

# The Impact of Carbon Border Adjustment Mechanism (CBAM) on the EU - Ukraine trade

Policy paper. Summary

November 2021



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For quotations: "The Impact of Carbon Border Adjustment Mechanism (CBAM) on the EU - Ukraine trade, Policy paper summary, Resource and Analysis Center "Society and Environment" (2021)".

This publication was produced with the support of the European Union and the International Renaissance Foundation within the framework of the EU4USociety project. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union and the International Renaissance Foundation.

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# Summary

## About this paper

This is a summary of the policy paper representing the results of the assessment of economic consequences from the carbon border adjustment mechanism (CBAM) for EU – Ukraine trade. This analysis is based on the draft regulation on CBAM as published on July 14th, 2021, by the European Commission.

CBAM is not a tax or duty, it is a complex legal mechanism regarding the import of carbon-intensive goods to the EU. It includes special procedures for importing such goods, declaring requirements, methods for estimating embedded emissions and verification, CBAM certificates life cycle (price setting, purchase, surrendering, and their final cancellation).

CBAM is expected to become fully operational since 2026. Meanwhile, all its administrative elements (registration of importers, declaring goods and embedded emissions, reporting) will be field-tested in the transitional period (2023 – 2025).

The research was carried out by the Resource & Analysis Center “Society and Environment” with the support of the European Union and International Renaissance Foundation under the grant component of the EU4Society project.

## Methodology

Assessment of the CBAM impact on the EU – Ukraine trade was done for each group of the regulated goods (CBAM-goods): electricity, fertilizers, cement, aluminium, and iron and steel.

The assessment was focused primarily on importing relevant goods from Ukraine to the EU. In turn, the financial impact assessment was performed by calculating the embedded greenhouse gas emissions and, accordingly, estimating the potential

costs for the purchase of greenhouse gas emissions certificates (CBAM certificates). The calculation of related emissions is the most difficult component of such an assessment, in particular given the lack of certain detailed provisions in the draft regulation and the lack of data on emissions from the production of relevant goods in Ukraine. In addition, we took into account the general economic and production context (cost of production, comparison with other countries, the share of goods in total exports and production of these goods in Ukraine, etc.).

# Main conclusions

## General conclusions

**Carbon border adjustment is one of the inevitable elements of the future carbon pricing system in the world, which will not be limited to trade with the EU.** Ukraine's mutually beneficial participation in international trade in the future will require consideration of «climate change» factors, including economic instruments related to climate change mitigation. In turn, strategic macroeconomic planning should also take into account those factors: both in the context of national carbon pricing and decarbonization of energy-intensive industries, and the development of new low- and carbon-free technologies and industries.

**The CBAM mechanism proposed by the European Commission will only intensify over time:** both in the direction of including indirect greenhouse gas emissions and in the direction of expanding the scope (list of regulated goods).

**CBAM will have a complex and unequal impact on the export of certain goods from Ukraine,** so the consequences of its implementation should not be assessed in a simplified way, as one common problem. Instead, the causes and extent of the consequences should be considered separately for each group of products or even individual products. This will make it possible to look for pragmatic and effective ways to eliminate or mitigate such consequences.

**Among CBAM-goods included in the draft EU regulation, the largest volumes of Ukraine's trade with the EU account for three of them: iron and steel, electricity and fertilizers.** Ukrainian ferrous metallurgy and the electric power industry are most affected by the introduction of CBAM. Therefore, these sectors need further and in-depth analysis of both the factors that shape such impacts and possible mechanisms to address and at least mitigate the effects of CBAM.

## Sectoral conclusions

**Iron and steel occupy the largest share in the structure of Ukrainian exports of CBAM-goods (85%), so the impact of CBAM on iron and steel will primarily determine its overall impact on Ukraine:**

- The total additional financial costs of Ukrainian exporters to bring cast iron and steel to the EU market after the introduction of CBAM may be at the level of 300-900 million euros per year with a supply of 5.5 million tons and an emissions price of 25-75 euros/ton.
- CBAM will not significantly change the competitive position of Ukrainian iron and steel producers compared to producers from Russia or China, but will significantly worsen it relative to producers from the EU and Turkey.
- Among the ferrous metallurgy goods exported from Ukraine to the EU, the largest relative influence of CBAM will be felt by those producers who supply cast iron and semi-finished products to the EU market.
- Ukrainian producers who produce steel by electric arc furnace technology can get certain advantages.
- To remain competitive in the EU market in the long run, Ukrainian ferrous metallurgy will need a complete technological restructuring, which will require the development of carbon-free electricity generation, in particular from renewable sources and carbon-free combustible gases (including hydrogen).

**Electricity is potentially the most vulnerable to CBAM:**

- If Ukraine's united electrical system is not synchronized with ENTSO-E and without the integration of the electricity markets of Ukraine and the EU, exports of electricity generated at the Burshtyn power plant will be virtually stopped in the amount of up to 6 billion kWh worth up to 300 million euros per year.
- Subject to synchronization with ENTSO-E and the integration of electricity markets, CBAM will de facto become a protective barrier to imports into the EU of electricity of Ukrainian origin purchased on the day-ahead market (DAM) and intraday market (IDM). In this scenario, CBAM will allow exporting to the EU of the electricity purchased under bilateral agreements directly from producers with relatively zero emissions or low-emission types of generation (renewables, nuclear and highly manoeuvrable high-efficiency generation based on natural gas).

**CBAM will have a relatively small impact on the cost of bringing to the EU market basic mineral fertilizers (ammonia, urea and ammonium nitrate) from Ukrainian producers compared to imports from, for example, Russia (which is the largest importer of these fertilizers to the EU).** The primary impact on the competitiveness of Ukrainian producers will be played by the access of their competitors (from Russia, North Africa, the

Middle East, etc.) to significantly cheaper natural gas. The production of ammonium nitrate will be affected the most, but such effects can be eliminated by technological and cost-effective solutions.

**The largest and most technological cement producers, under the condition of integral and synchronous implementation of the EU ETS and CBAM, will not experience a critical influence of CBAM when bringing cement to the EU market in comparison with European ones.**

**Primary aluminium is not produced in Ukraine, so CBAM-regulation will not have a significant direct impact, but will affect the choice of Ukrainian producers of aluminium semi-finished products and raw aluminium for their own production based on their carbon intensity.** CBAM-regulation will not harm the only Ukrainian producer of alumina LLC «Nikolaev Alumina Plant».