

SMART ENERGY

Understanding CBAM and Its Market Impact

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Luka Jazbec Vice Chair of the Board Energy Traders Europe



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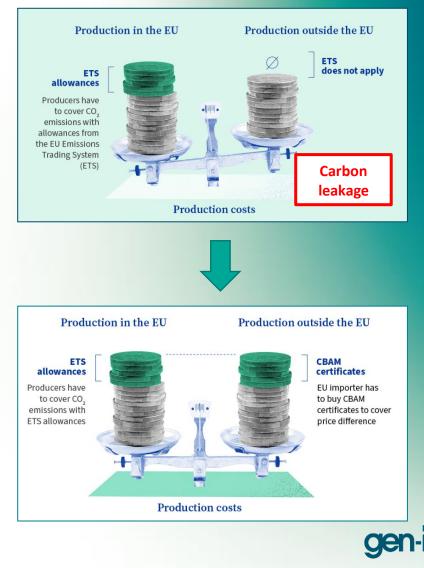


I. CBAM Essentials

- Carbon Border Adjustment Mechanism (CBAM) is introduced as an <u>additional</u> <u>tax for importing goods to EU, based on the total emissions embedded in the</u> <u>imported electricity.</u>
- CBAM Transitional phase: Quarterly reporting since October 2023.
- Financial obligations begin in 2026, with adjustments payable from 2027 onward based on reported emissions and certificate prices.
- Price of CBAM certificates will mirror the EU ETS, i.e. weekly average auction price of EU ETS allowances expressed in €/ton of CO2 emitted. The Commission shall calculate and publish the price of CBAM certificates.
- CBAM Certificates are not "tradable"
- Key differences of electricity from other sectors
 - > Intangibility and real-time trading
 - ➢ Border Crossings ≠ Trade Transactions
 - High share of spot market trading (anonymized and exchange-based)

COVERED SECTORS



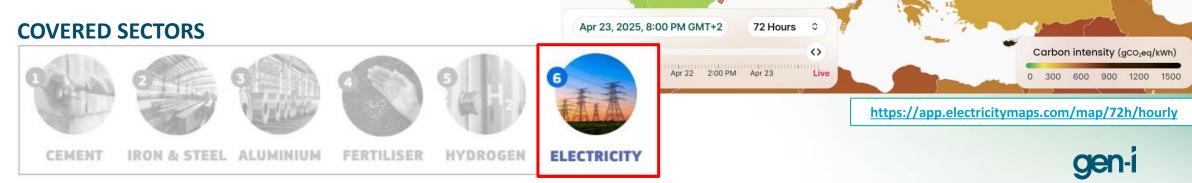


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Myth #1: PPAs are exempt

CBAM Annex IV

PPAs with producers where emissions are below 550g CO2/kWh **can** use actual embedded emissions...





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|---------|---------|--------|------|
|---------|---------|--------|------|

CBAM Annex IV

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...if they fulfil several criteria, some of which are not clear nor under the control of market participants

Example: "if it can be demonstrated (...) there was no physical network congestion"



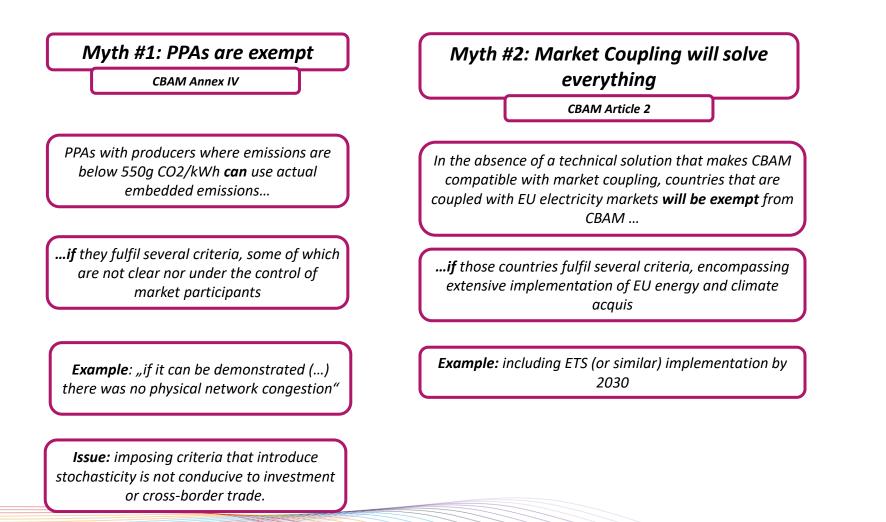


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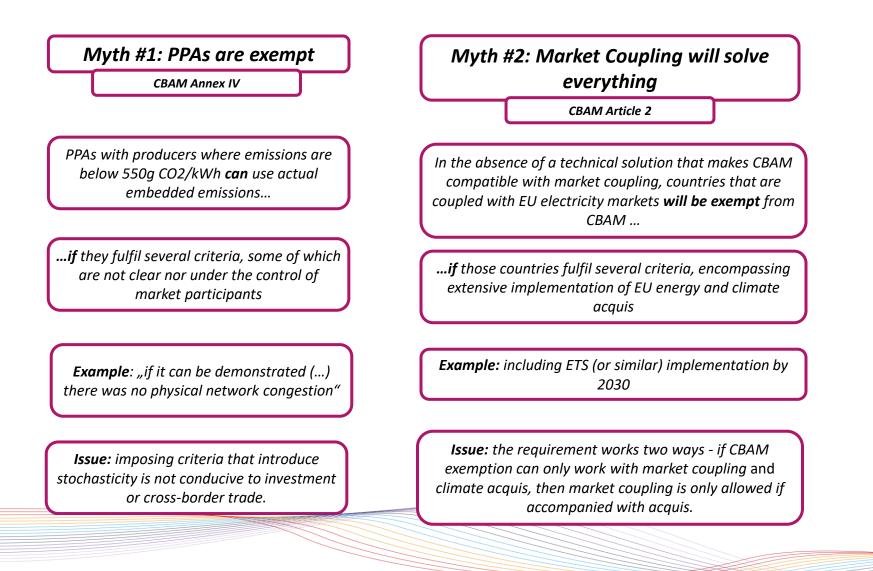


| Myth #1: PPAs are exempt CBAM Annex IV | Myth #2: Market Coupling will solve everything |
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| | CBAM Article 2 |
| PPAs with producers where emissions are below 550g CO2/kWh can use actual embedded emissions | In the absence of a technical solution that makes CBAN compatible with market coupling, countries that are coupled with EU electricity markets will be exempt from CBAM |
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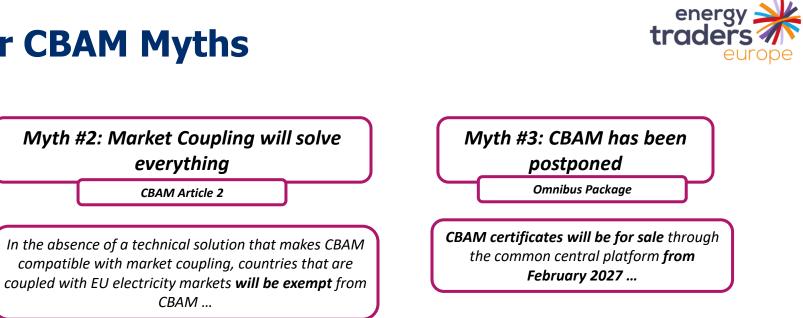




Montel CSEE Energy Day Budapest, 24.04.2025



energy traders



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PPAs with producers where emissions are

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Issue: imposing criteria that introduce stochasticity is not conducive to investment or cross-border trade.

Example: including ETS (or similar) implementation by 2030

Myth #2: Market Coupling will solve everything

CBAM Article 2

compatible with market coupling, countries that are

CBAM ...

...if those countries fulfil several criteria, encompassing

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acquis

Issue: the requirement works two ways - if CBAM exemption can only work with market coupling and climate acquis, then market coupling is only allowed if accompanied with acquis.



| Myth #1: PPAs are exempt CBAM Annex IV | Myth #2: Market Coupling will solve everything | Myth #3: CBAM has been postponed |
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| Example : "if it can be demonstrated () there was no physical network congestion" | Example: including ETS (or similar) implementation by 2030 | Every MWh imported into the EU as of 01.01.2026 is still subject to payment o | |
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| are not clear nor under the cor market participants Barbon Content of Content | way: CBAM remains "as is", remains unclarifi of electricity, will enter its definitive period (p start) on 01.01.2026, and will not incentivise enewables investments or cross-border flows. | ex not mean that the payment starts in 2027, but rather that ment thereof is postponed. | | |
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III. Immediate Market Impacts of CBAM

- Regulatory Uncertainty = Market Uncertainty
 - Uncertainty around CBAM treatment of OTC and exchange-based electricity trades
 - Hedging against potential CBAM liabilities as of 2026
- Perceived CBAM cost shaping market behavior
- Contractual shifts underway demand for emission-related clauses in contracts
- "CBAM-Compliant" PPAs emerging are they truly effective?

III. Immediate Market Impacts of CBAM CBAM Cost estimates for 2024-2025

Sensitivity of CBAM Cost to EUA prices

| Country | Emission Factor (t CO2/MWh) Source: Default values in CBAM registry | Average EU ETS Price for Q1-24 (EUR/tCO2) | Average EU ETS Price for Q2-24 (EUR/tCO2) | Average EU ETS Price for Q3-24 (EUR/tCO2) | Average EU ETS Price for Q4-24 (EUR/tCO2) | Average EU ETS Price for Q1-25 (EUR/tCO2) | Estimated CBAM tax due if paid for 2025 (EUR/MWh) |
|-----------------|---|---|---|---|---|---|--|
| Albania | 0.00 | | | | | | 0.00 |
| Bosnia and | | - | | | | | |
| Herzegovinia | 1.14 | | | | | | 83.66 |
| Kosovo | 1.06 | | | | | | 78.07 |
| North Macedonia | 0.93 | | | | | | 68.13 |
| Montenegro | 0.97 | 59.60 | 67.94 | 66.93 | 65.53 | 73.45 | 71.40 |
| Serbia | 1.04 | - | | | | | 76.43 |
| Ukraine | 0.96 | | | | | | 70.65 |
| Moldova | 0.52 | | | | | | 38.25 |
| Turkey | 0.71 | | | | | | 51.83 |

estimating future CBAM costs is highly complex...







- ★ Persistent lack of clarity regarding the practical applicability of CBAM to electricity imports → significant advocacy efforts undertaken and currently ongoing
- ★ Expertise from members and consensus positions by members → dedicated working groups monitoring ETS and CBAM implementation at EU level & national task forces monitoring local-level implementation
- Energy Traders Europe as a Member of European Commission Informal Expert Group on CBAM

MEMO



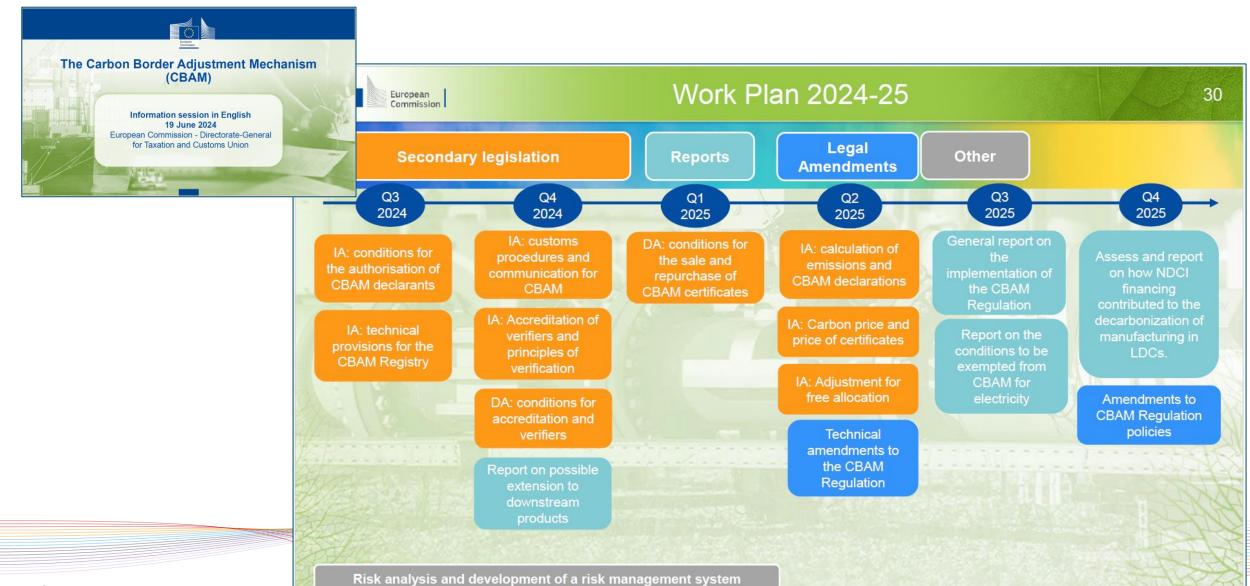
Energy Traders Europe memo on CBAM electricity

Brussels, 16 July 2024

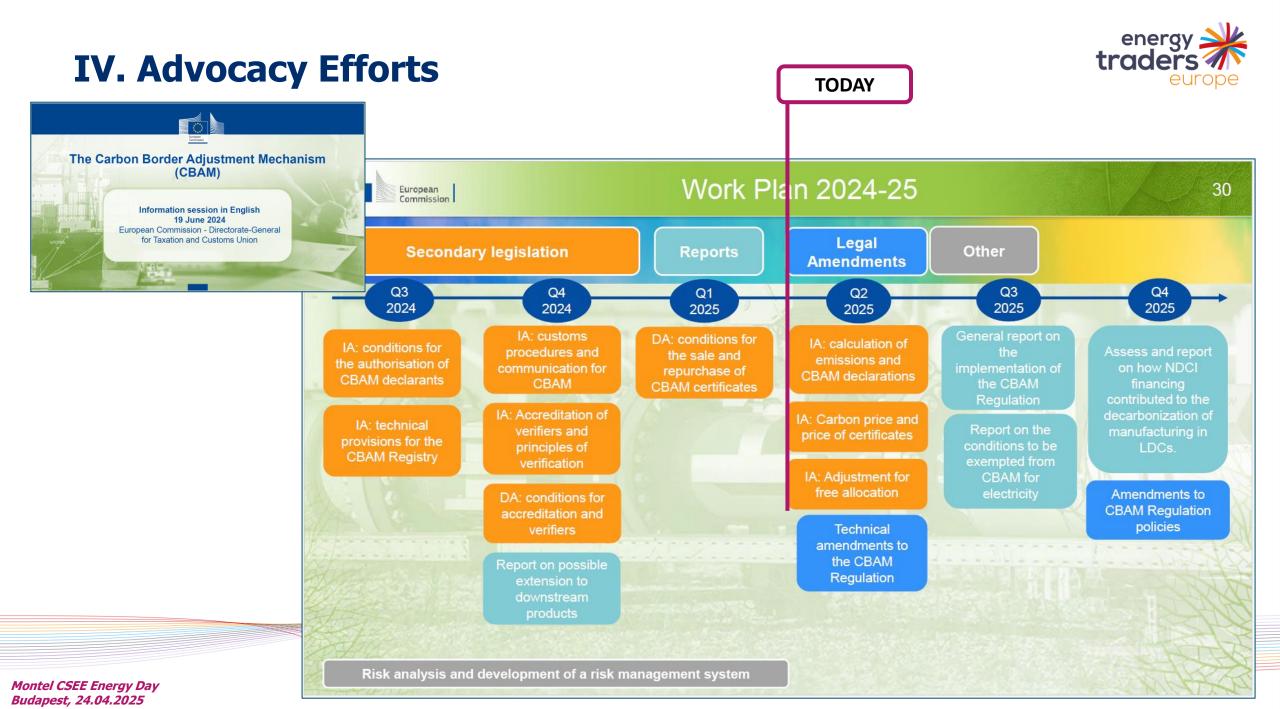
We bring to the attention of the European Commission critical aspects concerning the conditions for applying actual embedded (direct and indirect) emissions on "electricity", more specifically:

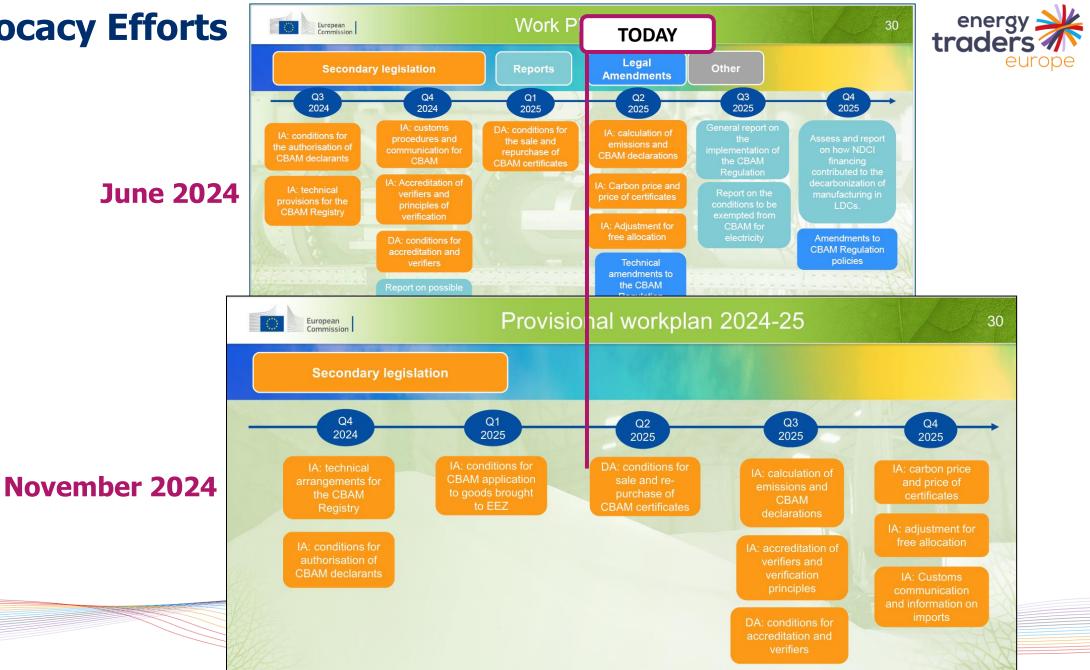
- 1. Definition of Power Purchase Agreement (PPA)
- 2. Application of congestion and firm nomination criteria
- 3. Reporting of cross-border flows (including transit)









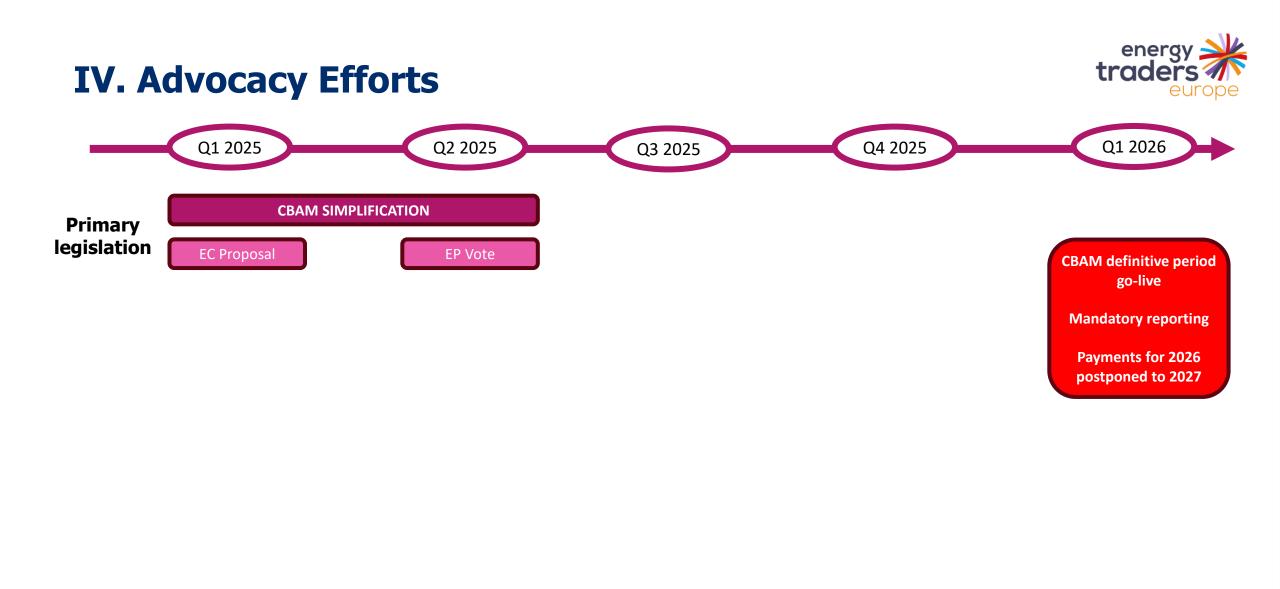


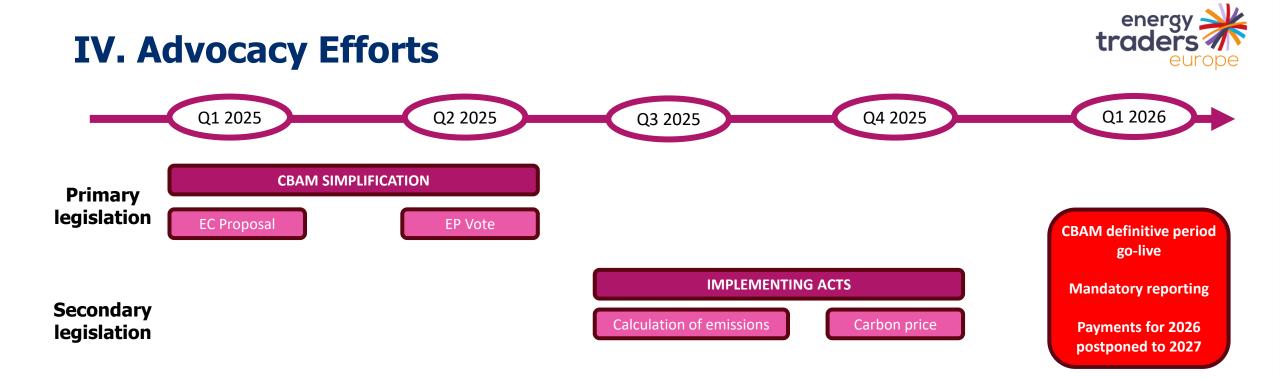




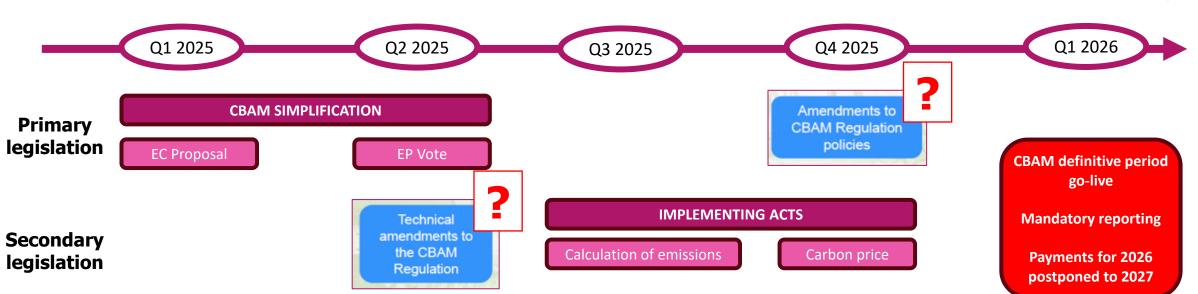
Mandatory reporting

Payments for 2026 postponed to 2027

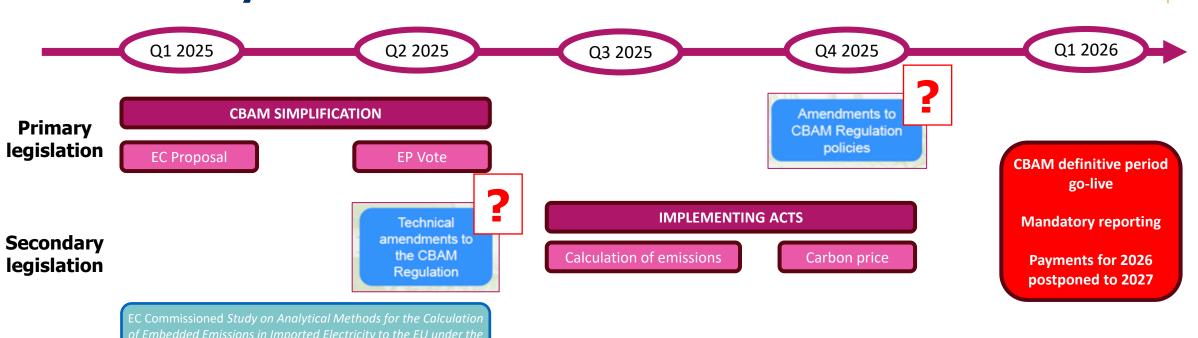




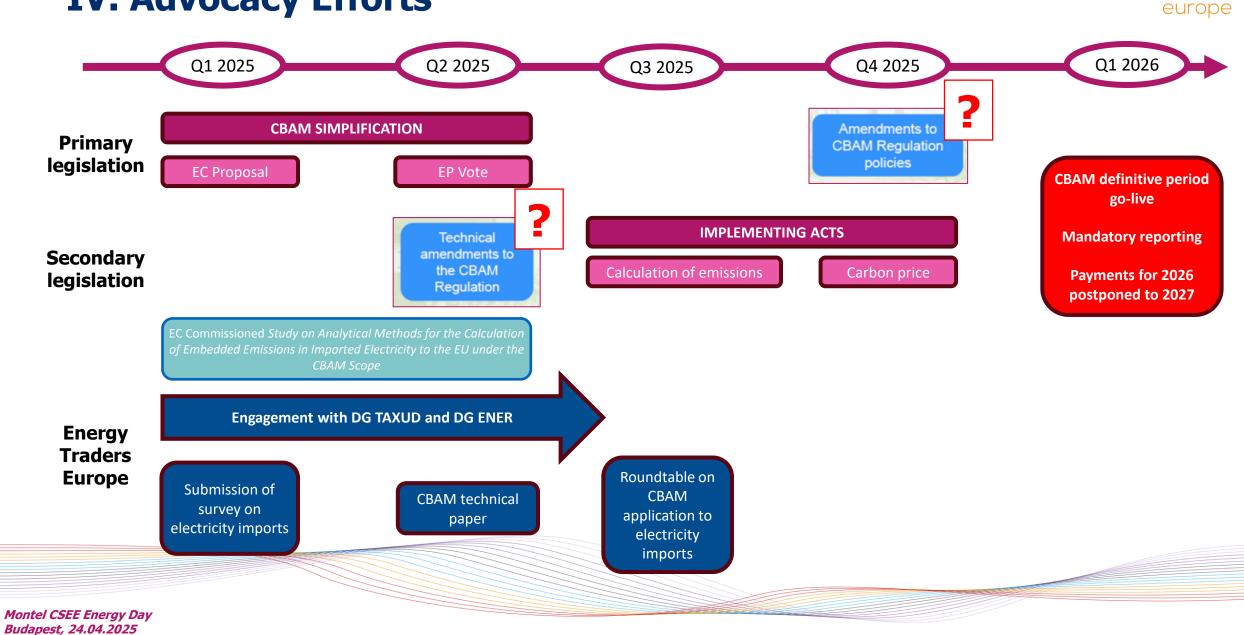




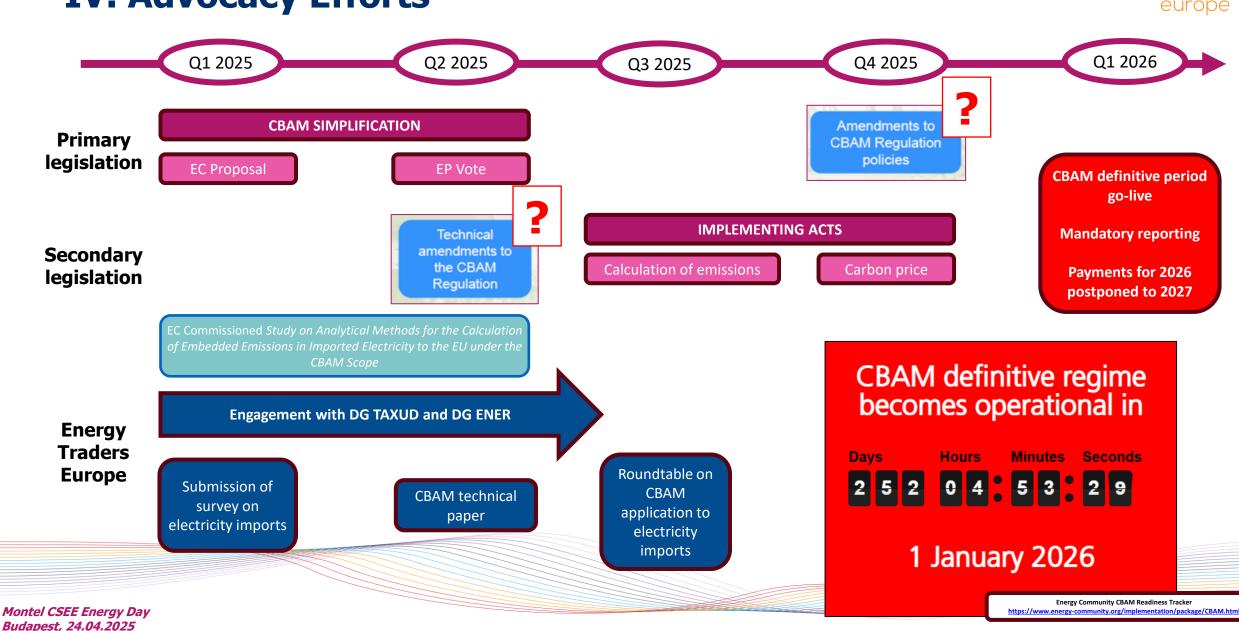




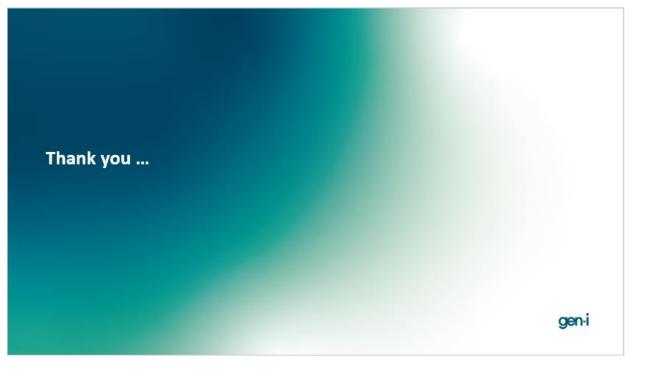














... for your attention!



