

Ensuring a fair and clear application of the Carbon Border Adjustment Mechanism (CBAM) to electricity imports

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Energy Traders Europe support the overall objective of CBAM as a tool to put a fair price on the carbon emitted during the production of carbon-intensive goods imported into the EU, to avoid carbon leakage, and to encourage cleaner industrial production in non-EU countries.

At the same time, the inclusion of electricity imports within the scope of CBAM should respect the principle of proportionality, ensuring that no excessive costs or administrative burdens are imposed and that no disproportionate carbon price is applied.

Regulation (EU) 2023/956 attempted to account for the specific characteristics of electricity by introducing tailored provisions for electricity imports. However, **several implementation challenges remain unaddressed** with less than 6 months until the start of the definitive period.

Consequently, the methodologies and criteria outlined in the Regulation require improvement, including more accurate calculation of the carbon intensity of third countries' electricity mix and clearer rules for importers to prove the carbon-free origin of electricity imports.

Ensuring that CBAM is fit for purpose for electricity will lead to more efficient use of cross-border interconnections between the EU and third countries, prevent renewable curtailments, and promote their uptake in third countries, ultimately reducing costs for EU consumers.

Implementing and preserving market coupling should remain a priority – alongside linkage with the EU Emission Trading System - at a time when further energy market integration is needed to enhance flexibility and security of supply (see [ACER report on Key developments in European electricity and gas markets](#), March 2025). Furthermore, **a temporary CBAM application to electricity imports should be avoided** if a third country shows concrete efforts and progress towards market coupling.

Finally, we believe that **the definitive period of CBAM application to electricity imports should not start without a thorough impact assessment and without a clear legislative framework**.

The following sections provide our assessment of CBAM application to electricity imports, and it is structured in three different parts:

- i) Peculiarities of electricity as CBAM commodity
- ii) Applicability of the criteria for utilisation of actual values
- iii) Proposals for improvement

I. Peculiarities of electricity as CBAM commodity

Electricity differs fundamentally from other CBAM-covered goods (aluminium, fertilizers, cement, iron, and steel) and the application of CBAM to electricity imports from third countries requires taking a significant number of assumptions:

1. Tracking and reporting of electricity

- a. **Electricity flows cannot be physically traced** – Once produced and injected into the grid, electrons become indistinguishable from the other electrons on the grid, whichever their production sources (e.g. an imported iron beam arriving in the EU on a ship can be distinguished from another iron beam on the same ship)
- b. **Electricity can, in theory, be commercially traced** – Regulation 2023/956 attempts to establish a paper trail between a producer and an importer in order to enable the demonstration of the carbon content of the imports. In practice, the cumulative conditions outlined in Annex IV(5) create significant challenges for both CBAM declarants and non-EU TSOs which remain unaddressed (see Section II)
- c. **An electricity trade does not necessarily correspond to an actual electricity flow** - Physical imports are not just determined by the commercial positions of a single market participant, but results from the interactions of multiple market participants (e.g. netting of import and export) and TSOs operational decisions (e.g. re-dispatching and countertrading)
- d. **Import as per energy regulation does not necessarily correspond to import in customs regulation** - Differences between the CBAM and customs regulations should be addressed in order to align key terms and definitions and have a unified approach (e.g. definition of import, importer, treatment of transit)

2. Carbon price applied to electricity imports

- a. **The carbon intensity fluctuates depending on the electricity generation mix** – Implementing Regulation 2023/1773 (Annex III, Chapter D, page 77) currently applies a fixed default value based on previous five years' average to calculate the carbon content of electricity imports. This methodology does not reflect the actual carbon intensity of the generation mix of a third country at the specific moment when the imports took place (e.g. a carbon price would still be applied on electricity imports even if, during a specific hour, the generation mix of a third country was 100% renewable)

- b. **The whole generation mix should be considered for the default values –**
The Regulation currently disregards renewables production and consider only fossil fuels generation (CO₂ emission factor) to calculate the carbon content of the imported electricity from a third country, hence overestimating the actual emissions. As third countries increase their renewable capacity, imports are driven by excess renewable energy rather than fossil fuels generation.
- c. **Carbon price already paid cannot be demonstrated once electricity is traded –** When electricity is traded on power exchange of a third country with a carbon pricing mechanism, the carbon costs are internalized in the price of electricity. Due to the anonymity of the trades, it is not possible to track the "carbon-paid" status of that electricity once it enters the exchange, and it is eventually exported. Article 9(3)(a) of the amending Regulation (EU) 2023/956 addresses this issue via the publication of an annual average of the "effective carbon price paid" in third countries to be used for deduction, hence avoiding double carbon pricing

3. Market coupling

- a. **Importers cannot be identified under market coupling** - Market coupling replaces the explicit allocation of cross-border capacity with implicit allocation, optimizing cross-border flows and maximizing social welfare by utilising available capacity more efficiently. However, under implicit allocation, cross-border capacity is auctioned together with the electricity on power exchanges, where trades are conducted anonymously. Cross-border flows are implicitly determined by the market algorithm without assigning a specific cross-border trade to a particular market participant.
- b. **CBAM should not become a deterrent for market coupling** - Market-coupled non-EU countries can be temporarily exempted from the application of CBAM to electricity imports, but they have to comply with additional requirements under Article 2(7) by 2030, among which is the adoption of an EU ETS equivalent carbon pricing mechanism. It is difficult to foresee for market participants whether third countries would manage to comply with all the conditions set in the Regulation to maintain their exemption beyond 2030, or to even obtain it in the first place

II. Applicability of the cumulative criteria for utilisation of actual values

Annex IV(5) of Regulation 2023/956 sets criteria to enable the demonstration by importers of the carbon-free content of electricity imports. However, such criteria conflate physical (electricity generation, grid congestion) and commercial (Power Purchase Agreement, cross-border capacity nomination) aspects of the transfer of electricity, creating uncertainty over CBAM compliance, respectively:

- a. Power Purchase Agreement** – CBAM regulation seems to restrict the definition of Power Purchase Agreements (PPAs), de facto excluding utility PPAs where intermediary actors would contract renewable energy volumes with producers and then sell the electricity to industrial or other consumers. Intermediation is required for absorbing counterparty credit risk and also providing essential balancing services. Uncertainty over the definition of PPAs alongside the application of the “no congestion criteria” (see point below) creates potential barriers for signing new cross-border PPAs
- b. No congestion criteria** - The interpretation of “congestion” under CBAM regulation requires further clarification in accordance with the existing technical and legal definitions (see [Study on technical and legal definitions of congestions in electricity networks](#), November 2023). In principle, congestion should not be interpreted as a situation in which electricity cannot flow directly from supplier to recipient. In fact, electricity flows cannot be physically traced with or without the occurrence of congestion. Furthermore, congestion cannot be predicted or forecasted, nor congestion data are made available by non-EU TSOs
- c. Limit of 550 gCO₂/kWh** – No specific comment
- d. Hourly capacity nomination** – Even though they can be used as supporting material for the utilisation of actual values, capacity nominations (pre-netted positions) do not provide an accurate representation of the electricity that is physically imported into the EU and therefore should not be used as a basis for calculating imports and therefore determining CBAM payments
- e. External verification** – Electricity importers are subject to additional reporting requirements with the submission of monthly interim report to the verifiers

III. Proposals for improvement of CBAM application to electricity imports

Considering the above, we suggest the following adjustments to the Regulation or request clarification from the European Commission:

1. Default emission factors for electricity imports

Default emission factors should reflect the actual carbon intensity of the electricity mix imported from of a third country as close as possible to real-time.

Therefore, the **hourly average carbon intensity of a third country electricity mix** should be applied as default values for electricity imports, taking into account all generation technologies and not just fossil fuels (CO₂ emission rate).

This can be calculated by calculating the sum of the generation mix of a third country in a specific hour multiplied by standardised emission intensity rates of each generation technology (to be published by the Commission) divided again by the generation mix of a third country in the specific hour:

$$EF_{c,h} = \frac{\sum E_{el,i} * EF_i}{\sum E_{el,i}} \text{ with } c = \text{country}, h = \text{hour}, i = \text{technology}$$

- $EF_{c,h}$ = Default emission factor per country per hour (t CO₂/MWh)
- $E_{el,i}$ = Electricity produced (MWh)
- EF_i = Emission Factor by technology to be published by the Commission (t CO₂/MWh)

A harmonized and centralised source of information (e.g. generation mix published on the [ENTSO-E transparency platform](#)) should be recognised as a valid source for computing emission factors in order to ensure a level playing field among CBAM declarants and reduce the administrative burden for non-EU entities.

If information on some third countries is not available via a centralised source, then the data of the generation mix published by the non-EU TSOs should be considered as the basis for CBAM reports.

2. Volumes to be reported

For a better approximation of electricity imports, imports should be reported – and accounted – based on the **final confirmed scheduled quantities on the hour of delivery**. Therefore, data and final schedules communicated from market participants to respective TSOs should be recognized as the basis for CBAM reports.

3. Carbon price

The **daily average price** should replace the yearly average price proposed by the European Commission. Additionally, instead of directly determining and publishing the methodology to calculate the default price, we recommend the European Commission to provide the **source from which the average price in a 3rd country is** determined (e.g. daily settlement price of UK ETS as published by ICE for UK plus the CO2 tax).

Furthermore, we encourage an earlier publication of the Delegated Act laying out the methodologies for calculating third country carbon pricing, to give importers much needed clarity of their expected obligation costs for forward planning ahead of 2026.

4. CBAM compliant PPA

Given the absence of a framework for the exchange and recognition of "green certificates" (e.g. Guarantees of Origins) between the EU and third countries, alternative options must be provided.

Restricting the definition of eligible PPAs under CBAM would give fewer options to demonstrate low-carbon content of electricity, hence reducing flexibility for importers and producers in sourcing electricity and creating additional barriers for cross-border trading.

As long as the importer can prove on hourly basis that the power plant(s) associated to the cross-border PPA is producing electricity matches the volumes to be exported, and that there is no double-counting of the electricity produced, all types of agreements existing in third countries should be considered.

5. Congestion criteria

Once the condition under Annex IV(5d) of Regulation 2023/956 is satisfied and it is guaranteed there is no double counting, **the "no congestion" rule becomes redundant.**

6. Implicit allocation

Third countries with **cross-border implicit allocation for day-ahead and intra-day should be exempted** from the application of CBAM to electricity imports. This is the case of Northern Ireland, which is also part of the Single Electricity Market and of the EU ETS.

III.bis Proposals for CBAM operational improvements

The proposed operational changes are intended to make the CBAM registry easier and less costly for obligated parties:

1. Third Party CBAM Delegations

We welcome the addition of a "CBAM Service Provider" in the omnibus, enabling a third party to submit CBAM declarations. We suggest extending this role to include the *option* to delegate CBAM certificates purchasing, surrendering, repurchasing and / or reporting, while ensuring the responsibility remains with the CBAM declarant for regulatory oversight.

This reduces compliance complexities and provides a simplified approach for all obligations for CBAM declarants within a corporate group – hence, reducing the risk of under- or over-purchasing of certificates.

2. Certificate Repurchasing

We await the Delegated Act providing further details on the process of certificate repurchasing. However, we propose that the CBAM declarant should be able to elect which certificates are sold back to the Commission.

While the move to limit repurchasing to up to 50% of the embedded emissions in account is a step towards achieving equivalence, this requirement still creates an imbalance in fairness compared to the EU industry, who can optimise their EU ETS purchasing according to price developments.

3. Transferring Unused Certificates

Currently, all certificates are cancelled two years after acquisition, with no compensation. We propose an additional clause be implemented in order to allow the transfer of any unused certificates within a corporate group to another internal obligated entity.

This reduces the administrative burden on larger corporations in managing their certificate purchasing, enabling efficient use of CBAM certificates and ensuring fair costs are incurred by CBAM declarants.

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