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The Role of the EU CBAM in Raising Climate Policy Ambition in Trade Partners

The case of Ukraine

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Summary

As part of the European Green Deal, the European Commission proposes a carbon border adjustment mechanism (CBAM) to address carbon leakage and back up the EU's new 2030 climate targets. The mechanism is further expected to have ancillary positive effects by stimulating third countries to adopt more stringent climate policies. There is, however, a gap in understanding if and how this initiative can promote more ambitious climate policies elsewhere, as it is facing harsh criticism from around the world for being mere protectionism and in breach of international climate and trade laws.

The purpose of this study is to examine if and how the EU CBAM influences the climate policy debate in Ukraine, one of the countries that is expected to be most affected due to its large share of carbon-intensive exports to the EU. The study seeks to find out how the EU CBAM can be made more instrumental in promoting an increase in the country's climate policy ambition.

The data in this study was collected through desktop research and semi-structured expert interviews with climate policy stakeholders in Ukraine during February-April 2021 and analyzed using thematic context analysis. The findings of this study are therefore based on data collected before the draft CBAM regulation was released by the Commission in July 2021.

The study finds that the upcoming EU CBAM influences the climate policy debate in Ukraine by affecting the interests of powerful business groups opposing climate policy so that climate policy now finds itself in the sphere of their interests. Despite perceptions in Ukraine that the EU CBAM represents a form of protectionism, it has nevertheless moved climate policy higher up the country's political agenda. The increased interest for climate issues has not yet transformed into support for an ambitious climate policy from the business side. This is largely due to the hope of negotiating an exemption from the CBAM and a lack of financial resources for pursuing costly industrial modernization. The study recommends that EU decision-makers clearly communicate the intentions and design features of the EU CBAM to the EU trading partners and envisage returns of a large part of the CBAM revenues back to exporting countries for decarbonization projects. This will improve the image of the CBAM and strengthen its role in promoting an ambitious climate policy in low- and middle-income countries.

Contents

List of abbreviations

AA – Association Agreement between the EU and Ukraine

CBAM – carbon border adjustment mechanism

DTEK – Donetsk Thermal Energy Company

EBA - European Business Association

EC – European Commission

EGD – European Green Deal

ETS – Emission Trading System

GDP – Gross Domestic Product

GHG – greenhouse gases

MENR – Ministry of Ecology and Natural Resources of Ukraine

NDC – Nationally Determined Contribution (under the Paris Agreement)

UBTA – Ukrainian Business and Trade Association

UNFCCC – United Nations Framework Convention on Climate Change

WTO – World Trade Organization

1 Introduction

As part of the European Green Deal (EGD), the European Commission (EC) proposed a carbon border adjustment mechanism (CBAM) to prevent carbon leakage and support the achievement of the bloc's climate targets. Climate leakage represents an increase in GHG emissions in foreign jurisdictions caused by stringent climate policies in an implementing jurisdiction (Cosbey et al., 2012). The CBAM can be introduced in the form of a tax, levy, or requirement to buy emissions allowances imposed on goods from foreign producers who operate without a carbon price, in order to put these goods on an equal footing with products from domestic producers who do face a carbon price (Cosbey et al., 2019).

The mechanism is expected to have "ancillary positive effects" (EC, 2021a, sec. 4.3) by stimulating third countries to adopt more stringent climate policies. Countries with weaker climate policies are expected to seek to improve them to avoid carbon border payments. The Commission expects that the CBAM would "indirectly promote the adoption of similarly ambitious policies by trading partners and thus contribute to the reduction of global emissions even further" (EC, 2020b, p. 3).

The initial reaction of EU trading partners, however, involves accusations of "green protectionism", illegitimate international trade distortions, and breaching of the Paris Agreement principle of common but differentiated responsibility and respected capabilities. Indeed, while big economies such as the US or China have the power and resources to retaliate or even rather quickly adjust to the CBAM by pursuing the decarbonization of their industries, small low- and medium-income countries have often limited capabilities for both and thus might be disproportionally affected (Weko et. al., 2020). Ex-ante modelling supports this concern by predicting that a CBAM would shift the economic costs of decarbonization to the developing world (Böhringer et al., 2018).

Ukraine could be significantly affected by the EU CBAM and is among the countries whose governments have raised deep concerns. Researchers name Ukraine among the countries under the highest relative risk from the EU CBAM (Weko et al., 2020) and envisage a "modest" CBAM-related per capita income loss in Ukraine of 0.4 % (Chepeliev, 2021). Ukraine actively pursues integration with the EU in the framework of the EU-Ukraine Association Agreement (AA) and has a number of obligations to align with the EU acquis, including in the area of climate policy. Yet, the country's current NDC under the Paris Agreement does not envisage a significant GHG emissions reduction. Ukraine's carbon tax of 0.36 USD/tCO_2 is well below the carbon prices observed in the EU.

This study explores if and how the EU CBAM influences the climate policy debate and contributes to promoting climate policy ambition in Ukraine. It suggests and further tests the hypothesis that a CBAM as an influential factor can affect the interests of carbon-intensive industry in exporting countries so that more ambitious national climate policies might become useful or even necessary for them. It attempts to identify features of an EU CBAM that can increase its potential for stimulating countries like Ukraine to improve their climate policies and accelerate decarbonization processes.

The study contributes to bridging the existing gap in empirical research on how CBAMs impact the interests and form perceptions of different climate policy stakeholders in affected countries and how they subsequently shape the climate policy debate. Data collection and analysis for this study was conducted before the EC published its draft regulation on the EU CBAM in July 2021. Consequently, the analysis and findings reflect the level of knowledge about the instrument and state of respective debates in the first half of 2021 and should be considered accordingly.

2 What is a CBAM, and how could it impact the climate policies of third countries?

The CBAM refers to any trade measure that puts products from foreign producers who operate without a carbon price on an equal footing with products from domestic producers who do face a carbon price (Cosbey et al., 2019). Such measures are proposed to address fears of the negative effects of carbon pricing on the competitiveness of domestic producers and to prevent carbon leakage. Both can arise when jurisdictions determined to fight climate change introduce carbon pricing on a unilateral basis. The introduction of CBAMs by countries with strong carbon pricing policies should theoretically stimulate the launch of similar policies in trade partners of such countries (Lehne & Sartor, 2020). Also, the EC itself expects the EU CBAM to "indirectly promote the adoption of similarly ambitious policies by trading partners" (EC, 2020b, p. 3).

Some experts, however, call such an objective inappropriate (Cosbey et al., 2012) due to its contradiction with the UNFCCC principle of common but differentiated responsibility and respective capabilities (Cosbey et al., 2012). A CBAM is a politically and legally challenging tool, as it often raises accusations of being merely a form of protectionism, so-called "green protectionism" (DG EXPO, 2020) and may be met with retaliation measures from powerful affected players, instead of improved climate policies. The CBAM effectiveness will also depend on the extent to which producers can switch to other unregulated markets to sell their carbon-intensive products (Böhringer et al., 2016).

It is important to distinguish between two types of EU trade partners affected by the proposed CBAM: large economies and small low and medium-income countries. With the CBAM the EC is targeting primarily big economies – the USA, China and Russia (Lehne & Sartor, 2020). Still, other EU trade partners, including low and medium-income states, will also be affected by the CBAM, making those countries perceive the instrument as unjust (DG EXPO, 2020).

Emerging economies argue that it is fair for them to have lower climate targets, as their share of emissions in the past was much lower in comparison to the EU (DG EXPO, 2020). Ex-ante modelling shows "that the main effect of a CBAM is shifting of the economic burden of developed-world climate policies to the developing world" (Böhringer et al., 2018, p. 1), which could further exacerbate pre-existing income inequalities (Zachmann & Mcwilliams, 2020). The lack of attention to the effects that a CBAM might have on vulnerable developing countries was called "a key blind spot in the [CBAM] policy debate" (Weko et al., 2020, p. 4). While big economies have greater economic power to negotiate with the EU and resources to adapt, developing countries might be adversely affected by a CBAM as they have much lower ability to adapt by changing their export structures and decarbonizing (Weko et al., 2020). Finally, trade partners have stressed the importance of a transparent dialogue, saying the latter had not yet taken place to a sufficient degree (Marcu et al., 2020).

To date, there is very limited research available on which countries might be the most vulnerable. Weko et al. assessed the EU CBAM relative risks for developing countries based on an indicator that comprises the level of exposure (e.g., how important the trade with the EU is for those countries) and vulnerability (based on the proportion of emissions-intensive trade-exposed goods in total exports, the

carbon intensity of final energy consumption, institutional capacities to monitor, report and verify emissions, and level of NDC ambition). The study found that countries with the highest relative risks are Western Balkan countries, Ukraine, Turkey, South Africa and Mozambique (Weko et al., 2020). The literature mentions three strategies for addressing the need for special attention to low and middle-income countries while designing CBAMs: (1) country-based exemptions, (2) CBAM revenue returns, and (3) additional climate diplomacy measures.

Country-based exemptions. A CBAM could provide for potential country-based exemptions for economies that implement effective emissions caps or take other adequate national actions, but also for least-developed and low-income states (Droege & Fischer, 2020). With non-pricing policies, it is difficult to define what adequate is. Non-application of exemptions to signatories of the Paris Agreement could be considered a violation of the General Agreement on Tariffs and Trade (GATT) provision on arbitrary treatment, as it can be argued that all contributions under the Paris Agreement are recognized and therefore constitute adequate climate action (Droege & Fischer, 2020). Experts argue that country-based exemptions should be used very carefully as their application could prompt issues around transshipment and reshuffling[1] if differences in the level of carbon price persist between countries introducing CBAMs and those getting exempted (Cosbey et al., 2019; Droege & Fischer, 2020).

Revenue returns. Returning part of the revenues back to exporting countries is suggested by a number of researchers as a good way to address the adverse distributional effect of carbon tariffs (Böhringer et al., 2012; Cosbey et al., 2019). Additionally, this would show respect to the Paris Agreement's principle of common but differentiated responsibility and demonstrate that the main purpose of the CBAM is not protectionism but the environmental cause (Cosbey et al., 2019). The literature, however, lacks information on how revenue return mechanisms could work in practice and how different stakeholders feel about political feasibility and effectiveness in terms of addressing the concerns of affected countries.

Additional support measures. Although the European Commission recognizes that addressing concerns of unfairness by lower-income countries would be "probably one of the most difficult aspects of the CBA design"(DG EXPO, 2020, p. 12), there is very scarce information available on how implementing jurisdiction can address this concern and what range of options is available[2].

The only study that assesses the perceptions of the EU CBAM among domestic experts in potentially affected trade partners is the recent work by RECAP. The authors conducted surveys with experts from countries in the South Pacific region, including China, India, Indonesia, and Australia. They conclude that the basic features the EU CBAM should meet, from the perspective of those countries, are WTO compatibility, preservation of the voluntary bottom-up approach, and recognition of existing CO_2 pricing schemes (Konrad Adenauer Stiftung, 2021).

To summarize, the literature on CBAMs identifies the potential role of the mechanism in stimulating climate action in trade partners. It also acknowledges the need to pay attention to lower-income countries, which have fewer resources to pursue a decarbonization agenda. At the same time, there is scant empirical evidence on perceptions of the EU CBAM by different climate policy stakeholders in affected states and there is no empirical research on how the mechanism could ratchet up climate policy ambition in those countries.

[1] Transshipment is the shipping of goods from the original exporter through third countries to take advantage of their preferential trade status (Cosbey et.al, 2012); Reshuffling is a relocation of the lowest-carbon products for sale to the EU, while keeping high-carbon products for unregulated markets (Droege & Fischer, 2020).

[2] The draft CBAM regulation, released after this research was completed, suggests technical assistance, technology transfer and extensive capacity building for the least developed countries (LDCs).

3 An overview of Ukraine's climate policy

3.1 Ukraine's carbon reduction targets

Ukraine is a lower-middle-income country at the eastern border of the EU. Ukraine gained its independence after the collapse of the Soviet Union in 1991 and is still in transition to a market economy (Melnikova et al., 2017). Due to a significant decline in GDP after the collapse of the Soviet economy and the war in Eastern Ukraine, the country's GHG emissions plummeted from 942.1 in 1990 to 339.2 Mt-CO_2 eq. in 2018 (excluding land use, land-use change and forestry); in other words, GHG emissions decreased by 64% from the 1990 level (MENR, 2020). The energy sector is by far the largest GHG emitter (65%)[3], followed by industry (18%), agriculture (13%), and waste (4%) (MENR, 2020).

Ukraine ratified the United Nations Convention on Climate Change in 1996, the Kyoto Protocol in 2004, and the Paris Agreement in 2016. The first intended nationally determined contribution (INDC) of Ukraine under the Paris Agreement set a goal of not exceeding 60% of 1990 GHG emissions level in 2030 (NEIA, 2016). This - 40% NDC target has been rated by independent researchers as critically insufficient and incompatible with the Paris Agreement targets (Climate Action Tracker, 2020). The target allows for an increase of national GHG emissions by 75% by 2030 compared to the 2017 level (Andrusevych et al., 2020).

Ukraine's new draft NDC published for public consultation by the responsible authority – the Ministry of Ecology and Natural Resources (MENR) - in April 2021[4], proposes a new GHG reduction target of 65% from the 1990 level by 2030 (Cabinet of Ministers, 2021c). The largest contribution to emissions abatements is expected from the energy sector (26% reduction from the current level), while the industrial sector is allowed to increase its total emissions by 16% due to envisaged annual economic growth of 3.8% (MENR, 2021). To remain within a 16% emissions growth limit, industry would need to increase its efficiency by 1.5% annually and invest up to 37 billion EUR in modernization between 2021 and 2030 (MENR, 2021).

3.2 Ukraine's carbon pricing

As a part of the AA with the EU concluded in 2014, Ukraine is committed to the development and implementation of a policy on climate change (AA between the EU and Ukraine, 2014). Annex XXX to the AA imposes an obligation on Ukraine to implement the EU Directive 2003/87/EC establishing an emissions trading scheme (ETS) for GHG emissions within 5 years after entry into force of the Agreement (AA between the EU and Ukraine, 2014). The delivery of Ukraine's commitments in the areas related to transport, climate and environment has been slow, and some key strategic documents have not yet been delivered or were delayed (EC, 2020a).

[3] Including GHG emissions in transport and building sectors.

[4] Ukraine's second NDC has been approved on July 30th, 2021.

An ETS for GHG emissions has not been put in place by the deadline envisaged in the AA. Its introduction is now planned for 2025 (Ukrinform, 2021a). The first enabling step for an ETS rollout - the implementation of a system for monitoring, reporting and verification of GHG emissions - has already commenced in 2021, after a relevant law was approved in 2019 (World Bank, 2021).

In terms of other carbon pricing policies, Ukraine has implemented a carbon tax on CO_2 emissions from big stationary sources in 2010 at the level of 0.02 USD/tCO_2, with a negligible effect on GHG emissions reductions (Frey, 2017). In 2019 the carbon tax was raised 25-fold and is currently 0.36 USD/tCO_2 (PMR, 2019), a level that still has more of a fiscal rather than an emissions reduction function (Andrusevych et al., 2020). The proceeds from this tax go to the general budget without any earmarking. Ukraine also lacks specific climate policies to stimulate modernization measures and energy efficiency in industry (MENR, 2021).

3.3 Ukraine and the European Green Deal

In July 2020, the Ukrainian government officially announced the country's readiness to contribute to the EGD. Ukraine's official position paper with the country's vision for the implementation of the EGD was passed on to the European Commission in August 2020. According to this document, "Ukraine sees itself as an integral contributor to the European Green Deal goals" (The Government of Ukraine, 2020, p. 1). It proposes, inter alia, to establish a structured dialogue with the EU on modalities of the early involvement of Ukraine in the development and implementation of policies under the EGD and to develop a joint roadmap for Ukraine's participation. Official dialogue between Ukraine and the EU on Ukraine's involvement in the EGD was supposed to start at the end of April 2021 (Ukrinform, 2021b) but there is no publicly available information if this was the case.

4 Expected impacts of the EU CBAM on Ukraine's economy

The EU is by far the most important trade partner for Ukraine. In 2019 the share of exports to the EU relative to total exports was 41.5% and amounted to 20.75 billion USD (State Statistics Service of Ukraine, n.d.). **Over one-third of Ukraine's exports to the EU are potentially subject to the EU CBAM, including steel, minerals, and chemicals, as highlighted in Table 1.**

Table 1. Composition of Ukraine's exports to the EU (2019), based on data from the State Statistics Service and the State Customs Service of Ukraine.

Aggregated categories of exported products	Billion USD (2019)	% of total exports to the EU
Potentially covered by the EU CBAM		
Minerals and mineral products*	2.9	14.1%
Chemicals (incl. fertilizers and plastics)	0.8	3.7%
Non-precious metals and their products (steel, copper, nickel, etc.)	3.8	18.3%
Total potentially covered by the EU CBAM	7.5	36.1%
Agricultural products	7.3	35.3%
Machines and electrotechnical equipment	3.0	14.6%
Timber	1.1	5.4%
Textile	0.7	3.4%
Other	1.1	5.3%
Total exports to the EU	20.7	100%

* This category includes electricity exports of 379 million USD.

According to Ukrainian industry sources, the steel sector is expected to be particularly affected by the EU CBAM, as **over a quarter of all steel and steel products manufactured in Ukraine are exported to the EU**, amounting to 2.5 billion EUR in 2019 (GMK Center, 2021).

The widespread use of older technologies means that the production costs of Ukrainian steelmakers are higher than those of Russian, Turkish or Chinese competitors and closer to the costs of European producers (CEPS, 2013). The carbon intensity of Ukraine's steel is significantly higher than that of the EU and key competitors: 2.38 tCO_2/t for steel produced via the blast furnace / basic oxygen furnace method, as compared to the EU's 1.95 tCO_2/t and Russia's 2.1 tCO_2/t for the same technology (GMK Center, 2021). Higher carbon emissions are due to the lower quality of domestic coal, iron ore and pig iron and a lack of retrofitting measures such as the instalment of pulverized coal injection technology and continuous casting (Zachmann, 2021). The large share (>90%) of the emissions-intensive steel

production methods in Ukraine is considered to be the reason for the sector's higher overall emissions compared to other countries with an average 30% share of scrap electric arc furnace steel (Zachmann, 2021). Taken together, these factors make Ukraine's steel sector more vulnerable to the EU CBAM than that of other countries (GMK Center, 2021).

In terms of macroeconomic effects, the only available modelling study finds that among the EU trade partners, Ukraine is expected to be the most negatively impacted by a CBAM, however, this impact will still be "moderate" (Chepeliev, 2021). The author uses sectoral CO_2 emissions embodied in Ukraine's exports to the EU, and a tax rate of 26 USD/tCO_2. The estimates suggest the maximum per capita income fall in Ukraine to be 0.4% and a reduction in aggregate welfare of 450 million USD. Such moderate negative effects are explained by the redistribution of exports to other countries (notably in the steel sector) and by increasing outputs in sectors not covered by the EU CBAM (Chepeliev, 2021).

Ukrainian industry calculations show higher losses and project that Ukrainian steel exporters alone might lose up to 155-200 million EUR annually. The calculations are based on a price of 42 EUR/tCO_2 and an assumption of 44-80% of the price increase being passed on to consumers. The overall macroeconomic impact for Ukraine is estimated to be -0.5% of GDP from 2019 level or – 700 million EUR per annum (GMK Center, 2021).

5 Theory and hypothesis

Energy-related climate policies are designed to reduce a country's GHG emissions, including through support for clean technologies that facilitate decarbonization (Hughes & Urpelainen, 2015). One of the key structural factors that influence national climate policy is the presence of domestic fossil fuel resources and related industries (Karapin, 2016). The energy-intensive manufacturing industry (notably the production of steel, cement, and chemicals) works against an ambitious climate policy because it bears high costs from policies that seek to reduce CO_2 emissions through increased energy costs or tighter regulations on emissions (Peterson, 1996 and Leggett, 2000 as cited by Karapin, 2016).

According to the critical-junctures theory, the systems and their policy outcomes are usually stable; for example, the presence of fossil fuel and energy-intensive industries is a relatively stable characteristic (Karapin, 2016). A non-incremental change in such a system can happen when it is confronted with a crisis, induced by unexpected influential focusing events, capable of changing the status quo. A *focusing event* can be defined as uncommon and harmful to geographically or otherwise concentrated interests and known to the public and decision-makers (Birkland, 1998). Focusing events may also include actions by other governments, either at national or international level (Jänicke, 2008 as cited by Karapin, 2016).

The EU CBAM has the necessary characteristics to be viewed as an external focusing event for the development of climate policies in affected third countries. Firstly, the introduction of a CBAM is an uncommon event; no state government has implemented a CBAM before. Secondly, for countries with high shares of carbon-intensive exports to the EU, the EU CBAM is harmful to the interests of energy and carbon-intensive exporting industries. These industries usually form the backbone of the opposition to ambitious climate policy. Thirdly, information about the planned introduction of the EU CBAM is publicly available and known to governments of potentially affected states.

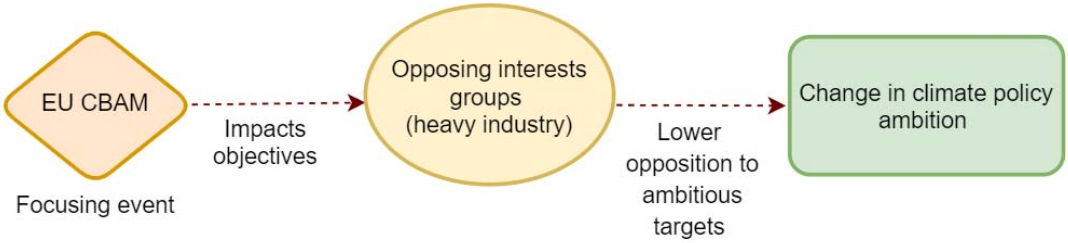

Fig. 1 Influence of the CBAM on climate policies of third countries – a proposed mechanism

The CBAM can affect the interests of the key opponents to climate ambition in trade partners – carbon-intensive exporting industries – by making their products less competitive or uncompetitive on the market protected by the CBAM. The prospect of a CBAM may push these trade partners towards different response strategies, such as forcing retaliation, switching to markets without carbon pricing, closing down production, or accepting domestic climate regulation and investing in carbon emissions reduction to avoid CBAM payments.

Unlike major world economies, smaller low and middle-income countries have limited options to retaliate against the EU CBAM; this is especially true for Ukraine, a close EU neighbour with an AA that is striving for closer integration. The other three strategies mentioned are all viable options.

Switching to markets without carbon regulation will not help to improve climate policy and decrease emissions, while closing down outdated production facilities and investing into modernization measures will.

The approach to stimulate the opposing groups towards acceptance of a more ambitious climate policy can be derived from the theory of Olsonian regulation. When the imposed regulation will affect a few clear but powerful losers (the carbon-intensive industry in our case), these will mobilize against the regulation with greater effectiveness than a large number of weaker beneficiaries. The theory suggests this problem can be mitigated (though not eliminated) through compensation to losers, thus reconciling private self-interests and public environmental interest (Oye & Maxwell, 1994). In Ukraine public funding is scarce and financing for climate policy is expected to come from the private sector (Zachmann, 2021). The EU CBAM regime could provide kick-start funding for modernization by returning part of the collected revenues and leveraging further private funding while at the same time serving as a "stick" ensuring modernization does take place. Therefore, in this work, **we hypothesize that the EU CBAM can promote a more ambitious climate policy in Ukraine by affecting the interests of key opposing groups, and this influence can be further strengthened by envisaging (partial) revenue returns to lessen the financial burden of the emissions reductions for the affected interest groups.**

6 Methodology

To verify the hypothesis, a mixture of methods has been used to collect data, including documents review and semi-structured expert interviews with relevant stakeholders in Ukraine's climate policy. The list of reviewed documents included official statements submitted by the Ukrainian stakeholders within the scope of public consultations on the Inception Impact Assessment for CBAM, held by the EC between July 22 and October 28, 2020 (see Table 2), other written statements from officials, opinion pieces in media and open letters.

Table 2. Ukrainian actors who made contributions to EU public consultation of the EU CBAM (July 22 – October 28, 2020)

	Actor's name	Sector	Referenced in text
1	Ministry for economic development, trade and agriculture of Ukraine (now the Ministry of Economy)	Government	Ministry of Economy
2	European Business Association (EBA)	Business	EBA
3	Association of Enterprises Ukrmetalurgprom	Business	Ukrmetalurgprom
4	Ukrainian Business and Trade Association (UBTA)	Business	UBTA
5	Donetsk Thermal Energy Company (DTEK)	Business	DTEK
6	PJSC Ivano-Frankivskcement	Business	PJSC Ivano - Frankivskcement

The list of 14 interviewees was compiled with the aim of gathering views from representatives of all relevant political and societal actors, as presented in Table 3. Purposive and chain-referral sampling methods were used. The list of interviewees was also strengthened by including international experts who research the impacts of the EU CBAM in Ukraine and other EU neighbouring countries.

The interviews were conducted in February-April 2021 in English, Ukrainian or Russian according to the interviewees' preferences. The interviewees took part in the study on the condition of their answers being anonymized, so each of them was assigned a random number to refer to throughout the analysis.

The interview guide was designed to collect the stakeholders' views on different aspects in relation to the EU CBAM, including general attitudes, preferences on design, observed impacts on the climate policy debate and ideas on how to make the mechanism more instrumental in driving up climate policy ambition.

To analyze interview transcripts and documents, we used a mix of deductive and inductive approaches. The themes for the analysis were pre-defined while the sub-themes within them where derived in the process of analysis.

A key limitation of research based on expert interviews lies in the high level of subjectivity. The data collected represents the views of individuals who may be prone to biases and misjudgements, which then is processed by researchers who might add their own biases and interpretations. In addition, only limited knowledge about the upcoming EU CBAM design was available at the time of interviews.

Table 3. List of interviewees

Type of actor	Sector	Stakeholder's affiliation
National authority	Government	Ministry of Ecology and Natural Resources
		Government adviser on European Integration
	Legislature	Member of Parliament
Non-governmental	Academia / consultancy	Independent researcher, IPCC author
	Academia	Institute for Economics and Forecasting of the National Academy of Science of Ukraine
	Non-governmental	Center for Environmental Initiatives "Ecoaction"
	Non-governmental, think tank	Resource & Analysis Center "Society and Environment"
Business	Consultancy for heavy industry	Center for Ecology and Development of New Technologies
	Business association	European Business Association (EBA)
International	EU government	EU Commission/ EU Delegation to Ukraine
	International organization	United Nations Development Programme, EU4Climate project
Type of actor	**Sector**	**Stakeholder's affiliation**
International expert	International / consultancy	International Carbon Action Partnership (ICAP)
	International / consultancy	Center for Global Trade Analysis, Purdue University
	International / non-governmental	Independent expert authoring a report on potential CBAM impacts on the energy sector of the EU and countries of the Energy Community

7 How the EU CBAM impacts interest groups and the climate policy debate in Ukraine

7.1 Impacts on opposing interest groups

Although the expected negative macroeconomic impact of the EU CBAM on Ukraine is projected to be moderate (See Section 4), it is sufficient to alert carbon- and energy-intensive industries (the steel and coal sectors) and made them treat the EU CBAM as a threat to their interests. Export-oriented carbon-intensive Ukrainian businesses and their associations such as Ukrmetalurgprom, EBA and UBTA were the first to react to the upcoming EU CBAM. They participated in the EC's public consultations in 2020 (see Section 7.2), published their concerns in mid-2020 (Bojko, 2020) and engaged in CBAM discussions in the EU early on. For example, the EBA co-organized the Virtual EU-Ukraine Town Hall on CBAM in September 2020 (ERCST, 2020). The steel industry is the only sector that commissioned a comprehensive assessment of the EU CBAM's potential impacts on the sector, claiming the competitiveness of their products will be threatened and predicting loss of market share and profits (GMK Center, 2021). Ukrainian exporters of carbon-intensive products requested the government to make every possible effort to avoid the CBAM on Ukrainian goods or negotiate softer conditions and a longer phase-in period based on Ukraine's historical emissions reductions and existing climate obligations under the AA (interviews 8,10, Bobytskiy, 2021).

7.2 Attitudes towards the EU CBAM

Among Ukrainian climate policy stakeholders, only business and governmental stakeholders have publicly stated their attitudes towards the EU CBAM. Within the scope of consultations on the Inception Impact Assessment of the CBAM in 2020, the Ukrainian stakeholders made six submissions: five from the business sector and one from the Ministry of Economy (see Table 2 in Section 6). The cross-cutting issue in those positions is that the climate obligations which Ukraine implements under the AA, notably the current carbon tax and the planned introduction of an ETS, should count when determining the application of the CBAM to Ukrainian goods (Ukrmetalurgprom, DTEK, Ministry of Economy) or even be sufficient to completely exempt importers of Ukrainian products from CBAM payments (PJSC Ivano-Frankivskcement). UBTA calls the instrument a "trade restricting measure" and claims the CBAM will have "profound adverse consequences" on export-oriented companies' ability to finance their "green transition" (UBTA).

Ukrainian non-governmental climate policy actors did not make any submissions during the EC's official consultations on the CBAM, which they attributed to low clarity on the mechanism design and the lack of previous experience with CBAMs (interview 12). As of April 2021, non-governmental climate policy actors have published no statements on the EU CBAM. In general, there is no feeling of urgency among them when it comes to the EU CBAM, and they are waiting for more information

from the EC before formulating their official positions.

A general perception of the CBAM has been, however, formed by all groups of stakeholders, and is remarkably homogeneous across the stakeholder spectrum. Most of the Ukrainian stakeholders interviewed regard the EU CBAM as EU industry protectionism rather than an instrument for climate policy (interviews 1,2,3,4,6,7,8,10,12). This perception is shared by business, national authorities, and representatives of the non-governmental sector. At the same time, there is an understanding of why EU industry may need protection (interviews 1,3,6,12). Ukrainian stakeholders note that the EU industry is in a "harsh" situation given the bloc's climate policy goals and that European green modernization efforts risk being devalued by the unwillingness of other countries to invest in decarbonization.

> "The EU CBAM needs to be assessed in the context of ensuring the EU's economic security, as in this transitional period to a more sustainable social order, the EU will be vulnerable to external influences, and the EU CBAM should be assessed in the context of this vulnerability."
>
> (Interview 3)

Some stakeholders are unequivocal in saying the EU CBAM is not about recovery and transformation but about eliminating competitors from the market (Kachka, 2021). Industry perceives the EU CBAM as a tool to discriminate against those countries that do not have sufficient financial resources to modernize and radically decrease CO_2 emissions (Grigorenko, 2021). The EU's intention to keep CBAM revenues for its own use instead of supporting climate protecting measures in affected countries was mentioned as an illustration of the instrument's protectionist nature (interviews 6,10).

Finally, several stakeholders from business, non-governmental and international organizations (interviews 6,8,12) acknowledge that the EU's objectives for introducing the CBAM may be both to protect domestic industry and to create "a forceful method" to improve climate policy in trading partners. Despite viewing the EU CBAM as protectionist (fully or partially), non-governmental stakeholders (interviews 1, 7, 12,) and one representative of national authorities (interview 9) believe the EU CBAM may be a useful stimulating instrument and is capable of impacting climate policy in Ukraine. Business indirectly supports this by saying that the economic and financial leverage the EU CBAM can provide is needed to move from lip service to actual decarbonization actions (interview 8).

7.3 Observed impacts in the climate policy debate

Many stakeholders noted that the discussion on climate policy and new Paris targets in Ukraine recently became significantly more frank because it has attracted influential stakeholders from government and business (interviews 1, 4, 6, 7, 9, 14). In the past Ukraine's climate targets never included actual emissions reductions; thus, the debate around them did not attract particular attention from economic players. The current rise of economic actors' interest was noted by the respondents from national authorities dealing with climate policy, non-governmental players, and international actors and is attributed largely to the upcoming EU CBAM (interviews 1, 4, 6, 7, 9 14).

There are two elements in this reported increase in interest: i) the movement of climate policy up the political agenda and ii) the activation of the business sector in the climate policy debate. The first element is, to some extent, induced by the second. The government would not pay much attention to an external request for a policy change, but it becomes important when such request comes from inside the country (interview 14).

The move of climate policy up the political agenda.
In 2020, the readiness to contribute to the EGD and work on a more ambitious climate target was declared at the highest political level in Ukraine – by the President and the Prime Minister. In December 2020, the President announced that "Ukraine's long-term goal is to achieve carbon neutrality" and that the country was considering setting a 2030 GHG reduction target of 58-64% from 1990 levels (Office of the Ukrainian President, 2020). The Prime Minister Denys Shmygal calls Ukraine "an inseparable part of the EGD implementation" and pledged to develop renewables and kick-start the transformation of coal regions (Cabinet of Ministers of Ukraine, 2021b). The EGD and climate policy are consistently on the agenda of meetings between Ukraine's Prime Minister and the EU Vice-President Timmermans (interviews 6, 14).

Already in January 2020, a dedicated governmental working group on the mitigation of climate change impacts in the framework of the EU initiative "European Green Deal" was created, chaired by the Prime Minister (Cabinet of Ministers of Ukraine, 2020). Three respondents familiar with the discussions in this working group admitted their surprise when, during one of the meetings in 2021, the Minister of Economy proposed 2050 as a target year for Ukraine to reach climate neutrality (interviews 1, 6, 12). The National Economic Strategy until 2030, adopted by the Cabinet of Ministers shortly after that meeting in March 2021, acknowledges the decarbonization of the economy as one of the key principles of the country's economic development but, nevertheless, makes a commitment to reach climate neutrality by 2060, not 2050 (Cabinet of Ministers of Ukraine, 2021a).

> "The positive effect of the EU CBAM is that the people who previously dealt purely with economics, and to whom environmental protection was a secondary issue and not on their agenda at all, suddenly started to look at it. No other factors had any effect. The mere presence of the CBAM suddenly placed the climate topic on the table of the Minister of Economy, Minister of Energy, etc."
> (Interview 4)

Meanwhile, non-governmental actors say they feel that, although the government has learned how to win points with its climate-oriented European partners, no concrete actions in the development of the country's climate policy instruments have been observed so far (interviews 7,12). The complaint, also from business, is that the government does not give an answer on how to reach the announced targets, including financially (interviews 6,8). The government, however, has started the work on financial instruments for industry modernization, notably on the Ukrainian Climate Fund, a financial agency, which will accumulate funds (including revenue from the carbon tax) to finance implementation of Ukraine's second NDC (Tolstych, 2021).

The activation of the business sector in the debate on climate targets.
Before 2020, the setting of climate policy targets in Ukraine was the exclusive domain of the MENR and a narrow circle of experts (interview 14). Now, much more lobbying around climate policy targets is observed, such that Ukraine's climate policy debate started to resemble the one in the EU (interview 14). The real traction, including at government level, came when the EU announced the Green Deal with the CBAM included (interview 14). In particular, the activation of industry-related players was observed in the latest round of discussions on the new NDC (interviews 6, 14). The activation of interest in climate and environmental issues is also noticed in the parliament, where the number of inter-factional parliamentary groups dedicated to the environmental issues has risen from one to four, with the latest being explicitly created to react to the EU CBAM (interview 9).

One business association representative confirmed that, for them, systematic work on climate and the environment only started in 2020 and this was connected, at least partially, with the announcement of the EGD (interview 10). Another business representative pointed out that, when it became clear the CBAM was officially part of the incoming EC plan, the importance of carbon-related issues for Ukrainian business quickly rose, now featuring among the top five topics on its agenda (interview 8).

Nonetheless, according to the national authority, the increased interest in climate policy targets among high-level officials and industry, which has been triggered by the upcoming EU CBAM, has not yet materialized in support of ambitious climate policy targets. This is largely because the industry is not convinced that an ambitious climate target is part of the negotiation process on the EU CBAM (interview 4). During the public consultations and after the publication of the draft second NDC, which foresees modest emissions reductions from the current levels, business argued that the second NDC lacks economic justification and identified sources of funding (UBTA, 2021; Ukrainian League of Industrialists and Entrepreneurs, 2020).

7.4 Suggestions on the EU CBAM design

Ukrainian climate policy stakeholders did not have many specific proposals on the EU CBAM design given the novelty of the mechanism, the scarcity of information on the intended EU CBAM design and current orientation towards a "give-us-an-exemption" strategy in the negotiations with the EU. Steel sector analysts argue the CBAM format does not matter as long as the main goal is to equalize the financial burden related to the carbon content of products between local producers and importers (GMK Center TV, 2021).

Defining the "similar level of ambition". The critical unknown parameter of the EU CBAM design pointed out by several Ukrainian experts is the definition of the "similarly ambitious climate policy" and how the sufficient level of ambition will be determined (interviews 2,3,4,8). On the most general level, one can look either at the emissions reduction target at the national level – that is at the NDC, or at the carbon footprint of certain exported goods and the domestic carbon price (interview 3). The EU is using the term "climate policy ambition" (see, for example, European Commission, 2020), and this is typically measured by the NDC, while the carbon content of certain goods or sectors is not an indicator of climate policy ambition (interview 3). Lack of clarity on what will be used as a yardstick for measuring the "similarity" of climate policy ambition is among the key reasons why the Ukrainian business community is not ready to support the currently proposed NDC (interview 8). For example, with the new EU target of 55% below the 1990 level, would it be sufficient for Ukraine to have the same target to meet the "similarity of climate ambition" criteria (interviews 2,8)[5]? There is some level of agreement among stakeholders that just introducing an ETS in Ukraine with some low prices or a carbon tax at the current deficient level will most likely not be considered a "similar" or compatible policy (interviews 4,6,7). On the other hand, business argues that the CO_2 price in the Ukrainian ETS should not be expected from the onset to be at the same level as in the EU ETS, and it is fair to give Ukraine time to adjust (DTEK, in the context of Table 2). Some actors propose that a correction factor based on GDP level be introduced to account for the difference in countries' development levels (interview 6). The government has also mentioned that it discusses such an option with the EC (Demchenkov, 2021).

Revenue returns. An absolute majority of the stakeholders interviewed expressed the view that access to affordable funding is key to launching decarbonization processes in Ukraine (interviews 1,2,3,4,6,7,8,9,10,12, DTEK). Both national authorities and business representatives said that funding availability could decrease the fear of business to commit to decarbonization (interviews 8, 9), and make it more supportive of an ambitious climate target (interview 8). The business representative argued that unlike in the EU, business in Ukraine does not receive any support from the government to pursue decarbonization and that interest rates for investment loans stand at 7-8 %, which is much

[5] At the time of the interviews, the draft CBAM regulation had not yet been released and it was not clear if exemptions based on ambitious climate targets will be considered; see also Section 3.1 for Ukraine's NDC valid at the time of interviews and the proposed new one.

higher than what European businesses pay (interview 8).

> "The best stimulus is to know there is some type of support."
> (Interview 8)

While the ideal option for business and the government is still an exemption (interviews 4,8, Petraschko, 2021), the second-best option would be a combination of gradual phase-in of CBAM applicability and the return of revenues back to the country as a way to ensure the availability of financial resources for decarbonization (interviews 8,10).

Financial transfers to affected countries will not put CBAM's legitimacy under threat in the WTO, especially if those returns are dedicated to environmental purposes. On the contrary, revenue returns would strengthen the position of the EU CBAM within WTO (interviews 3,7). Securing the return of revenue may be a more beneficial strategy for Ukraine from a long-term perspective as it would facilitate progress towards decarbonization rather than the status quo, as would occur in the case of Ukrainian products being exempted (interview 7).

The most frequently mentioned forms of implementation for CBAM revenue returns are the following:

1. Low-interest credit lines, including through international public banks like the European Bank for Reconstruction and Development and the European Investment Bank (interviews 3,6,7,8,9,12). This form is seen as an appropriate option by representatives across the whole spectrum of stakeholders, from NGOs to businesses. It is named alongside other forms of support, which could be offered in a package.

2. Dedicated international fund(s) for affected EU trade partners ready to invest to help businesses and public companies to modernize infrastructure and decrease emissions with clear criteria and monitoring (interviews 6,8,10,12). Setting up an analogue to the EU's Just Transition Fund for partner countries could be a tangible implementation option.

3. Financing decarbonization-related programmes in the public sector, for instance thermo-modernization programmes in buildings or power transmission networks, is the preferred option among non-governmental sector actors (interviews 3,7,12).

4. Financial allocations to a future national Climate Fund (interviews 2,7), reflecting the perspective that there is a potential to have some level of individual treatment for Ukraine as a country that implements an association agenda with the EU and gradually aligns its climate policy.

5. Support for the transformation of coal and heavy industry regions, including for re-skilling coal mine workers, to ensure that communities in vulnerable regions also get resources to transition from the dependence on carbon-intensive industry (interviews 6,12).

Non-governmental actors stress that an essential condition of the CBAM revenue returns should be earmarking them strictly for GHG emissions reduction purposes (interviews 3,6,12). Some of them do not support the idea of returning revenues directly to carbon-intensive industries, arguing that the latter systematically abuse existing environmental standards and exert their power to ignore environmental inspections; thus, it would be extremely challenging to ensure that the provided financial support is not misused (interview 12).

8 Discussion of findings

The evidence collected through this study suggest that the EU CBAM has been a focusing event for the development of climate policy in Ukraine. Ukrainian energy and carbon-intensive industries, the country's key climate policy opponents, reacted immediately and defensively to the EU CBAM idea thus suggesting that they see the instrument as harmful to their interests.

The industry's main strategy to address the threat of the EU CBAM has been to push for negotiations between the Ukrainian government and the EC regarding an exemption of Ukrainian products from the EU CBAM based on current EU-Ukraine AA obligations and historical emissions reductions. At the same time, these industries have become active players in the national climate policy debate. The prominence of the climate debate itself has increased substantially, reaching the highest political level. This suggests that affected interest groups in Ukraine see a connection between the CBAM and the quality of the national climate policy and are starting to take interest in its formulation. This confirms the first part of our hypothesis that the EU CBAM can promote a more ambitious climate policy in Ukraine by affecting the interests of key opposing groups. These groups, however, are not yet supportive of ambitious climate targets, meaning that they will further seek to reduce the costs of an EU CBAM through attempting to shift to unregulated markets, pressing the government for subsidies to compensate for export losses, and other measures that do not lead to emissions reductions.

The two key obstacles to making the EU CBAM acceptable to Ukrainian partners and thus promoting GHG emissions reductions are communication and financing. Ukrainian stakeholders would like this instrument to be understandable, fair, and timed in a way that affords them opportunity to adjust. The second issue is the lack of affordable financing that hinders decarbonization processes in the country. Importantly, all stakeholders see additional financial support from the EU side (through various forms of CBAM revenue returns and other avenues) as a way for the EU CBAM to positively influence the development and implementation of an ambitious climate policy in Ukraine. Therefore, the second part of our hypothesis, stating that the Ukrainian domestic climate policy can further be strengthened by envisaging (partial) revenue returns to lessen the financial burden of the emissions reductions for the affected interest groups, is also confirmed.

The governmental approval of the moderately ambitious second NDC at the end of July 2021 further supports our findings. One may argue that the elevated importance of ambitious climate policy, spurred largely by the announcement of the EU CBAM, contributed to ensuring the necessary political support for the improved NDC. Yet, the approval of the NDC is just a first step in building an effective climate policy in Ukraine capable of bringing about actual emissions reductions together with modernization of the energy and industry sectors. The EU CBAM revenue returns shall play an important role in bringing this into reality by providing kick-start funding for modernization and leveraging further private funds. At the same time, the EU CBAM would serve as a "stick" ensuring that ecological modernization of industry does go forward.

The draft EU CBAM regulation released in July (EC, 2021b) tackles to a large extent the issue of communication and predictability, as it provides more details on the instrument design, including e.g. the goods that it will be initially applied to as well as third countries that could be excluded from the mechanism. A pilot phase is envisaged until 2026 where no CBAM fees will be charged. However, the financial issue is not yet fully addressed thus limiting the potential positive effects of the EU CBAM on the decarbonization agendas of low- and middle-income trading partners such as Ukraine.

9 Policy recommendations

Based on the above findings and taking into account the draft EU regulation on the CBAM, we formulated several policy recommendations which we believe could increase the potential for the EU CBAM to stimulate climate action in affected trading partners.

(1) Consider the ways that a CBAM affects the interest of domestic interest groups and could change climate policy ambitions of trading partners

The study finds that the upcoming EU CBAM does affect the position of the major interest groups in Ukraine who historically were not interested in ambitious climate policy. The CBAM has already altered the stance of the affected industry and made it actively engage into the dialogue on CBAM and become an active player in the climate policy debate. We also find that the threat of the EU CBAM has moved climate policy up the political agenda of the country.

The transformative potential of a CBAM for different trading partners should be considered in detail by the EU. This will help to understand how these dynamics can be leveraged and translated into actual increased climate policy ambition.

(2) Continue the dialogue on the intentions and design features of the CBAM

We find that the increased interest of affected Ukrainian business and high-level governmental actors in the climate debate has not yet transformed into support from their side for ambitious climate targets. Uncertainties around the EU CBAM design and hopes to negotiate an exemption play a role in reducing ambitions. In addition, the CBAM is widely perceived as European protectionism and less as an instrument to fight climate change.

Even though some of the key details of the EU CBAM have become available in July, it will be crucial to continue the dialogue about how the mechanism could evolve in the future to provide trade partners with better understanding and predictability, restore trust in the EU CBAM as a climate policy tool and induce trading partners to take action.

(3) Provide direct support for decarbonization efforts

Another obstacle on the way to a more ambitious climate policy in Ukraine as a response to a CBAM is the lack of resources for financing decarbonization processes. Dedicated financial support offers a crucial means to curb the negative impacts of the EU CBAM and increase its potential to ratchet up climate policy ambition in Ukraine. Such support may be made available in the form of affordable loans, international climate funds, regional/national climate funds, or direct financing of modernization programmes in the public sector.

So far, it has been announced that most revenues from the CBAM will contribute to the EU budget (EC, 2021b). At the same time, the EU intends to provide technical assistance for low- and middle-income countries towards the decarbonization of their manufacturing industries. In this context, we believe that the EU should earmark part of the CBAM revenues to support the decarbonization efforts of trad-ing partners. This would improve the image of the CBAM and strengthen its role in promoting ambi-tious climate policy in low- and middle-income countries.

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