The EU's Carbon Border Mechanism explained: A tool for a level playing field on carbon

When does the CBAM come into effect?

A transitional period will run **from 1 October 2023**. The CBAM will come into full effect on **1 January 2026**, with financial adjustment in the form of certificate purchases.

Electric energy production | **Cement** | **Aluminum** | **Fertilizers** | **Iron** | **Steel** | **Hydrogen**

In some cases, the policy will also cover raw materials used in production and finished products like screws and bolts.
(This clarifies "precursors" and "downstream products")

If your business brings these goods into the EU from outside the region, the CBAM will apply to you.

How does the CBAM work?

The CBAM has been designed to comply with the EU's international commitments and obligations including World Trade Organisation (WTO) rules.

- CBAM is applied on the actual embedded emissions in the goods imported in the EU, determined according to a methodology that is in line with the reporting of emissions under the EU ETS for the production of the same goods in the EU.
- As from the entry into force of the definitive period of CBAM in 2026, EU importers will buy CBAM certificates corresponding to the carbon price that would have been paid, had the goods been produced under the EU's carbon pricing rules.
- Conversely, if a non-EU producer has already paid a carbon price in a third country on the embedded emissions for the production of the imported goods, the corresponding cost can be fully deducted from the CBAM obligation.

What are the reporting obligations? By when do I need to submit a report?

The report shall include the information:

• the total quantity of each type of CBAM good;
• the actual total embedded emissions;
• the total indirect emissions;
• the carbon price due in a country of origin for the embedded emissions in the imported goods, taking into account any rebate or other form of compensation available.

REPORTING PERIOD	SUBMISSION DUE BY
2023: October – December	2024: January 31
2024: January – March	2024: April 30
2024: April – June	2024: July 31
2024: July – September	2024: October 31
2024: October – December	2025: January 31
2025: January – March	2025: April 30
2025: April – June	2025: July 31
2025: July – September	2025: October 31
2025: October – December	2026: January 31

An individual representative of the business **must** do the following:

Apply to access the EU CBAM Transitional Registry

*An authorized **CBAM** declarant acts as a go-between for importers of CBAM goods into the EU. They handle the reporting and certificate purchases required by CBAM, and can represent multiple importers. You can register as a declarant in your EU member state, or appoint a customs representative to do it for you.*

Fulfill the CBAM's reporting requirement

Purchase CBAM certificates

One certificate needs to be bought for each ton of direct greenhouse gas (GHG) emissions generated during the production of goods (refer to Section 4 on the following page). The cost of CBAM certificates will reflect the average price of EU Emissions Trading Scheme (ETS) allowances from the preceding week, with weekly announcements.

The CBAM will be applicable to emissions not covered by EU ETS free allowances, which are set to be phased out between 2026 and 2034.

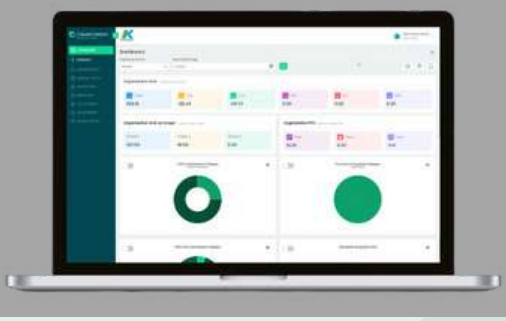
Certificates are available for purchase at any time and will be kept in the registered CBAM certificate account of the authorized declarant.

By the end of each quarter, authorized declarants must confirm that their account includes certificates for a minimum of 80% of the emissions from imported goods in the current calendar year.

Businesses will have the ability to buy surplus certificates and resell a limited number during an annual reconciliation process. In this process, businesses must surrender certificates that match the total reported emissions of their imports from the previous year, purchasing additional certificates if necessary. A penalty, equivalent to the ETS penalties (EUR 100 per tCO2e at the time of writing), will be imposed on importers who fail to surrender the required certificates.

Need help developing a monitoring methodology or collecting supplier data?

Get in touch



What are the requirements to report actual embedded emissions of electricity, the so called “conditionality”?

The actual emissions data of a specific electricity-producing installation may be used, if the criteria in the CBAM Regulation (Annex IV (5)) are met, the so called ‘conditionality’).

The following conditions shall be met, bearing in mind that the criteria are cumulative:

- The amount of electricity for which the use of actual embedded emissions is claimed is covered by a power purchase agreement between the authorised CBAM declarant and a producer of electricity located in a third country;
- The installation producing electricity is either directly connected to the Union transmission system or it can be demonstrated that at the time of export there was no physical network congestion at any point in the network between the installation and the Union transmission system;
- The installation producing electricity does not emit more than 550 grammes of CO2 of fossil fuel origin per kWh of electricity;
- The amount of electricity for which the use of actual embedded emissions is claimed has been firmly nominated to the allocated interconnection capacity by all responsible transmission system operators in the country of origin, the country of destination and, if relevant, each country of transit, and the nominated capacity and the production of electricity by the installation refer to the same period of time, which shall not be longer than one hour.

Deeds to embrace presently.

Importers' To-Do List:

Track every import that includes CBAM-covered products (customs officials will also do this)

Ask your suppliers (producers/installations) for the emissions data in line with the CBAM methodology

Installation Checklist for the Producers: 🛠️

Develop a monitoring methodology

Estimate as much of 2023 emissions as possible

Include both direct and indirect emissions during transition period

Verification is voluntary but recommended during transitional period

During the initial three quarters of the transitional period (until 31 July 2024), both installations and importers have the option to utilize default values for up to 100% of their emissions.

To which goods does the CBAM Regulation apply?

CBAM currently covers:

cement, iron and steel, aluminium, fertilisers, electricity, and hydrogen products.

- The CBAM Regulation applies to CN codes (Combined Nomenclature),
- All goods for which the embedded emissions must be reported are listed in Annex I to the CBAM Regulation. These are called 'CBAM goods'.
- Sectors such as 'iron and steel' are mentioned only for informational purposes.

How do I find or calculate emissions data?

Suppliers (installations) must share their data with importers, who then pass this information on to the European Commission.

What needs to be reported?

Suppliers (typically operators of the production installation) need to calculate and report primary emissions data in line with the CBAM methodological requirements set out in the regulation. Some default emissions data can be used, but for no more than 20% of the total emissions reported.

Will more products be covered?

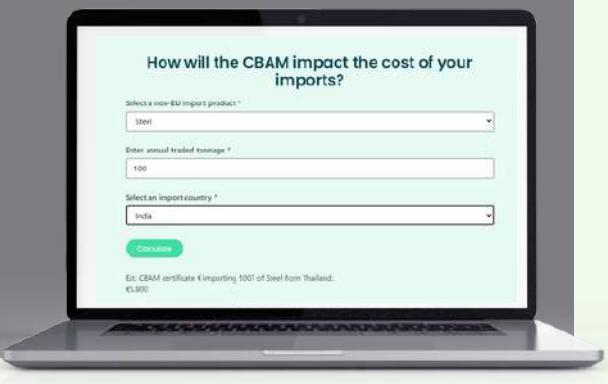
It is highly probable that the **CBAM** will extend its coverage to include additional high-risk goods prone to carbon leakage, like petroleum, organic chemicals, coal, and iron ores.

Are there any exemptions to the CBAM?

The **CBAM will not apply** to imports from Iceland, Norway, Liechtenstein, or Switzerland, as these countries follow or are associated with the EU ETS. Additionally, electricity markets connected to EU internal markets via market coupling will also be excluded.

Find out how much the CBAM could cost you on your imports.

Get your estimate



Which upstream emissions are covered by the EU CBAM?

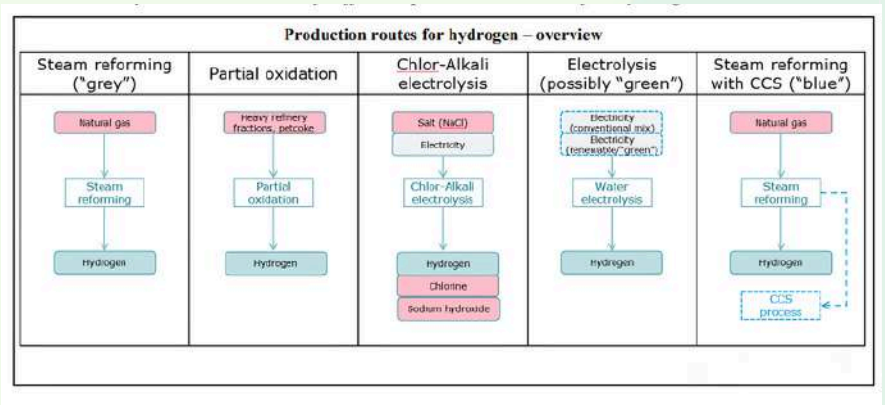
Definition and explanation of relevant production processes and routes.

Hydrogen can be produced from various feedstocks including plastic wastes, but currently it is derived mostly from fossil fuels. Hydrogen production units are typically integrated into larger industrial processes e.g. as for an installation producing ammonia

The system boundaries for direct emissions monitoring for hydrogen include all processes directly or indirectly linked to hydrogen production, and all fuels used in the production of hydrogen

The diagram illustrates the variety of different routes by which hydrogen may be produced.

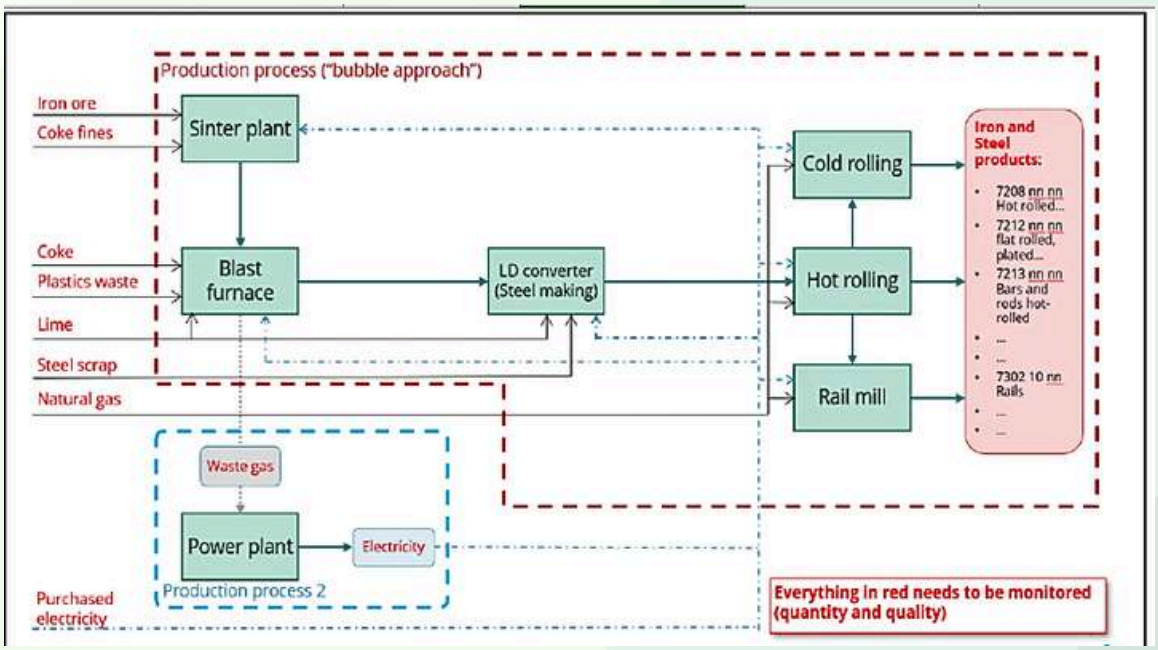
System boundaries of different production routes for hydrogen – overview



CBAM - Iron and Steel Sector - Calculating Specific Embedded Emissions

Example scenario:

Example for carbon steel production, blast furnace route - complete monitoring approach .



Everything shown in red color is to be monitored

Example Calculation Table

Input	AD (tonnes)	CC %	Bio fraction	Emissions (t CO2)	f: ratio of the molar masses of CO2 and C	Biomass fraction
Coke fines	50,000	88.0000		16,121,600.0	3.664	
Iron ores	5,600,000	0.0230		471,923.2	3.664	
Coke	2200000	88.0000		709,350,400.0	3.664	
Plastic waste	70000	68.4000	16%	14,736,314.9	3.664	2806917.12
scrap (external)	800000	0.2100		615,552.0	3.664	
Scrap (internal)	200000	0.1800		131,904.0	3.664	
Lime calcined	280000	0.2730		280,076.2	3.664	
Natural gas	170000	75.0000		46,716,000.0	3.664	
Other inputs	40000	10.0000		1,465,600.0	3.664	
Sum of Direct emissions for all the inputs =				789,889,370.2		
Outputs	**AD (tonnes)**	**CC**	**Bio fraction**	**Emissions (t CO2)**	**Emission Factor**	
Steel	-4800000	0.1800		-3165696	3.664	
Slangs	-1000000	0.0300		-109920	3.664	
Sum of output emissions =				-3275616		
			Total direct emission of the installation =	786,613,754.2		