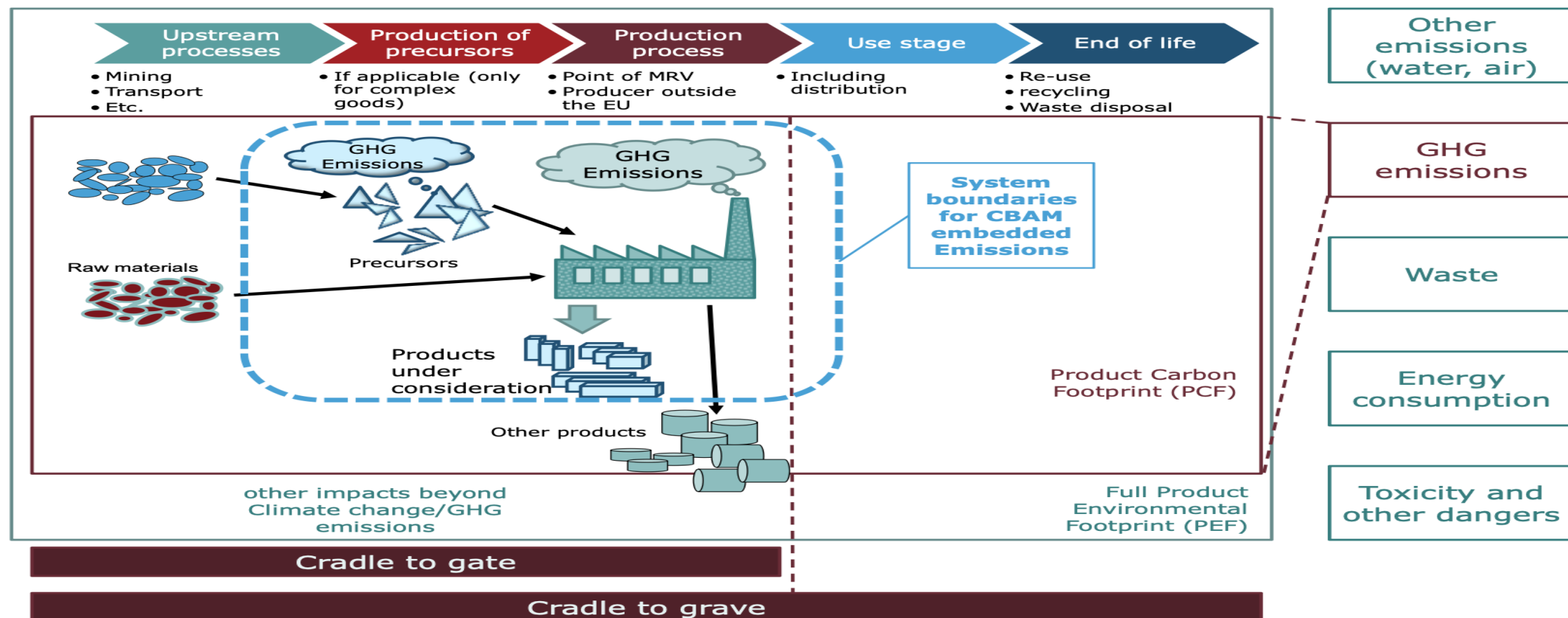
Scope 2 ➡ Partially included in CBAM (electricity-related emissions in specific sectors)

Scope 3 ➡ Generally excluded from CBAM embedded emissions

CBAM is narrower than a full corporate carbon footprint

Key takeaway: CBAM focuses on product-level production emissions, while Scopes 1–3 measure the broader corporate GHG footprint.

Scopes in product footprints vs. CBAM





Calculation of embedded emissions

- [Article 7](#) of the EU CBAM Regulation governs the calculation and determination of embedded emissions in imported goods.
- It establishes the methodologies for calculating greenhouse gas emissions and empowers the European Commission to define specific default values for both direct and indirect emissions.



Article 7 Approaches

Actual Emissions

The primary path using installation-specific monitoring data

Default Values

A fallback method for when actual data is unavailable or unreliable

System Bound

Defined boundaries mirroring the EU ETS regulatory scope

Direct vs. Indirect Emissions

Direct Scope

Emissions from physical production and heating/cooling used in-process

Indirect Scope

Emissions from electricity consumed during production processes





Annex IV: Monitoring Methodologies

Calculation-based

Determining emissions from source streams by using activity data (fuel/material consumption) and calculation factors

- Standard: Input/Output volumes x Emission Factor
- Mass Balance: Based on the carbon content of input materials and resulting products

Measurement-based

Determining emissions by continuous monitoring of gas concentration and flow rates at the stack level

- Uses Continuous Emission Monitoring Systems (CEMS)
- Must be corroborated by parallel calculations to ensure accuracy



Annex IV: Classification of Goods

Simple Goods

Produced using exclusively zero-emission inputs and fuels. Calculation focuses purely on the manufacturing process emissions.

Complex Goods

Produced using other CBAM goods as inputs (precursors). Total emissions must include the embedded carbon of all precursors used.

Precursors

Intermediate goods (e.g. clinker for cement) whose emissions are “carried over” into the final product carbon footprint.



Specific Emissions Formula

$$E_g = SEE_g \cdot M_g$$

E_g : Total embedded emissions (tCO_{2e})

M_g : Mass of the imported goods (tonnes)

SEE_g : Specific Factor (Direct + Indirect + Precursors)



Case Study: Steel Pipe Calculation

Parameter	Value / Default Factor	Calculation Step
Quantity Imported (M_g)	500 Tonnes	Input Volume
Direct Default Factor	2.15 tCO _{2e} /t	Based on EC Default Values
Indirect Default Factor	0.35 tCO _{2e} /t	Based on Country Grid Intensity
Total Embedded Emissions	1,250 tCO _{2e} /t	$500 \times (2.15 + 0.35)$

The example assumes a simple process without further precursor considerations



Commission's Default Values

Default values are estimates provided by the European Commission based on global/regional averages.

Strategic purpose

- Enable reporting when primary data from producers is missing.
- Incentivize actual data collection (defaults are set at higher intensities).
- Harmonize reporting during the transition phase.





CBAM Certificates Price Determination

Direct Link to the EU ETS

The price is strictly pegged to the **EU Emissions Trading System (EU ETS)**. This ensures importers pay a carbon cost equivalent to EU producers

Weighted Average Calculation

Calculated as the weighted average of auction clearing prices of allowances on the common auction platform.

Official Publication

The **European Commission** publishes the price on a dedicated central platform, serving as the official benchmark for all importers.

- The European Commission has officially set and published the first CBAM certificate prices for 2026.
- The price for Q1 2026 is €75.36 per tonne of CO₂eq., and the Q2 2026 price is €75.28 per tonne of CO₂eq.
- Starting in 2027, the EC will define and publish certificate prices on a weekly basis.



Verification Requirements

Accredited Verifiers

From 2026, all declared embedded emissions must be verified by an independent body accredited under the CBAM regulation

Reporting Cycles

Importers must submit annual CBAM declarations by May 31st for emissions occurred in the previous calendar year

Compliance failure may result in penalties of € 10 to € 50 per tonne of unreported CO₂



Verifier Accreditation Scope

EU Regulation Parity

Anyone already accredited under Implementing Regulation (EU) 2018/2067 for a relevant activity group is recognized as an authorized CBAM verifier

National Approval

National accreditation bodies can officially grant this status upon request

Annex VI Principles

This approval is given once the body reviews the documentation and confirms the verifier has the capacity to apply the core verification principles in Annex VI



Key Verification Rules

Mandatory Site Visits

Verifiers are required to perform physical visits to the production installations to confirm the accuracy of the emissions data

Verification Reports

The verifier must issue a standardized report covering installation details, emissions calculations, product quantities, origin data, and carbon prices effectively paid in the origin country



CBAM registry functions

Central Compliance Hub

The CBAM registry is the centralized platform managed by the EC for managing CBAM authorizations and compliance

Key Portals

It includes the *Authorisation Management Module (AMM)* for EU importers and the *O3CI portal* allowing third-country operators to securely upload sensitive emission data

Transmission

It explains how data flows directly from installations to declarants within the system



List of Accredited Verifiers

Central Registration

All accredited verifiers are officially registered within the CBAM Registry

Transparency Portals

The CBAM registry showcases the dual publication system where both the European Commission and National Accreditation Bodies (NABs) will maintain public search databases

Fraud Prevention

These public directories act as a critical shield to verify legitimate auditors and mitigate service scams



The Three Pillars of CBAM

To whom and through what mechanism are CBAM certificates paid, and where does that money end up?

Competent Authorities

The National Competent Authorities (NCAs) of EU Member States act as the administrative gateway. They approve authorized declarants and oversee national compliance enforcement.

CBAM Registry

A centralized digital database managed by the European Commission. The Registry maintains the official ledger of declarations, certificate accounts, and the final annual surrenders.

Central Platform

The Common Central Platform (CCP) is the financial clearinghouse managed by the Commission. It executes the actual sales and repurchase of certificates in Euro currency.

The revenues gathered from the purchase of these certificates are consolidated. 75% of the proceeds flow directly into the central EU Budget as 'Own Resources' to fund green initiatives, while 25% is allocated back to the Member States to support administration and local transition plans.



Implementation Roadmap



Oct 2023

Start of Transitional
Phase. Reporting only



July 2024

Mandatory 80%
Actual Data for
complex goods



Jan 2026

Definitive
Regime. Financial
obligations begin



End 2034

Full
implementation.
Phase-out of
free allowances



Transition timeline under reporting regulation 2023/1773 (adopted on August 17, 2023)

Reporting method	Allowed coverage	Deadline	Status in final regulation
Option 3: Default/Reference Values	Up to 100% of emissions	July 31, 2024	Restricted to a maximum of 20% of total embedded emissions for complex goods after this date.
Option 2: Equivalent National Systems	Full equivalence	December 31, 2024	Allowed for 15 months to utilize local national frameworks (e.g., South Africa's SAGERS, China's ETS, etc.).
Option 1: Final EU Regulation	Full actual data	No Deadline	The only fully accepted methodology allowed for reporting starting January 1, 2025.



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