



Low Carbon Ukraine

Policy advice on low-carbon policies for Ukraine

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Exemption of electricity exports from EU-CBAM Conditions for exemption and assessment for Ukraine

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Implemented by



1. Berlin Economics and Low Carbon Ukraine



- Advising governments of transition countries in Eastern Europe, Western Balkans, Caucasus and Central Asia on economic policy reform and sustainable development
- Strong in-house expertise in economic, energy and climate policy supported by a wide network of external experts

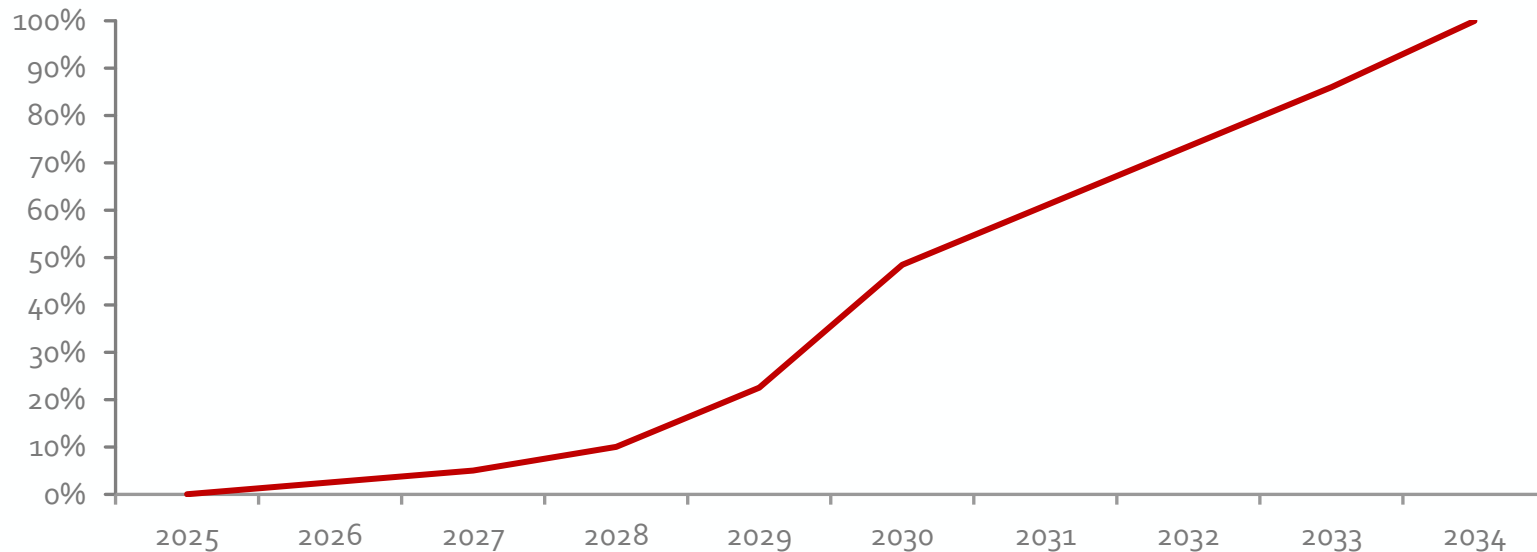


- Supporting the Ukrainian government with demand-driven analysis and policy proposals to transition towards a low-carbon economy since 2018
- Part of the International Climate Initiative and supported by German Federal Ministry for Economic Affairs and Climate Action (BMWK)
- Since 2022, additional focus on green reconstruction of Ukraine and creating a more resilient energy system

2. Introduction – CBAM

- In October 2023, the EU set up its **Carbon Border Adjustment Mechanism (CBAM)**
 - CBAM covers imports of cement, iron & steel, aluminium, fertilizers, **electricity**, hydrogen
 - Excl. electricity, 20% of Ukraine's export to EU would fall under CBAM (2021)
 - From 2026, importers will have to **purchase CBAM allowances**, the price of which will be determined by an **increasing proportion of EU-ETS allowance price** and will approach the full price of EU-ETS allowances by 2034.

Phase-in trajectory of EU-CBAM (% of EU-ETS price level)



Source: Regulation (EU) 2023/956 of the EU Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism

3. Implications in case of non-compliance: **CBAM payments**

CBAM regulation provides **two options** for the application of CBAM to electricity imports into EU:

1. **Default value:** Electricity exports from Ukraine covered by CBAM would be priced based on the weighted average emissions intensity of **fossil-based** (coal- and gas-fired) electricity generation inside Ukraine.
 - No matter the actual emissions intensity (incl. RES or nuclear).
 - Justification is that coal- and gas-fired generation is price setting source in most hours.
 - Would make electricity from Ukraine less competitive due to high prices.
2. **Specific emissions intensity:** Zero for RES/Nuclear, but many conditions apply:
 - **Direct power purchase agreement (PPA)**
 - **Proof that there was no physical congestion**
 - **Nomination for allocated cross-border capacity**
 - **All conditions verified by accredited verifier.**

3. Implications in case of non-compliance: **market coupling**

- Electricity is mostly traded on dedicated markets organised through **anonymous auctions** (power exchanges).
- With **electricity market coupling**, this anonymous market becomes a cross-border market.
- This makes it difficult or even impossible to track exporters and importers and to assign CBAM payment obligations.
- **CBAM is potentially incompatible with electricity market coupling.**
 - Reason why European Commission provides the exemption option for ELC
- **Electricity market coupling could be halted until price parity with the EU-ETS is achieved.**
 - Unless exemption for electricity trade is obtained.
- **Potential roll-back of electricity market coupling** in case the two markets are already coupled by 2025.
- Failure to comply with the CBAM exemption **could delay Ukraine's EU accession process in the area of energy market integration.**

4. CBAM exemption criteria (Article 2.7 of CBAM Regulation)

Conditions (Article 2.7)	Fulfilled	Status Quo	Further Steps
a) Agreement that sets out an obligation to apply Union law	Fulfilled	As a contracting partner to the Energy Community Treaty this condition is already fulfilled	Energy Community treaty includes application of EU acquis on energy, RES, environment and competition
b) Domestic legislation in line with EU acquis	Not Fulfilled	Laws and draft laws are not fully in line with EU acquis	Comments on amendments of Energy Community Secretariat should be included.
c) Implementation Roadmap of exemption criteria	(Partly) Fulfilled	Roadmap for implementation of ETS under development	Submit Roadmap containing timetable for adoption of CBAM exemption measures
d) Commitment to climate neutrality by 2050	Not Fulfilled	Current NDC and draft NECP not in line with 2050 Net Zero target	Integrate 2050 climate neutrality objective into NECP and upcoming long-term low carbon development strategy (LEDS)
e) Implementation of ETS for electricity	Not Fulfilled	Insufficient carbon tax of 1€/tCO ₂ Climate framework legislation in development	Establishing domestic ETS with price convergence to EU-ETS price until 2030
f) Implementation of efficient system to prevent indirect import of electricity	Not Fulfilled	Not in place	Implementation of domestic CBAM or joint ETS with Moldova

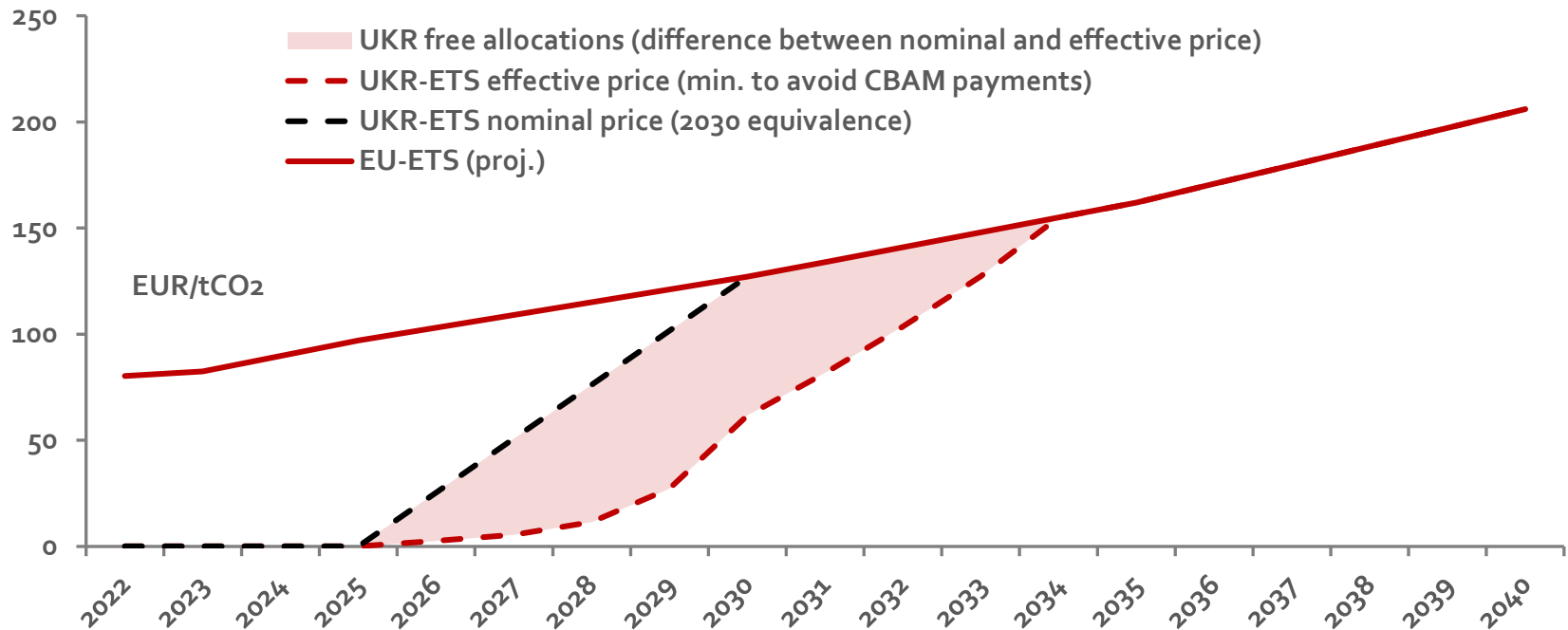
5. Timeline to implement exemption conditions



Source: Own illustration based on Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism.

- By 1 July 2025, Ukraine should include a detailed roadmap for achieving the conditions, including:
 - 2050 economy-wide climate neutrality target
 - Climate framework legislation aligned with EU law
 - Updating long-term low greenhouse gas emissions development strategy
 - Implementing a Ukrainian ETS (reaching price equivalence with EU-ETS by 2030)

6. Potential price path to obtain CBAM exemption for electricity



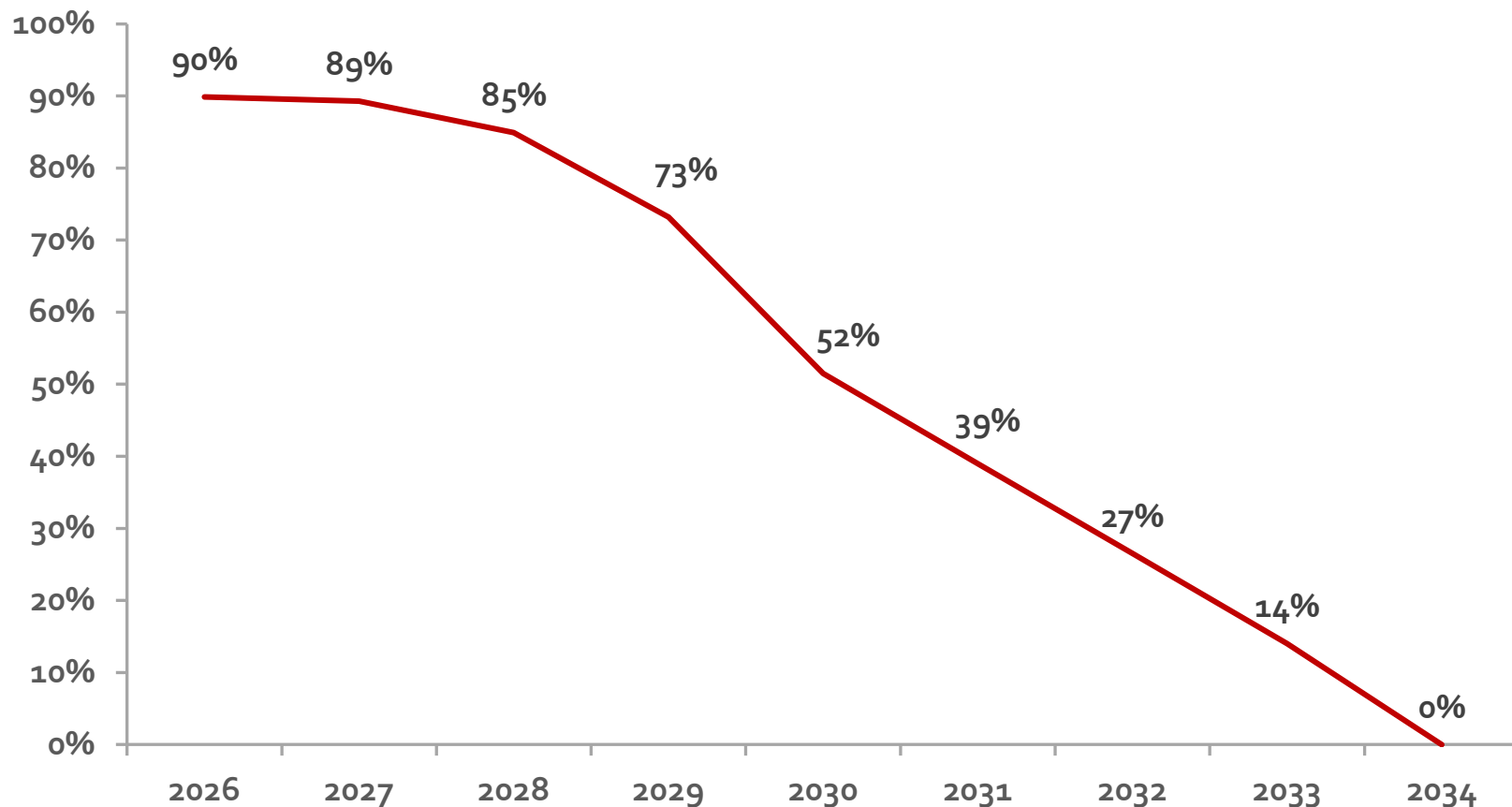
Possible price trajectory and level of free allocations to obtain CBAM exemption for electricity

Sources: Pahle et al. (2023), CBAM Regulation (Regulation (EU) 2023/956), own calculations

- Convergence with EU-ETS prices to avoid a carbon price shock at EU accession
- Nominal price convergence in 2030 (CBAM exemption condition, electricity sector)
- Temporary use of free allowances to mitigate impact on competitiveness
- Effective carbon price follows phase-in path of CBAM to avoid CBAM payments*

*in non-exempt sectors

7. Share of free allocations with proposed price path



Share of free allocations to achieve effective price convergence by 2034 under nominal price convergence by 2030 (scenario from previous slide)

Source: own calculations

8. Conclusions and recommendations

- Several key steps must be taken to secure exemption on electricity trade from CBAM
 - Full implementation of the latest **EU electricity market acquis**
 - Establishing an **ETS with pricing aligned to EU-ETS by 2030**
 - Set up a system to prevent indirect electricity imports from **non-compliant third countries** (Ukrainian CBAM or joint ETS with Moldova)
- **Challenging to meet exemption criteria**, especially to introduce ETS with price equivalence to EU-ETS by 2030
- However, **larger risk is rolling back electricity market coupling** in case of non-compliance
- It is advisable for Ukraine to pursue serious efforts to fulfil the exemption criteria, especially as **many conditions are also prerequisites for the EU accession process.**

Further readings...



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Tommaso Ficara
Pavel Bilek
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