## FAQs on the Carbon Border Adjustment Mechanism



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### What is the CBAM and how does it work?

The Carbon Border Adjustment Mechanism (CBAM) is essentially the European Union's (EU) new carbon tax, designed to be in alignment with the EU's domestic Emission Trading System (ETS).

As of 1 October 2023,<sup>1</sup> the CBAM has already been in action.<sup>2</sup> Its goal is to prevent carbon leakage by setting a price on imported goods that reflects the carbon price on goods made within the country. It puts a price on the carbon emitted during the production of certain carbon-intensive goods that are entering the EU and claims to encourage cleaner industrial production in non-EU countries.<sup>3</sup>

The CBAM has been designed to comply with the EU's international commitments and obligations. The CBAM system mirrors the EU ETS and works as follows:

The implementing regulation of the CBAM has prescribed three methods for calculating embedded emissions during the transitional phase. As of 1 January 2025, only the EU method would be accepted.

EU importers will need to purchase CBAM certificates to cover the carbon price that would have been paid if the goods were produced within the EU.

If the non-EU producer has already paid a carbon price for producing the imported goods in a third country, that cost can be deducted from the CBAM obligation subject to the carbon price of the third country being recognised by the EU.

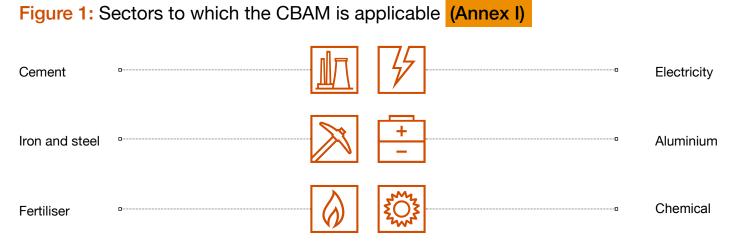
1 https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_er

2 Ibid.
3 Ibid.

# Which industries and products are impacted by the CBAM regulation?

As indicated in Figure 1, CBAM covers six sectors – cement, electricity, iron and steel, aluminium, fertiliser, and chemical. The CBAM regulation specifies the Common Nomenclature (CN) codes of the products to which it applies (Figure 3).

The EU claims that it chose these sectors based on certain criteria, especially their high risk of carbon leakage and high emission intensity. Once fully implemented, these sectors will account for more than 50% of the emissions in the industry sectors covered by the ETS. In future, the CBAM might include additional ETS sectors.<sup>4</sup>



Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOL\_2023\_228\_R\_0006#d1e40-94-1

### Figure 2: Countries and territories which are exempted (Annex II)



Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOL\_2023\_228\_R\_0006#d1e40-94-1

4 https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

#### **Fertilisers** Cement Nitric acid (HS 28080000) Clinkers (HS 25231000) Ammonia (HS 28141000/28142000) Kaolin and other kaolinic clays (HS 25070080) Nitrates of potassium (HS White Portland (HS 25232100), other 28342100) mineral or chemical fertilisers, nitrogenous (HS 3102) Portland (HS 25232900), aluminous (HS 25233000), other hydraulic (HS mineral or chemical, nitrogen, phosphorus and potassium (HS 25239000) 3105) (except 31056000) CBAM Chemical Electricity ...... products Hydrogen (HS 28041000) Electrical energy (HS 27160000) Aluminium Iron and steel Iron and steel (HS 72 incl. 72021, Unwrought (HS 7601) • 72024 and 72026\* but excl. Powders (HS 7603) 7204) Bars (HS 7604) Sheet piling (HS 7301), railway Wire (HS 7605) (HS 7302) Plates (HS 7606) Tubes of cast iron (HS 730300), Foil (HS 7607) tubes other than cast iron (HS 7304), other tubes (HS 7305) Tubes (HS 7608) Other tubes and hollow profiles ٠ Fittings (HS 76090000) (HS 7306), tube fittings (HS 7307) Structures (HS 7610) Structures (HS 7308) Reservoirs (HS 76110000) Reservoirs (HS 7309) Casks (HS 7612) Tanks (HS 7310) Containers (HS 76130000) Containers (HS 7311); Stranded (HS 7614), other screws, bolts, etc. (HS 7318); 4..... articles (HS 7616) other articles (HS 7326)

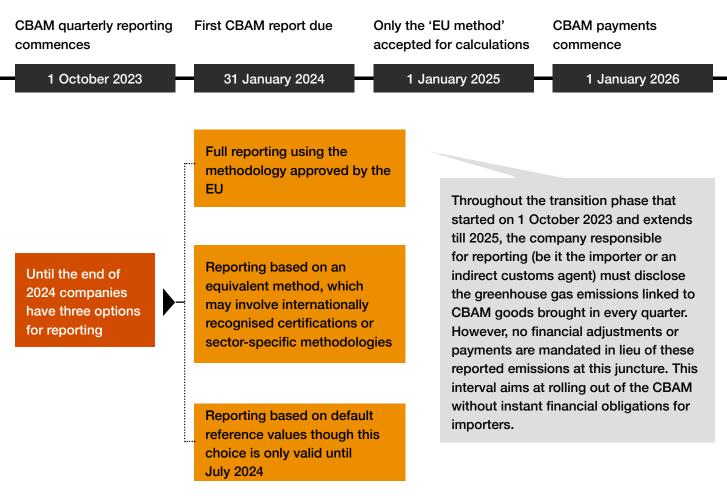
Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOL\_2023\_228\_R\_0006#d1e40-94-1

### 03.

### What action do companies need to take during this transitional period? Are there any financial implications?

Between 2023 and 2026 (the transitional phase), the CBAM will focus on imported goods and materials with high carbon emissions in their production. Importers of these products must report the greenhouse gas emissions linked to their imports (both direct and indirect). However, they are not obligated to acquire or submit certificates.<sup>5</sup> Nevertheless, penalty provisions are applicable even during the transitional phase.<sup>6</sup>

### Figure 4: CBAM reporting timelines



Source: https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

6 Ibid.

<sup>5</sup> https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

From 1 January 2025 onwards, only reporting through the EU approved method will be accepted. Estimates (including default values) can only be used for complex goods if these estimates represent less than 20% of the total embedded emissions of those goods.<sup>7</sup>

In the definitive period, i.e. when the CBAM certificates are to be purchased by the EU importer, it could be relevant for the Indian exporters to be mindful of the cost implications of CBAM certificates. This is relevant because the EU importer might attempt to transfer the CBAM certificate related costs to the Indian exporter. In such circumstances, it might be important for the Indian exporter to engage in beneficial negotiations with the EU importer, to the effect that minimal CBAM certificate related costs are absorbed by the Indian exporter.

Argentina, Chile, Mexico, Colombia, Canada, Iceland, the UK, France, Spain, Norway, Sweden, Belgium, Denmark, Estonia, Slovenia, Latvia, Finland, Poland, the Netherlands, Ukraine, Japan and South Africa already have a carbon emissions tax instrument.<sup>8</sup>



<sup>7</sup> https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

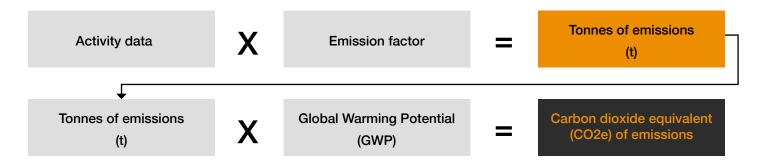
8 https://ourworldindata.org/carbon-pricing

## What are the different types of emissions to be taken into consideration by the EU for the CBAM?

The following emissions are calculated and reported for the purpose of the CBAM regulation:

**Direct emissions:** This refers to emissions resulting from the manufacturing processes of goods, consisting of emissions from the production of heating and cooling used in these processes, regardless of where this heating or cooling is produced. (Article 3)<sup>9</sup>

### Figure 5: Estimating direct emissions



Indirect emissions: This refers to emissions arising from the generation of electricity used in the manufacturing processes of goods, irrespective of where this electricity is generated. (Article 3)<sup>10</sup>

### Figure 6: Estimating indirect emissions

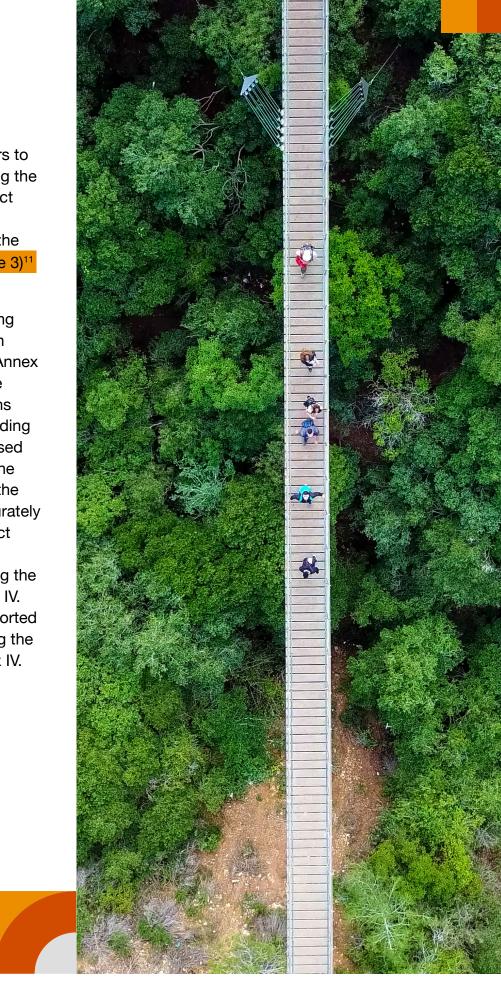


9 https://eur-lex.europa.eu/legal-content/EN/ TXT/?toc=OJ%3AL%3A2023%3A130%3ATOC&uri=uriserv%3AOJ.L\_.2023.130.01.0052.01.ENG

10 Ibid

**Embedded emissions:** This refers to direct emissions generated during the manufacture of goods and indirect emissions originating from the production of electricity used in the manufacturing processes. (Article 3)<sup>11</sup>

The emissions contained within products must be calculated using the specified methods outlined in Annex IV. For products listed in Annex II, only direct emissions are to be taken into account. The emissions contained within products, excluding electricity, will be determined based on their actual emissions using the methods detailed in Annex IV. If the actual emissions cannot be accurately determined, or in cases of indirect emissions, the emissions within products will be determined using the default values provided in Annex IV. The emissions embedded in imported electricity will be calculated using the default values specified in Annex IV. (Article 7)<sup>12</sup>



<sup>11</sup> https://eur-lex.europa.eu/legal-content/EN/ TXT/?toc=OJ%3AL%3A2023%3A130%3ATOC&uri=uriserv%3AOJ.L\_.2023.130.01.0052.01.ENG

# Which embedded emissions need to be reported by each CBAM sector?

The following table provides an overview of the specific emissions and greenhouse gases covered and how direct and indirect emissions are determined for each sector falling under the CBAM scope:<sup>13</sup>

CBAM goods	Cement	Fertilisers	Iron/steel	Aluminium	Hydrogen	Electricity
Greenhouse ga	ses Only carbon dioxide (CO2)	CO2 (plus nitrous oxide for some fertiliser goods)	Only CO2	Only CO2 (plus perfluorocarbons (PFCs) for some aluminium goods)	Only CO2	Only CO2
Unit of emissior	Tonnes (t) of CO2 equivalent (tCO2e)	tCO2e	tCO2e	tCO2e	tCO2e	tCO2e
Unit of weight c goods	f Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Not applicable
Emission covera during transition period						
Emission covera during definitive period		Direct and indirect Only direct, subject to review Only				
Determination of direct embedde emissions	ect embedded be based on estimations, including default values, for imports until 30 June default values					
	Determination of Similarly, the reporting of indirect embedded emissions (based on actual electricity consumption) for imports can utilise estimations, including default					

13 https://taxation-customs.ec.europa.eu/system/files/2023-12/Default%20values%20transitional%20period.pdf

## Questions regarding reporting procedures, timelines, verification obligations and penalties for non-compliance

### A. What are the reporting timelines and what must be reported?

Reporting timeline			Information included in the report (Annex I)		
Reporting period	Submission due by	01	Total quantity of each type of CBAM good		
2023: October-December	2024: 31 January	-			
2024: January-March	2024: 30 April				
2024: April–June	2024: 31 July	02	Actual total embedded emissions		
2024: July–September	2024: 31 October				
2024: October-December	2025: 31 January	03	Total indirect emissions		
2025: January-March	2025: 30 April				
2025: April–June	2025: 31 July				
2025: July–September	2025: 31 October	04	Carbon price due in a country of origin for the		
2025: October-December	2026: 31 January		embedded emissions in the imported goods		

Source: https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

## B. What is the penalty for non-compliance with the CBAM regulation?

06.

Reporting declarants may be subject to penalties ranging from EUR 10 to EUR 50 per tonne of emissions that are not reported accurately. If a CBAM report is missing, incorrect or incomplete, the National Competent Authority (NCA) can initiate a correction process, allowing reporting declarants the opportunity to rectify any mistakes. The NCA will impose penalties in cases where the reporting declarant fails to submit a CBAM report or does not correct an incorrect or incomplete report after the competent authority has initiated the correction process. (Article 16)<sup>14</sup>

## C. Is verification by an external independent body required during the transitional period?

No, verification by an external independent body will only be mandatory from 2026. The accreditation of CBAM verifiers will be the task of National Accreditation Bodies (NABs) in the EU member states. Post the transitional period, embedded emissions declared must be verified by an independent and accredited verifier. Article 18(1) and Article 18(1)<sup>15</sup>

14 https://eur-lex.europa.eu/legal-content/EN/

TXT/?toc=OJ%3AL%3A2023%3A130%3ATOC&uri=uriserv%3AOJ.L\_.2023.130.01.0052.01.ENG 15 lbid.

### D. Which original documents need to be submitted in the quarterly CBAM report?

No original documents need to be provided. The reporting declarant only needs to submit the necessary information for the quarterly CBAM report through the CBAM Transitional Registry. The reporting declarant must submit supporting documents for defining emissions and providing detailed information about goods as specified in the CBAM report's information requirements.

(Annex I, table 2)<sup>16</sup>

## E. What should I do if I was unable to submit the first CBAM report by the submission deadline due to technical errors?

A reporting entity can request a delayed submission through the CBAM Transitional Registry if they are unable to submit a CBAM report on time due to technical issues. (Article 9)<sup>17</sup>

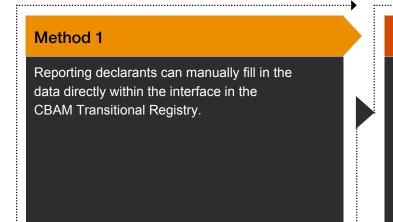
### F. Where should I submit my report?

The European Commission has developed a standardised and secured electronic database called the CBAM Transitional Registry, which is designed to collect and manage reporting during the transitional period, which can be accessed to submit reports.

### G. How should I fill in the data in the CBAM Transitional Registry?

There are two ways to fill in the data in the CBAM Transitional Registry:

### Figure 7: Reporting in the CBAM Transitional Registry



### Method 2

Alternatively, reporting declarants can use an XML structure to upload CBAM quarterly reports. Once an XML file is uploaded successfully, a new draft quarterly report will be created and can be submitted via the CBAM Registry user interface. A supporting XLS file can be used to fill in the quarterly report using XML.

### H. Is it mandatory to use the communication template Excel file?

The use of the communication template is recommended but not mandatory. This template helps operators calculate the embedded emissions in CBAM goods according to the methodology specified in Implementing Regulation (EU) 2023/1773, ensuring all relevant data such as source streams, emission sources, electricity consumption and relevant precursors is included in the calculation.<sup>18</sup>

16 https://eur-lex.europa.eu/legal-content/EN/

TXT/?toc=OJ%3AL%3A2023%3A130%3ATOC&uri=uriserv%3AOJ.L\_.2023.130.01.0052.01.ENG

17 Ibid.

18 Ibid.

07.

## How will the carbon price paid in a third country be discounted from the CBAM?



CBAM declarants have the option to reduce the number of CBAM certificates\* they need to submit by considering the carbon price already paid in the originating country for the stated embedded emissions of CBAM goods.<sup>19</sup> The term 'carbon price' in the CBAM regulation covers any payments made in a third country through carbon emissions reduction programmes such as taxes, charges, fees or emission allowances within greenhouse gas emissions trading systems. This reduction is applicable to authentic carbon prices paid under a greenhouse gas emissions trading system in the originating country. In cases where an authorised CBAM declarant receives any refunds or compensations, these will be considered when determining the carbon price to be paid as taxes in the CBAM. By 2025, before the end of the transition period, the Commission will introduce an implementing act explaining how to calculate the actual carbon price paid in the originating country, potentially laying down specifications on how the same is to be accounted for vis-à-vis CBAM liability. (Article 9)<sup>20</sup>

The negotiations between the Indian exporter and EU importer play a crucial role in determining who bears the burden of the CBAM certificate related costs, as the EU importer could be expected to attempt to pass on this burden to the Indian exporter.

\*Note: EU importers of goods covered by the CBAM will register with national authorities where they can also buy CBAM certificates. The price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in EUR/tonne of CO2 emitted.<sup>21</sup>

- 20 https://eur-lex.europa.eu/legal-content/EN/ TXT/?toc=OJ%3AL%3A2023%3A130%3ATOC&uri=uriserv%3AOJ.L\_.2023.130.01.0052.01.ENG
- 21 https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en

<sup>19</sup> https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\_en#:~:text=CBAM%20definitive%20 regime%20(from%202026),-EU%20importers%20of&text=EU%20importers%20will%20declare%20the,corresponding%20 amount%20can%20be%20deducted.

# What are the areas of concern for companies and suppliers?

### Figure 8: Critical challenges for companies and suppliers

Companies are under increasing pressure to...

04

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## 02

Establish

frameworks for

carbon trading

transactions to

navigate both jurisdictional

difference and

**CBAM** regulations

01

Understand the relevant tax and legal implications, such as carbon taxes, transfer pricing implications, VAT treatment, legal documentation for trading

## 03

Adhere to EU climate policies and trade laws, including CBAM regulations to avoid legal repercussions

Ensure alignment with emission factor and emission calculation methodologies by the EU for accuracy of emissions reporting

## 05

ò

Deal with the complexity of tracking and verifying emissions data across diverse global supply chains 09.

### How should companies plan the steps ahead?<sup>22</sup>

### Figure 9: Next steps – planning for progress with the CBAM

Companies that export CBAM goods to the EU will likely be required to consider and respond to the following matters in the long run:

### 01

### **CBAM** handbook

Determine the relevant information collation and compliance requirements for CBAM reporting requirements.

### 02

### **CBAM** organisation

Organise and determine the internal process and policy necessary for handling CBAM matters; consider establishing a CBAM organisation.

### 03

### Emission reduction roadmap

Consider various methods for reducing embedded emissions to eventually reduce the levy incidence (if any).

#### Examples of activity for CBAM handling















Establish CBAM handbook	Data collection and emission calculation	Assess applicability and type of calculations	Communicate	Record-keeping and monitoring
Develop a comprehensive handbook outlining the processes and procedures for complying with CBAM regulations. This handbook should detail the roles and responsibilities of personnel involved in CBAM compliance, including gatekeeping, data collection, calculations, communication with importers, record-keeping, and monitoring of regulatory updates.	Initiate the collection of relevant carbon data from various stages of their production or supply chain. Use this data to calculate embedded emissions associated with the production of their goods.	Identify the types of calculations required for CBAM compliance, including steps involved in calculating embedded emissions, which emissions factors and methodologies are appropriate for their industry and product, deadline for default emissions that companies need to be cautious about, etc.	Assess the requirements and provide carbon data to CBAM importers and communicate as needed.	Maintain detailed records of all documents and data related to CBAM compliance. As we are in the transitory phase of the CBAM, it is essential to update the CBAM handbook and internal procedures based on new requirements and regulatory updates.

22 https://www.pwc.in/assets/pdfs/tax-knowledge-hub/carbon-border-mechanism-cbam-adjustment.pdf

## How can PwC help?



1. Status quo

Gap assessment: We evaluate which of your products are subject to the EU CBAM and their source of origin. Our team looks into the quantities of these imported products, the key players in your supply chain and pinpoints your suppliers of CBAM-related goods.



2. Ongoing coaching

Building capacity for CBAM: We

provide workshops and training sessions designed to improve the abilities of companies in effectively meeting ongoing and upcoming CBAM regulations, as well as upgrading the technical know-how of employees in determining the emissions required for reporting. We delve into how CBAM works, as well as how your company can navigate various tax initiatives under the EU Green Deal.



3. Eco-friendly logistics

**Green supply chain:** We enhance the sustainability of your supply chain by assessing and optimising its carbon emissions. We design strategies for reducing Scope 3 emissions and engaging with stakeholders in your supply chain.



4. Ready for customs

Customs compliance and supply chain optimisation support: We

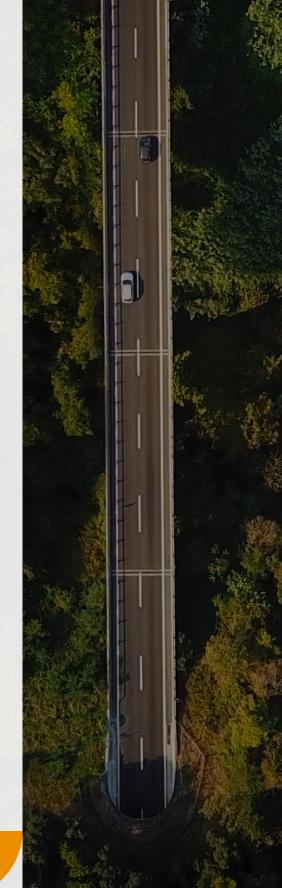
can support you along the entire journey of making your goods export ready in terms of customs compliances. This support could enable Indian exporters to respond to queries raised by EU importers on customs and trade matters as well as those related to CBAM reporting related information sharing. In addition, we can also support you in assessing the impact of CBAM on your current exports as well as future exports aligned with the CBAM timelines.



5. Road to net zero

#### Decarbonisation strategy development: We offer

assistance at every stage of your decarbonisation process, from measuring emissions to putting plans into action, monitoring progress and reporting results. Our solutions encompass activities such as sourcing of green energy, implementing energy-saving initiatives, and implementing supply chain decarbonisation strategies.



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