

CBAMCalc

Industrial Carbon Intelligence Platform

Official User Guide

Complete Onboarding & Operational Handbook

12 Chapters | 14 Pages

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CBAMCalc Official User Guide -- All 12 Chapters

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Regulation references throughout this guide:

Reg. (EU) 2023/956 | IR (EU) 2023/1773 | CDR (EU) 2021/447 | Omnibus Reg. (EU) 2025/2083 | IR (EU) 2025/2621

Introduction

CBAMCalc is an industrial-grade compliance platform purpose-built for exporters and importers navigating the EU Carbon Border Adjustment Mechanism (CBAM). Established by Regulation (EU) 2023/956 and refined by Omnibus Regulation (EU) 2025/2083, CBAM requires companies exporting goods to the EU to account for the embedded carbon emissions in their products and purchase certificates to cover the difference between the carbon price paid in the country of origin and the EU ETS price.

The transitional period ran from October 2023 to December 2025, during which importers were required to submit quarterly CBAM Transitional Period Reports via the EU CBAM Registry. From January 2026, the definitive period begins: importers must surrender CBAM certificates proportional to the embedded emissions in their goods, adjusted by the Art. 22 phasedown factor and any Art. 9 carbon-price deduction.

This guide covers every feature of the platform -- from initial account setup through advanced scenario modelling and quarterly report generation. CBAMCalc is built on official EU Commission data: 269 CN codes, IR (EU) 2023/1773 default emission values for 90+ countries, EU ETS benchmark factors from CDR (EU) 2021/447, and the full Art. 22 phasedown schedule from 2026 to 2034.

KEY REGULATORY REFERENCES: Reg. (EU) 2023/956 -- CBAM parent regulation. IR (EU) 2023/1773 -- default SEE values. CDR (EU) 2021/447 -- ETS benchmarks. Omnibus Reg. (EU) 2025/2083 -- phasedown schedule amendments. IR (EU) 2025/2621 -- updated country default values.

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Suggested Screenshot: CBAMCalc landing page hero with CBAM deadline counter

Platform Overview

The CBAMCalc platform is organised around six core modules, each corresponding to a stage in the CBAM compliance lifecycle. The Dashboard aggregates your real-time exposure. Imports stores your shipment records. The Calculator enables scenario modelling. Reports generates submission-ready documents. Suppliers manages your supply chain data. The Knowledge Base provides access to all reference data.

The platform operates on a multi-tenant architecture: each Organisation has its own isolated data environment. Users are assigned roles -- Owner, Admin, Member, or Viewer -- with permissions scoped accordingly. Owners control billing, team membership, and organisation settings. Viewers can access all data but cannot create or modify records.

Security is built in at every layer. Sessions expire after 8 hours. All actions are logged in the Audit Log with user, IP address, and timestamp. Two-factor authentication (TOTP) is available to all users. Database access is isolated per organisation at the query layer, making cross-tenant data access architecturally impossible.

The platform is hosted on EU infrastructure (Neon PostgreSQL, eu-central-1 region) and complies with GDPR. A Data Processing Agreement is available for paid plan subscribers. All data at rest is encrypted with AES-256 and data in transit is protected with TLS 1.3.

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Suggested Screenshot: Dashboard overview showing KPI cards and navigation sidebar

Getting Started

After creating your account at cbamcalc.company/auth/register, you will be guided through a five-step onboarding wizard. Step 1 confirms your organisation name and primary CBAM sector. Selecting your sector pre-loads the most relevant CN codes and IR (EU) 2023/1773 default Specific Embedded Emission (SEE) values. Supported sectors: Steel & Iron, Cement, Aluminium, Fertilizers, Electricity, Hydrogen.

Step 2 adds your first production plant -- the external facility from which you source goods. Provide the plant name and country of origin. CBAMCalc automatically retrieves the correct default SEE value from IR (EU) 2023/1773 for that country-sector-year combination. If the plant has obtained third-party verified emission data, you can enter it separately as a plant-specific SEE override.

Step 3 records your first import shipment. Search for the CN code by product name or 8-digit code. Enter the tonnage and select the origin country. Step 4 runs the live CBAM calculation and shows your estimated exposure -- embedded emissions, liable emissions after phasedown, and estimated certificate cost at the current ETS price.

Step 5 is the completion screen: it provides a direct download of this User Guide and links to the Dashboard, Calculator, and Reports. The entire onboarding flow typically takes 8 to 12 minutes. All data entered during onboarding can be edited at any time from the respective module pages.

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Suggested Screenshot: 5-step onboarding wizard -- Step 1: Organisation setup

Dashboard Overview

The Dashboard provides a real-time compliance overview in four KPI cards. Total Embedded Emissions shows the sum of all embedded CO₂e across your import records for the selected period, calculated using the formula: $EE = \text{Tonnage} \times \text{SEE}$. Net Liable Emissions shows the post-phasedown, post-Art.9-deduction value. Estimated CBAM Certificate Cost shows total cost at the configured ETS price. Phase-in Factor shows the current Art. 22 percentage.

The CBAM Exposure Timeline bar chart projects your certificate obligations from the current year to 2034, recalculating as you update records. Each bar represents annual cost at the current SEE values and configured ETS price, scaled by the Art. 22 phasedown factor for that year. The chart is interactive -- hover over any bar to see the underlying calculation inputs.

The Recent Imports table shows the five most recent import records with status indicators: DRAFT (unreviewed), SUBMITTED (filed with declarant), VERIFIED (third-party checked), REPORTED (included in a filed quarterly report). Click any row to open the full import record with its complete calculation trace.

The AI Insights panel (Executive Insight) uses Claude to analyse your exposure data and generate plain-language observations. Examples: 'Your steel imports from China account for 67% of your total CBAM liability -- consider requesting verified SEE data from that supplier.' Insights refresh automatically when new import records are added.

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Suggested Screenshot: Dashboard with KPI row, CBAM exposure bar chart, and recent imports table

Features & Functionalities

The CBAM Calculator is the core computation engine. Input: CN code (selected from the 269-code database), origin country, year, tonnage, and optional ETS certificate price assumption. The engine resolves SEE (plant-specific if available, otherwise IR 2023/1773 country default), applies the benchmark from CDR (EU) 2021/447, retrieves the Art. 22 phasedown factor, and calculates: $LE = EE \times \text{PhasedownFactor} \times (1 - \min(1, \text{CPP} / \text{CertPrice}))$.

Scenario Planning allows unlimited what-if analyses. Each scenario is saved with a name, year, and certificate price assumption, and can contain multiple line items. Scenarios store immutable calculation snapshots -- meaning historical scenarios always reflect the inputs and outputs at the time of calculation, even if reference data is later updated. This is essential for audit-readiness.

The Knowledge Base provides searchable access to: all 269 CN codes with product descriptions and benchmark SEE values; country-specific default emission values by year (from IR 2023/1773); the Art. 22 phasedown factor table (2026-2034); production route SEE values by sector (BF-BOF, EAF, DRI, wet-kiln, dry-kiln, Bayer process, Hall-Heroult, SMR, ATR, HB process); and country carbon prices paid (for Art. 9 deductions).

Team Collaboration features include: multi-user access with role-based permissions; in-platform notifications when import records are updated; shared scenario libraries visible to all team members; and a full Audit Log accessible to Owners and Admins showing every create, update, and delete action with the responsible user, timestamp, and IP address.

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Suggested Screenshot: Feature cards grid: Calculator, Reports, Knowledge Base with tag pills

RECORDING AN IMPORT

Navigate to Imports > New Import. Set the import date (the actual customs clearance date). Add a reference number (your internal customs entry reference). Add one or more line items. For each line item: search and select the CN code; select the origin country; enter the net tonnage; optionally assign a specific plant (if plant-specific SEE data is available). Click Save Draft to store without finalising.

RUNNING A SCENARIO

Navigate to Calculator > New Scenario. Name it descriptively (e.g. 'Cement Q2 2027 -- Base Case at EUR 75'). Set the year and your ETS certificate price assumption. Add line items as above. Click Calculate -- results appear immediately with a 9-step audit trail showing every formula applied. Click Save to store the scenario. Use the Compare button to view two scenarios side by side.

ENTERING PLANT-SPECIFIC SEE DATA

Navigate to Suppliers > [Supplier] > Plants > [Plant] > Emission Data. Click Add Year. Enter the year, CN code, specific embedded emissions value (tCO₂e/t), verification status (Unverified, Self-Reported, Third-Party Verified, Accredited), and the data source. Once saved, any import line item referencing this plant and CN code will use the plant-specific value instead of the EU default.

GENERATING A QUARTERLY REPORT

Navigate to Reports > Generate Quarterly Report. Select the year and quarter. Review the auto-populated summary showing all import records in scope. Choose your export format: Excel (4-sheet workbook), PDF (branded report), XML (EU Registry schema), or HTML (browser preview). For official EU Registry submission, use the XML format and validate it against the EU Commission's published XSD schema.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Import creation form with CN code search, tonnage field, and origin country selector

Reports & Analytics

The Excel Report workbook contains four sheets. Sheet 1 (Summary) shows organisation details, reporting period, and KPI metrics (total embedded emissions, total liable emissions, estimated cost, phasedown factor). Sheet 2 (Line Items) lists every import line item with all calculation inputs and outputs: CN code, country, tonnage, SEE applied, embedded emissions, benchmark, phasedown factor, carbon price paid, liable emissions, and CBAM cost. Sheet 3 (Supplier Breakdown) aggregates by supplier. Sheet 4 (Regulatory Reference) cites all applicable implementing regulations.

The PDF Report is formatted as an executive summary suitable for board presentations and regulator correspondence. It includes a branded cover page, a KPI summary section with visual indicators, a Goods Summary table showing each CN code with totals, a methodology note citing IR (EU) 2023/1773 and the applicable phasedown factor, and a legal disclaimer confirming that this is an indicative estimate rather than a legally submitted declaration.

The XML Export follows the EU Commission CBAM Transitional Period Report XML schema. It includes all required fields: importer EORI number, reporting period, goods details (CN code, country of origin, net mass, embedded emissions, carbon price paid), and totals. The output is validated against the schema before export and will display field-level errors if any required data is missing from your organisation profile.

Analytics features include: trend analysis showing your CBAM cost trajectory quarter-over-quarter; supplier contribution analysis showing which supply chains drive the most liability; CN code breakdown showing cost by product category; and a forecast view projecting costs to 2034 based on your current import volumes and SEE values. All analytics update in real time as you add or modify import records.

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Suggested Screenshot: Quarterly report PDF -- cover page with KPI summary and goods table

Settings & Administration

ORGANISATION SETTINGS

Accessible to Owners and Admins via Settings > Organisation. Fields: Organisation Name (used in report headers); EORI Number (required for XML export -- format: 2-letter country code + up to 15 digits); Primary Sector (determines default CN code display); Annual Tonnage Band (used for plan tier recommendations); CBAM Declarant Status (Not Applied / Applied / Authorized / Refused -- displayed on the Dashboard). Changes take effect immediately and are logged in the Audit Log.

TEAM MANAGEMENT

Navigate to Settings > Team. To invite a new member: enter their email address and select a role. They will receive an invitation email with a temporary password and instructions to set up their account. Available roles: Owner (full access including billing -- limited to one per organisation); Admin (all features except billing); Member (create and edit data, cannot access team management or billing); Viewer (read-only access to all data).

BILLING & SUBSCRIPTION

Navigate to Settings > Billing. Your current plan, next renewal date, and usage metrics are shown here. To upgrade, click Upgrade Plan and follow the Paddle checkout flow. Paddle is the Merchant of Record for all transactions -- invoices are issued by Paddle. Annual plan subscribers receive a 20% discount. To cancel, click Cancel Subscription -- access continues until the end of the current billing period.

SECURITY SETTINGS

Navigate to Settings > Security. Enable Two-Factor Authentication (TOTP) by scanning the displayed QR code with an authenticator app (Google Authenticator, Authy, 1Password). Store your backup codes securely -- they are shown once. To disable 2FA, you must re-authenticate with your current TOTP code. Audit Log export is available from Settings > Audit Log > Export as CSV.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Organisation settings page showing EORI, sector, and CBAM Declarant Status fields

Best Practices

COLLECT VERIFIED PLANT SEE DATA EARLY

EU default SEE values from IR (EU) 2023/1773 are intentionally conservative: they represent average or upper-bound emission intensities for each country-sector combination. Modern, efficient plants typically have actual SEE values significantly below these defaults. Requesting third-party verified data from your suppliers and entering it into CBAMCalc can materially reduce your certificate obligations -- in some cases by 30-60%.

MODEL MULTIPLE CERTIFICATE PRICE SCENARIOS

ETS certificate prices are volatile. Run scenarios at EUR 50, EUR 75, EUR 100, and EUR 150 per tonne to understand your exposure range. The Calculator's scenario comparison feature makes this straightforward. Share these scenario outputs with your CFO and procurement teams to inform supplier negotiations and capital planning.

FILE QUARTERLY REPORTS EVEN IF ESTIMATES

During the transitional period, EU regulations required quarterly Transitional Period Reports even when using default SEE values. In the definitive period from 2026, accurate data becomes more important because certificate surrender is actual, not estimated. However, submitting reports on time with conservative default values is always preferable to missing deadlines.

MAINTAIN AUDIT TRAIL HYGIENE

Before each quarterly report, review the Audit Log to confirm all import records were entered by authorised users. Check for any records in DRAFT status that should be SUBMITTED. Verify that the reporting quarter date range includes all imports for that period. The Audit Log provides a complete, timestamped record of every change -- this is your primary documentation for any regulatory inquiry.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Supplier data entry screen with verification status badge and SEE value field

Troubleshooting & FAQ

Q: MY CBAM COST IS HIGHER THAN EXPECTED. Check whether the import line item is using EU default or plant-specific SEE values. Default values are conservative by design. Navigate to Suppliers > [Supplier] > Plants > [Plant] > Emission Data to check what data is on file. If the plant SEE field is empty, the calculator uses the IR (EU) 2023/1773 country-year default. Entering verified plant data is the most effective way to reduce calculated costs.

Q: I CANNOT FIND A CN CODE IN THE SEARCH. CBAMCalc covers all 269 CN codes within the six CBAM sectors. If a product is not appearing, verify that it falls within Iron & Steel (CN 72xx, 73xx), Cement (2523), Aluminium (76xx), Fertilizers (28xx, 31xx), Electricity (2716), or Hydrogen (2804). Products outside these categories are not subject to CBAM and are therefore not in the database.

Q: THE XML EXPORT FAILS VALIDATION IN THE EU REGISTRY. The most common cause is a missing or incorrectly formatted EORI number. The required format is: 2-letter ISO country code followed by up to 15 digits, with no spaces or special characters (e.g. EG123456789012345). Check Organisation Settings > EORI Number. Also verify that all import records in the reporting period have a valid CN code and that the importer country is correctly set.

Q: MY SESSION EXPIRED BEFORE I FINISHED ENTERING DATA. Sessions expire after 8 hours for security. CBAMCalc auto-saves Draft records every time you click Save Draft. If your session expired mid-entry, sign back in and navigate to Imports -- your draft will be there. To avoid interruption during long data entry sessions, save frequently using the Save Draft button and complete the record in stages.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Error state in Calculator -- 'No default SEE value found' with guidance text

CBAM

Carbon Border Adjustment Mechanism. EU policy requiring importers of certain goods to pay for embedded carbon emissions, effective from October 2023.

CN Code -- Combined Nomenclature code. 8-digit EU product classification. CBAM covers 269 CN codes across six sectors.

SEE -- Specific Embedded Emissions. CO₂ equivalent emitted per tonne of product (tCO₂e/t). May be EU default (IR 2023/1773) or plant-specific verified value.

ETS -- EU Emissions Trading System. Cap-and-trade system under which EU producers pay for carbon. ETS certificate price is the CBAM benchmark price.

Phasedown Factor -- Percentage of embedded emissions requiring CBAM certificates under Art. 22: 2.5% (2026), 5.0% (2027), 10.0% (2028), 22.5% (2029), 40.0% (2030) -- updated per Omnibus 2025/2083.

Art. 9 Deduction -- Reduction in CBAM liability where the exporting country already applied a carbon price (CPP) to the embedded emissions. Formula: deduction = min(1, CPP / CertPrice).

EORI -- Economic Operators Registration and Identification number. Required for all CBAM declarations. Format: 2-letter country code + up to 15 digits.

Embedded Emissions (EE) -- Total CO₂e embedded in imported goods. Formula: EE = Tonnage x SEE.

Liable Emissions (LE) -- Portion of embedded emissions attracting certificate obligations. Formula: LE = EE x PhasedownFactor x (1 - min(1, CPP / CertPrice)).

Benchmark SEE -- The EU ETS production-process benchmark for each CN code, sourced from CDR (EU) 2021/447. Used to determine whether a plant is above or below average efficiency.

Declarant -- The EU-established legal entity responsible for submitting CBAM declarations and surrendering certificates. Must be authorised by the national CBAM authority.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Knowledge Base -- CN codes table with benchmark SEE column and active filter

Support & Contact

TECHNICAL SUPPORT

support@cbamcalc.com. Response within 24 business hours. For issues affecting quarterly filing deadlines, prefix your subject line with URGENT -- CBAM DEADLINE for priority handling. Technical support covers: platform functionality questions, calculation methodology queries, data entry guidance, export format issues, and account or access problems. Bug reports are triaged within 4 hours.

ENTERPRISE SUPPORT

sales@cbamcalc.com. Enterprise plan customers receive a dedicated account manager who provides: initial platform setup and data migration assistance; compliance team training sessions (1-2 hours, conducted remotely); quarterly review calls to assess exposure trajectory; and priority escalation for any technical issues. Contact the sales team to discuss custom integrations with ERP or supply chain management systems.

REGULATORY QUESTIONS

legal@cbamcalc.com. For questions about how CBAMCalc implements specific regulatory provisions, or for requests to review methodology documentation, contact the legal team. We publish regulatory update notes whenever the EU Commission releases amendments to CBAM regulations. These updates are available in-platform under Knowledge Base > Regulatory Updates and via the CBAMCalc newsletter.

BILLING ENQUIRIES

billing@cbamcalc.com. All billing is managed through Paddle (paddle.com), our Merchant of Record. For plan upgrades, downgrades, invoices, refund requests, or billing disputes, contact the billing team or use the self-service portal at Settings > Billing > Manage Subscription. Paddle invoices are available for download directly from the Billing page. Refund policy: 14-day money-back guarantee on all paid plans.

[INSERT SCREENSHOT HERE]

Suggested Screenshot: Contact page with support channel cards and response time badges