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The Use of CBAM Revenues

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1. Introduction

The transitional phase of the Carbon Border Adjustment Mechanism (CBAM) is underway, but several unresolved issues persist ahead of the definitive period. One of the issues relates to the use of CBAM revenues, whether these should be assigned to specific uses, and what the uses should be. This report addresses the factors that should be considered in determining if CBAM revenues should be recycled, who they should be recycled to and how to execute the recycling.

Building on previous work conducted ahead of the adoption of the CBAM Regulation with Phases I (2019-2020), II (2020- 2021) and III (2021-2022) of its project "Border Carbon Adjustments in the EU", as well as Phase IV (2023) assessing elements of the CBAM Regulation, the European Roundtable on Climate Change and Sustainable Transition (ERCST) is now extending its analysis of the evolving CBAM into a fifth phase, providing decision makers and stakeholders with a better understanding of critical issues as the CBAM proceeds from adoption to implementation.

Phase V of the ERCST project is intended to provide in-depth analysis of the implementation phase of the CBAM as it progresses to its full operationalization, and to offer a broader view of related developments at the intersection of climate and trade. The present report is the second in a series of three reports that together form the written outputs of the fifth phase of the "Carbon Border Adjustment in the EU" project.

In this report, Section 2 provides the context and analytical framework to determine the use of CBAM revenues. Section 3 highlights the arguments for and against recycling revenues. Thereafter, Section 4 discusses to whom the recycled revenues could be distributed. Section 5 discusses how much money the revenues will amount to and how they could be recycled and Section 6 concludes the report.

2. Context and analytical framework

2.1. Context

Once the CBAM progresses from the current transitional to the definitive period starting in 2026, after which its implementation will incur a financial obligation on importers, it will also begin yielding revenue that is proportional to the prevailing carbon price under the EU ETS as well as the carbon intensity and volume of imported goods covered by the CBAM. Not only will the revenue collected under the CBAM increase as the mechanism is gradually phased in over the course of nearly a decade, but the simultaneous phasing out of free allocation will also increase the revenue generated from allowance auctioning under the EU ETS. This indirect revenue-

generating dimension of the CBAM is not considered here, although both it and the direct revenue generated by the CBAM have prompted debate about appropriate uses and beneficiaries of proceeds.

Currently, Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a Carbon Border Adjustment Mechanism ("CBAM Regulation") does not specify how revenue from the CBAM will be allocated and spent. In its preamble, it merely declares that "Member States should be responsible for correctly establishing and collecting revenues arising from the application of this Regulation" (rec. 64), clarifies that the "Union is working towards introducing a new own resource based on the revenues generated by the sale of CBAM certificates" (rec. 74), and mandates the EU with protecting its "financial interests" and relying "on appropriate and effective mechanisms for avoiding losses of revenues."

It is worth noting, however, that the preamble to the CBAM Regulation also stipulates that the "Union is committed to working with and supporting low and middle-income third countries towards the decarbonisation of their manufacturing industries" and that it "should continue to support those countries through the Union budget, especially LDCs [Least Developed Countries], in order to contribute to ensuring their adaptation to the obligations under this Regulation" as well as "to support climate mitigation and adaptation in those countries, including in their efforts towards the decarbonisation and transformation of their manufacturing industries, within the ceiling of the multi-annual financial framework and the financial support provided by the Union to international climate finance" (rec. 74).

The foregoing language reflects some discussion in the EU institutions, and notably in the European Parliament, about a targeted use of CBAM revenue. When the European Parliament's Committee on the Environment, Public Health and Food Safety (ENVI) adopted its draft report on the CBAM on 21 December 2021, it had proposed including a new provision in Article 24a on "Revenues generated by the sale of CBAM certificates" which would have:

- Designated such revenues "internal assigned revenue" to cover the costs of the operation and maintenance of the CBAM authority, with any remaining revenue assigned to the EU budget.
- Defined an obligation ("shall") to provide financial support to support least developed countries' efforts towards the decarbonisation of their manufacturing industries which would be "additional" and "at least equivalent in financial value to the revenues generated by the sale of CBAM certificates."
- Required the Commission to ensure transparency on use of revenues by reporting, on a yearly basis, on how the equivalent in financial value of those revenues from the previous year has been used and how this has contributed to tackling climate change in the least developed countries.

While some of this language – including the assignment of revenue to cover implementation costs – was later modified in the final ENVI report, the proposal to introduce a separate provision on revenue use and ensure that new financial support be provided corresponding to "at least to the level of revenues generated by the sale of CBAM certificates" remained in the amendments adopted by the plenary on 22 June 2022. Although the insertion of a separate provision on revenue assignment was then abandoned in the final regulation as part of the political compromise reached in the interinstitutional Trilogue process, some of the language from the amendments proposed by the European Parliament survived in the aforementioned recitals of the preamble.[1]

Within these legislative parameters established by the CBAM Regulation, the current Commission proposal on the new own resources[2] process with respect to the CBAM revenues envisions a solution whereby a percentage (25%) of the revenues would be retained by EU Member States (presumably as collection fees to cover administrative costs as is the case with other existing EU own resources[3]), with the rest accruing to the EU's own resources, which will help repay the funds raised by the EU to finance the NextGenerationEU pandemic recovery package. This does not preclude the EU from channeling internationally (part of) the share of revenues not retained by EU Member States, e.g. by committing an equivalent increase in the amount of funding for mitigation actions in trade partner countries affected by the CBAM. While not the same as a legislative assignment, or earmark, such a political commitment (and its real-world implementation in good faith) would still effectively share many of the features and impacts of a more formal assignment.

Very different views exist on whether or not part or all of the CBAM revenue should be dedicated to specific uses, whether this be in the form of a binding assignment set out in legislation or implementing acts, or a more informal expenditure of funds equivalent in financial value to the collected CBAM revenue. Not all stakeholders in the legislative process agreed on the best use of CBAM revenue, however. In the public consultation and separate stakeholder interviews preceding the CBAM legislative proposal, for instance, private companies and civil society stakeholders expressed varying views, with businesses generally emphasizing the need to protect European industry from global competition and more likely to support use of revenues for domestic decarbonization or to compensate affected EU industries, whereas research and civil society actors typically stressed the need to also advance climate mitigation in third countries and provide financial support to foreign companies and disadvantaged EU citizens (Buylova et al., 2022; Kuehner et al., 2022). Accrual of revenue to the general budget generally found little support in stakeholder surveys, however.

[1] It is worth noting that the European Economic and Social Committee (EESC), which adopted its opinion on the legislative proposal on 8 December 2021, favored supporting the industrial transition of affected sectors through directly allocating revenue from the CBAM rather than use for international climate finance.
[2] Proposal to amend the Decision on the system of own resources of the European Union, COM(2021) 570.
[3] Custom duties and sugar levies in the EU are levied on economic operators and collected by EU Member States on behalf of the EU. These payments accrue directly to the EU budget, after a 25% deduction that Member States retain as collection costs to cover administrative costs.

2.2. Analytical Framework

Although a binding revenue allocation was foregone in the final CBAM Regulation in favor of a softer exhortation to support developing countries in their mitigation and adaptation efforts, stakeholders have engaged in a lively debate in the academic and policy literature about the advantages and disadvantages of different uses of CBAM revenue. An understanding of the main elements/KPI that are seen as determining if the use of CBAM revenues is one that will receive "general acceptance" when examining different policy options for the use of CBAM revenues is important if we are to assess their pros and cons, including how they score in terms of legal and political feasibility and acceptability.

The following are relevant considerations in the discussion on CBAM revenue use:

I. Delivering CBAM's objectives

One potential measure to assess whether CBAM revenues should be recycled is to assess whether it is aligned with the objectives of the CBAM regulation. The general objective for CBAM, from further objectives follow, involves counteracting the risk of leakage. The primary objectives expressed in legislation are: "Addressing the risk of carbon leakage under increased EU ambition" and "supporting the goals of the Paris Agreement, also by creating incentives for the reduction of emissions by operators in third countries."

In the early stages of the policy cycle before the CBAM was adopted, several additional objectives were mentioned. On top of the carbon leakage avoidance, objectives such as: addressing competitiveness concerns, allowing the EU to increase its level of ambition, motivating and nudging other countries to increase their pledges under the Paris Agreement to match that of the EU, eliminating free allocation and generating revenue. Revenues could, for instance, be targeted at supporting export-oriented EU firms, given that currently the CBAM does not cover EU exports, scoring well in terms of both the competitiveness objective and at reducing the risk of export-related carbon leakage.

To asses if these objectives align with the recycling of revenues one needs not only to elaborate on them but also to translate the objectives into a test or criteria.

In addition, there are other considerations which can be taken into account, which the EU has also supported or committed to outside of the CBAM regulation.

II. Alignment with the principle of *Common but Differentiated Responsibilities and Respective Capabilities* (CBDR&RC)

Some stakeholders consider a unilateral CBAM imposed by the EU to run against the decentralized spirit of the Paris Agreement and the principle of common but differentiated responsibilities and respective capabilities (CBDR&RC). An argument put forward is that it forces Parties to the Paris Agreement to adopt the same approach and impose the same scarcity on emissions, including the same carbon price, as the EU has done with the EU ETS, or otherwise face a charge at the border. This is seen as being misaligned with the letter and spirit

of the CBDR&RC principles as well as the Paris Agreement, which is a bottom up agreement based on Nationally Determined Contributions (NDCs) and transparency.

III. International climate finance

By recycling CBAM funds to developing countries or companies in developing countries, the argument has been made that the EU will help contribute to current climate finance commitments under the Paris Agreement, as well as to the NCQG (New Collective Quantified Goal on Climate Finance), which is a new global climate finance goal that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) shall adopt from a floor of USD 100 billion per year, prior to 2025.

IV. Legal feasibility under WTO and the international climate regime

Legal feasibility gauges the compatibility of the CBAM with applicable legal constraints, especially under WTO law and the international climate regime, thereby minimising the risk of CBAM being contested by the EU's trade partners. The discussion over WTO compatibility tends to focus on the General Agreement on Tariffs and Trade (GATT) Article XX (General Exceptions), the environmental exceptions of which would allow a breach of GATT's provisions on non-discrimination. Meeting the conditions of that provision is a demanding proposition, whereby the measure's environmental motivation becomes key.

The CBAM must inter alia pass the requirements of GATT's Article XX: General Exceptions including its Chapeau. To pass the requirements of GATT's Article XX chapeau, the EU would need to demonstrate that CBAM is a *bona fide* environmental measure, and not a disguised restriction on international trade; and, further, that it does not constitute arbitrary or unjustifiable discrimination. Channeling CBAM revenues internationally (e.g. to covered foreign firms or through international climate funds) strengthens CBAM's case under Article XX, while options that retain revenues within the implementing jurisdiction will fare worse in a GATT Article XX defence. Options that retain revenues domestically might be interpreted as evidence that the CBAM aims to protect competitiveness more than it is aims to protect the environment.

The EU commitment to the Paris Agreement and other obligations under the UNFCCC should also be taken into consideration when considering the issue of CBAM revenue. The EU is committed to the objective of the Paris Agreement to substantially reduce global greenhouse gas emissions to hold global temperature increases to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels, as well as to provide climate finance.

Additionally, there are articles and commitments related to unilateral trade measure that have to be considered. Article 4.15 of the Paris Agreement states that Parties shall take into consideration in the implementation of the Paris Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing countries. As the CBAM will affect certain countries´ economies, or parts of their economies,

this Article of the Paris Agreement should be considered when assessing what to use the revenues for.

According to Article 3.5 of the UNFCCC, "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade." As the EU is also committed to the UNFCCC language on trade (which is basically a repetition of the chapeau of GATT's Article XX), the CBAM also needs to follow this commitment, which could also play a role in assessing CBAM revenue use.

V. Principle of mirroring the EU ETS

Article 1 (2) of the CBAM regulation states that "the CBAM complements the system for greenhouse gas emission allowance trading within the Union established by Directive 2003/87/EC3 by applying an equivalent set of rules to imports". This implies that the CBAM mirrors the EU ETS, and therefore the way the CBAM treats its revenues should mirror the way the EU ETS treats its revenues.

Some of the revenues from the EU ETS auctioning are, through a number of instruments such as the Innovation Fund and the Modernization Fund, directed towards financing climate action, including for installations covered by the EU ETS. Applying the same logic would imply that the revenues from the CBAM should be used to assiste decarbonization of those affected by the CBAM.

VI. Political acceptability of the CBAM in the EU and abroad

Political feasibility represents an important element and consideration for the chosen solution. From a political perspective, retaining the revenues within the implementing jurisdiction would be far more popular domestically, and far less popular internationally.

VII. Order of magnitude and permanence of available funds

A final consideration on how and where the money should be used for is the materiality of the amount collected through CBAM. While the money will fluctuate depending of covereage and timing, its evolution over time will be influenced by different factors that might work in opposite directions. CBAM revenues can be expected to initially increase as free allocation is gradually phased out for domestic producers, but will eventually decline with time as production abroad decarbonizes (and a growing number of EU trade partners adopt carbon pricing systems that allow for crediting from the CBAM). In case the scope of the CBAM expands to cover additional sectors or emissions (e.g. emissions from the transport of covered goods), that will also increase the level of available revenues.

Nevertheless, under the current CBAM Regulation, CBAM revenues are not expected to constitute a large sum initially as compared to revenues expected from the increased auctioning of EUAs as free allocation is phased out alongside the phase-in of the CBAM. The question then arises whether the EU should commit to how revenues will be spent, considering that it is

not expected to be a large amount and that it might be a revenue stream that will eventually run out.

Given the limited legislative language on revenues, the considerations above are ultimately of a primarily political rather than legal nature, and offer considerable scope for discretion, entailing a degree of subjectivity. Rather than providing mathematical precision, they serve as a heuristic metric to assess and visualize a diverse range of factors in the evaluation of different policy options for the use of CBAM revenues. As such, their weight in the decision-making process will vary from stakeholder to stakeholder.

3. Should revenue be targeted for specific purposes?

Drawing on a review of the existing debate and based on our own interactions with experts and stakeholders, we synthesize below the main reasons that advocate for targeting revenue directly generated from the imposition of the CBAM, as well as reasons that caution against such an assignment of revenue. This review of arguments underpins our own conclusions and recommendations later on in the report.

3.1. Reasons that support targeting revenue

Reasons for earmarking or committing revenue generally fall in six categories: to accelerate industrial decarbonization in the EU or abroad, or both; to mitigate the adverse welfare impacts of the CBAM on affected industries, communities, or regions; to mobilize additional sources of climate finance; to prevent detrimental spillover effects in international relations and climate diplomacy; and to improve prospects of compliance with international law. Additionally, some matters of principle can be cited in support of revenue earmarking. All these are discussed in greater detail in the following subsections.

3.1.1. Delivering on the CBAM's objectives

First and foremost, assignment or political commitment of revenue can serve to advance the objectives of the CBAM. The primary goal of reducing the risk of carbon leakage can be furthered by allocating funds to industrial emission reduction efforts in order to accelerate industrial decarbonization, for instance by promoting related innovation processes, scaling up low-carbon technology deployment, or derisking investments in relevant manufacturing capacities. Doing so would also align with the additional objectives mentioned in the CBAM Regulation, which include "reducing global carbon emissions and supporting the goals of the Paris Agreement" (Article 1(1) of the CBAM Regulation).

Several proposals envisioning reinvestment of CBAM proceeds in developing country economies, for instance, envision such expenditures to be directed towards clean development activities that enhance those countries' capacity for low-carbon development (Brandi, 2021; Perdana & Vielle,

2022; Springmann, 2013). Citing the views of EU industrial stakeholders, Bellona Europa has called for a combination approach, with part of the revenues allocated to domestic efforts aimed at reducing industrial carbon emissions in the EU, and another part to be spent on international industrial decarbonization (Lombardi Stocchetti & Strandvåg Nagell, 2024). European businesses have generally favored investment in domestic industrial decarbonization (Buylova et al., 2022; Kuehner et al., 2022).

3.1.2. Addressing negative welfare impacts

Several recent studies have estimated that CBAM implementation could prove detrimental for the economies of developing countries by curtailing their exports, especially for Least Developed Countries (LDCs) for whom exports to the EU are a primary source of foreign income and represent a significant share of their Gross National Income (GNI) (African Climate Foundation, 2023; Eicke et al., 2021; Magacho et al., 2023; Perdana & Vielle, 2022; UNCTAD, 2021). Such concerns align with earlier economic research that found carbon tariffs to shift the economic burden of developed-world climate policies to the developing world (Böhringer et al., 2018). It is worth noting, however, that the European Commission in its impact assessment of the CBAM legislative proposal found such impacts to be modest (European Commission, 2021).

To address these concerns, revenue could be used to limit the welfare burden on developing countries by reducing their exposure and vulnerability to the CBAM without losing the price incentive to limit emissions leakage and avert competitiveness impacts of European firms. An early article on the targeted use of revenue collected with border carbon cost-leveling measures, for instance, argued that proceeds should be returned to developing countries to mitigate adverse welfare impacts and support low-carbon development (Grubb, 2011). Several commentators have more recently suggested this rationale for earmarked expenditure of CBAM proceeds in developing countries or specifically LDCs (Beaufils et al., 2023; Lamy et al., 2024; Perdana & Vielle, 2022; Springmann, 2013).

Not all proposals would see revenue from the CBAM go exclusively or primarily to affected developing countries to avert welfare impacts, however. A research project aimed at producing recommendations for taxation and social policy reforms, for instance, has suggested using CBAM revenues to reduce taxes on labor and capital inside the EU, thereby offsetting economic impacts in the EU itself rather than in foreign trade partners such as developing countries (Krenek et al., 2018).

3.1.3. Improving alignment with international law

Given the already evidenced risk that the CBAM may incite diplomatic tensions and potential retaliation, ensuring its compatibility with international legal obligations of the EU is of particular importance, and the uses to which CBAM revenue are allocated can also have a bearing in this regard. As already mentioned in Section 2., under international trade law, and notably the General Agreement on Tariffs and Trade (GATT), allocation of revenue to industrial decarbonization both domestically or abroad, and/or to assist trade partners and foreign companies in complying with

the CBAM, is likely to improve its prospects as an environmental measure under the general exceptions of Article XX(b) and (g) of the GATT and under that provision's introductory clause, or *chapeau* (Cosbey et al., 2019; Hillman, 2013; Mehling et al., 2019).

Similarly, as already highlighted in Section 2., the CBAM has been criticized for violating fundamental tenets of the international climate regime, notably the Principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) that is set out in the UNFCCC and underpins international climate cooperation (Davidson Ladly, 2012; Ozai, 2022), and more generally for being at odds with the nationally determined architecture of the Paris Agreement.

Earmarking revenue towards climate change mitigation and adaptation in developing countries would not only be seen as a contribution towards the broader objectives of the Paris Agreement, but could also serve to defuse such criticism that it runs counter to the CBDR-RC principle. Again, without explicitly invoking an earmarked allocation of CBAM revenue, the European Commission itself acknowledged in the impact assessment that a compensating mechanism could prevent LDCs from arguing that "the introduction of a CBAM will be a disproportionate burden for them and that they conflict with the UNFCCC principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances" (European Commission, 2021).

3.1.4. Providing a new source of international climate finance

In the discussion on CBAM revenue use, a further rationale has the possibility of assigning proceeds to international climate finance. Developed countries have fallen short of meeting their climate finance commitments entered in 2009 at the 15th Session of the Conference of the Parties to the UNFCCC in Copenhagen to collectively mobilize, by 2020, USD 100 billion per year from public and private sources to support developing countries' climate action. Given a rapidly rising public debt burden in developed countries and mounting fiscal constraints on public expenditures, however, the ability to draw on new sources of climate finance may be critical for developed countries to scale up financial transfers.

Referencing the work program of the High-Level Advisory Group on Climate Change Financing (AGF), Grubb (2011) has argued that revenues generated from "border carbon cost leveling" could help close the climate finance gap and align with broader international climate finance goals. In the face of the aforementioned climate finance gap, especially as Parties to the UNFCCC are engaged in negotiations to significantly scale up annual climate finance flows in line with a New Collective Quantified Goal on Climate Finance (NCQG), such an alternative source of public climate finance could be timely. It should be noted, however, that any CBAM revenue returned to developing countries by way of international climate finance transfers would likely need to demonstrate that it is new and additional in order to qualify.

3.1.5. Improving international diplomatic relations

From the outset, discussions of unilateral trade-related climate measures have raised the possibility that their imposition might undermine international relations between the imposing jurisdictions and their trade partners because of concerns about the fairness of such measures (Brandi, 2013; Eckersley, 2010) or their perception as "green protectionism", that is, restrictions on international trade disguised as environmental measures (Holmes et al., 2011). Unsurprisingly, surveys have confirmed such views and shown the CBAM to be widely unpopular among EU trading partners (Bergin et al., 2021; Overland & Sabyrbekov, 2022; Sapir & Horn, 2020). Technical complexities that increase the burden facing importers and foreign producers further exacerbate such reservations (Böhringer et al., 2022; Siskos & Saush, 2023).

Accordingly, foreign observers have contended that the CBAM is likely to have detrimental effects on international relations and trigger retaliation measures (Lim et al., 2021). Such concerns could, again, be addressed by earmarking revenue for reinvestment to affected countries, a rationale that has been variously proposed (Eckersley, 2010; Grubb, 2011; Roser & Tomlinson, 2014). The European Commission itself, in its impact assessment accompanying the CBAM legislative proposal, has acknowledged the risk of "new global dividing lines between countries with a low and high-carbon export structure" and therefore proposed different ways to support affected developing countries, such as technical assistance, technology transfer, extensive capacity building and financial support, without however directly mentioning CBAM revenue (European Commission, 2021).

3.1.6. Matters of principle

Finally, the rationale for earmarking the revenue generated from the CBAM could be based on matters of principle. For instance, under the EU ETS, revenue generated from the auctioning of emission allowances is at least partly returned to those who purchase the allowances by way of mechanisms such as the Innovation Fund; in view of the parallelism between the design of the EU ETS and that of the CBAM as a companion policy that seeks to avoid treating foreign producers any differently than European ones, a partial assignment of CBAM revenue to the importers against whom the cost of CBAM certificates is levied could be justified to mirror treatment under the EU ETS.

3.2. Reasons against earmarking revenue

As much as a number of reasons can be cited in favor of earmarking revenue from the sale of CBAM certificates for certain purposes, such as industrial decarbonization or climate change mitigation and adaptation in developing countries, there are also reasons that argue against such an allocation. It therefore merits asking the question: who actually bears the cost of the CBAM? Intuitively, one might reply that importers pay, because they face the formal obligation to purchase and surrender CBAM certificates equal to the embedded emissions of covered goods imported into the EU; but the actual economic incidence is significantly more complex. Foreign producers may

already lower their profit margins in order to retain their competitive advantage in the European market; EU producers relying on CBAM-covered raw material inputs will face increased production costs as these inputs increase in price, which in turn will either increase the cost of their products or erode their profit margins.

But ultimately, the economic incidence of the CBAM will, to a significant degree, accrue with consumers in the European Union as the cost of CBAM certificates is passed through the value chain and increases the downstream cost of goods. On this question, the European Commission therefore concluded that the CBAM would be regressive in its impact assessment of the legislative proposal (European Commission, 2021). If anything, that would favor an allocation of revenue to reduce distributional impacts or domestic economic burdens, as proposed by Krenek et al. (2018) – or, alternatively, letting the CBAM revenue accrue to the general budget, from which the EU can draw to adopt appropriate measures.

Also, any prospect of significant wealth transfers from the EU to countries such as China or private entities seen as major competitors would likely face substantial political resistance, as already intimated by private sector submissions to the CBAM consultation that urged the need to assign revenue for domestic decarbonization. Current fiscal constraints and budget pressures, along with a shifting political focus from environmental priorities to economic and competitiveness concerns, further underscore the relevance of this counterargument. Finally, critics of revenue assignment could argue that any concerns about impacts on developing countries should be best addressed through existing channels of development cooperation, technical assistance and climate finance to avoid confusing instruments and blurring the lines between existing and new climate finance.

Some voices in the literature have also cautioned against returning revenues to specific stakeholders for legal or environmental reasons. Holzer (2024), for instance, notes that using CBAM revenues for fiscal reform within the EU could be seen as contravening the spirit of international trade and climate commitments; likewise, she anticipates legal challenges if revenue recycling benefits domestic stakeholders, as it could then be perceived as a prohibited subsidy under WTO rules. Similarly, Leturcq (2021) endorses recycling revenue back to developing countries, but warns that doing so could undermine the environmental objectives of the CBAM by reducing incentives for these countries to lower their emissions *if not designed appropriately*. Lehne et al. (2020) and Perdana et al. (2022), finally, have argued that reinvestment of CBAM revenue in developing countries would not be sufficient to compensate for the economic impacts, which could be cited as a reason to rely on other existing channels of technical assistance.

4. To whom?

If the decision is made to earmark all or some portion of the CBAM revenue, the fundamental question then is: to whom would it be directed?

4.1. To governments, or to firms?

If the funds were retained within the EU, some have suggested that they might be used to address specific EU policy objectives, for instance by using them towards fiscal reform, reducing the need for Member State contributions to the EU, and potentially reducing undesirable/distortionary taxes such as those on labour (Krenek, Sommer, and Schratzenstaller, 2019).

Others have advocated for the funds to be directed to firms within the EU to help in the process of decarbonization (Holzer, 2024). This would have the advantage of serving the CBAM's primary objective—preventing leakage—since it would lower the costs that EU producers face from carbon pricing by reducing their GHG emission-intensity. Of course, reducing the GHG emission intensity of foreign competitors, as suggested by those that advocate recycling revenues abroad, would also lower the risk of carbon leakage (Grubb, 2011; Springmann, 2013).

Either option would face criticisms based on the arguments recounted in Section 3.1 above. That is, there is a suite of arguments for not retaining the finds within the EU. But on almost all of those grounds, the criticism would likely be much fiercer if the funds were directed to EU producers rather than to the Commission or to governments.

The alternative is to earmark CBAM revenues for distribution outside of the EU. Practically all proposals for this sort of "recycling" or revenue assume that the funds involved should be channelled to governments, either via some international/multilateral fund or via bilateral efforts. These options are assessed in greater depth below. But as a starting point there is another option: all or some of the funds could be directed not to affected countries but rather to affected firms. That option could for example involve subsidizing or full underwriting of the costs of verification of data, or funding of firm-level capacity building to help build internal systems of GHG accounting.

This would have the advantage of being most directly responsive to concerns about the high costs of compliance with CBAM regulations. And it might be more cost-effective at doing so; it would certainly be more direct than relying on funding from multilateral efforts to eventually pass through national governments to reach the affected firms. Such funding streams could be tailored to assist those firms most acutely impacted, such as SMEs or firms below a certain level of annual revenues, for whom compliance costs are amortized over a smaller base of revenue. Earmarking CBAM revenues to firms would also be more coherent with the principle, described above, that sees revenues from auctioning under the EU ETS being recycled to EU producers rather than, say, to Member States.

4.2. If to non-EU countries, to which countries?

If CBAM revenue is recycled to countries outside the EU, to which countries should it be directed? There are at least three options, none of which is mutually exclusive:

- Funds could be directed to all developing countries, or the poorest of developing countries, via some sort of international/multilateral fund, out of respect for the principle of CBDR-RC (Grubb, 2011; Holzer, 2024). This proposal has internal contradictions, however, since CBDR-RC is in part about apportioning the burden of effort, and these proposals would potentially involve funds going to countries that bore no such burden – that experienced few or no disruptions of exports of covered goods to the EU.
- Funds could be directed to those countries most affected by the CBAM. "Affected" could be taken to mean those that generate the most CBAM revenues via their export streams—those that export the greatest value of high-GHG intensity covered goods to the EU—and this could include even high-income countries (Brandi, 2021). Or it could mean, for example, those for whom the affected exports constituted more as a percentage of total national exports, or as a percentage of national GDP. The latter seems to be more in line with the principle of CBDR-RC. The World Bank's Relative CBAM Exposure Index bases its vulnerability assessment on the value of covered goods exported to the EU as a share of total goods exports, and those goods' GHG-intensity of production (World Bank, n.d.). Lamy et al. (2024) add to those criteria a consideration of a country's exports that CBAM might expand to cover, and consideration of exports to third countries that process those exports and then export to the EU.
- A variation on the above would see funds directed as a priority to countries that are most affected (however defined) *and* are least capable of adapting to those impacts. That is, some countries are far better equipped than others to assist their exporters in adapting to CBAM, whether because they have larger budgets, or because they have better developed institutional capacity to monitor and report product-based emissions (Eicke et al, 2021). If the concern, again, is for alleviating burden of effort, this option seems worth considering.

5. How much recycled, and through what channels?

If the decision were taken to recycle funds to firms or countries outside the EU, it would need to be decided how much of the revenue should be so recycled, and via what sort of means.

For context, it is important to note at the outset that the funds to be recycled are limited. Certainly they are limited compared to the increase in revenues expected as a result of the ETS reform that CBAM enables. That is, the EU intends the CBAM to allow it to move to full auctioning of allowances under the ETS, something that it projects will result in increased revenues of €9 billion by 2034.[4] By contrast, estimates of CBAM revenues are much smaller. The EU's 2021-2027 multi-annual financial framework projected revenues from the CBAM of between €5 – 14 billion, or an average of €0.7 - 2.0 billion per year (reference). The EU's CBAM impact assessment estimates

[4] According to the Commission's CBAM Impact Assessment (European Commission, 2021), using Option 4, which most closely aligns with the final CBAM design.

revenues by 2030 and beyond of €2.1 billion per year.[5] S&P Global (2023) modelled annual CBAM revenues as of 2040 to be as much as USD 80 billion, but this seems to assume levels of GHG intensity in foreign producers that are unchanged from today's, and assumes a 2040 carbon price in the EU of €184/tonne. None of these estimates takes into account the possibility of illegal circumvention, or the certainty that firms will engage in the perfectly legal practice whereby the cleanest producers divert their exports to the EU in response to CBAM and the most GHG-intense sell into other markets (Assous et al., 2024).

It also needs to be considered that basing a funding stream on an uncertain source such as CBAM revenues, which are in turn affected by uncertain EU ETS allowance prices, and the uncertain actions of foreign firms in decarbonizing and trade diversion, may fail to deliver the sort of dependable predictable funding needed by developing countries to pursue industrial decarbonization (Lehne & Sartor, 2020; Perdana et al., 2022; and André & Pirlot, 2024). Vasilj, Gonzalez, Ancygier (2023) highlight the lessons of the NER 300 program for financing decarbonization abroad, which was severely crippled by its reliance on emission allowances as a source of revenue when prices collapsed in the early 2010s.

The projected funds are also limited as compared to the *needs*, depending on what they are expected to do. If they are expected to simply defray the costs of compliance borne by the most highly affected firms, the estimated revenue flows might actually be in the same order of magnitude as the estimated costs. If, however, they are expected to help facilitate broader industrial decarbonization in developing countries (He, Zhai, and Ma, 2022), they are paltry relative to the needs. For perspective: converting a single steel mill from the emissions-intensive blast furnace-basic oxygen furnace model to the relatively clean electric arc furnace model can cost more than half a billion Euros.

5.1. How much should be recycled?

A decision to earmark CBAM revenues for distribution (to "recycle" them) r does not necessarily imply that *all* the funds should be so treated. Some might be retained to accomplish the objectives of paying down the EU's cost of COVID recovery through NextGenerationEU borrowing per the current policy approach, or used to further fiscal reform that would see a reduction of Member State contributions to the EU.

Alternatively, some might be used to help CBAM-covered EU producers decarbonize. Or some might be retained to pay for the costs of administering the CBAM regime itself. This latter argument was in part the rationale for allocating 25% of CBAM revenues to the Member States. These options might be perceived negatively by affected foreign producers, who could argue that their own funds were being used to make them even less competitive in the EU market, or used to enable the very regime that was "penalizing" them.

[5] Ibid.

5.2. What conditionalities?

Beyond the general guidance to recycle revenue outside the EU are some fraught questions of implementation. One of the most important is whether the funds would be conditional, and if so what conditions would guide their dispersal?

At one end of the spectrum of answers to this question, the EU could simply refund moneys received to the countries that transmitted them, making no demands as to how the refunded moneys were spent. This would be ill-advised; at a minimum there would need to be guardrails that prevented recipient countries from simply channelling the funds directly back to the assessed exporters, completely negating the CBAM's function.

But beyond that basic guidance, the answer has to be guided by the purpose of the recycling mechanism, as discussed above. If the purpose is to facilitate decarbonization in developing countries, there should be conditions that ensure the funds are directed to that purpose. If the purpose is to respect the principle of CBDR-RC, there should be conditions to ensure that the funds are spent in ways that reduce the burden imposed by the CBAM on developing country exporters, particularly those most impacted and least capable of adapting to the CBAM's impacts. If the purpose is to diffuse foreign opposition to the CBAM, then as a general proposition the fewer conditions the better; better to allow foreign governments the agency to determine their own priorities in responding to the impacts of CBAM.[6]

No matter what the objective chosen, the need to respect agency should probably guide the EU away from the other end of the spectrum of answers to the question: a fund that dictates EU-determined priorities in the use and manner of dispersal for any funds transferred, accompanied by an over-burdensome regime of accountability. This guidance applies whether the funds are recycled to governments or to firms, and is especially important if the funds are earmarked to be directed outside the EU. At a minimum, the input of the recipients should be actively sought and considered in the process of deciding how and to what ends any recycled funds should be dispersed.

Conditionality need not be imposed only on the recipients, of course. In recycling any funds from the CBAM, the EU itself might be guided by certain principles, with the most obvious candidate being the principle that any climate finance should be additional to funds already committed under other processes. Holzer (2024) argues that any recycled funds would be counted as part of the EU's commitments to climate finance for developing countries, which are traditionally sourced from national governments, the Commission (through vehicles such as the Neighbourhood, Development, and International Cooperation Instrument and the Instrument for Pre-Accession Assistance), the European Investment Bank, and the European Investment Fund. The EU's total commitment to international climate finance in 2021 was over €23 billion (European Commission, 2024). But that is not necessarily the case. If the EU were to declare that any recycled CBAM

[6] This latter option aligns to some extent with the first principle of the 2005 Paris Declaration on Aid Effectiveness, to which the EU is signatory: the principle of ownership.

revenues were *not* climate finance, it would a strong firewall to ensure the principle of additionality -- that these existing efforts were not reduced by the amount of increased funding provided by the CBAM.

5.3. Via what channels?

If revenues are to be recycled outside the EU, there is a suite of questions about how to implement that commitment. Primary among them is what channels to use in administering the funds. The answer to this depends on the questions explored above on conditionalities and objectives; the tool should look different according to the purposes to which it will be put.

If recycling is set up with conditionalities and objectives that make it much like existing funding from funds such as the Green Climate Fund or the Adaptation Fund, or institutions such as the World Bank or other IFIs, then those institutions might be best placed to administer the funds. If the objective is broad industrial decarbonization in developing countries, there are fewer choices of institutions and for that reason some have suggested the creation of a new fund dedicated to that purpose, whether based in existing institutions or created *sui generis* (Brandi, 2021; Lamy et al., 2024).

If the objective is to decrease the burden of compliance on exporting firms, or to help them with their decarbonization pathways, then the funds should be directed to firms, and a new facility would need to be created to manage the process. If the objective were to support decarbonization, the facility could support discrete decarbonization projects, and could award funding in a reverse auction process to find those projects with the highest potential for mitigation per Euro (though other criteria, such as CBAM vulnerability, could also be incorporated). This would have the advantage of symmetry with the existing approach to recycling EU ETS revenues, which uses a similar process to distribute Innovation Fund support. As well, it would be in line with the overall objective of the CBAM: to avoid carbon leakage.If the objective were to soften the impacts of the CBAM on exporters, then the facility might subsidize the costs of verifying the required GHG-intensity data. This would have the advantage of administrative simplicityfor both the EU and the supported firms; there would be no need to assess proposals, or worry about additionality, and no need to account for moneys spent or emissions avoided. It might also have the advantage of affordability; it was noted above that the available funds might not go far in pursuing a broad decarbonization agenda. As well, all exporters could benefit, rather than just the successful bidders for decarbonization funds.

Any decision on vehicles needs at least to be conscious of the crowded space that already exists for international climate finance and capacity building for trade. One of the most noteworthy efforts in the latter context is the Aid-for-Trade Initiative, led by the WTO, which administers funding for capacity building in developing countries, though its current iteration focuses on

capacity building in areas other than compliance with climate-related measures such as the CBAM.[7]

5.4. Avenues for cooperative funding?

One of the clear messages from the above discussion is that the revenue stream from CBAM alone may be critically limited relative to the needs, depending on the objectives chosen. It is worth noting that the EU will not be the only jurisdiction struggling with that challenge; the UK has announced its intention to implement a CBAM by 2027, and several other countries including Australia, Canada and the US, are currently considering CBAM-like mechanisms.

While there will probably always be a shortage of funds relative to needs, pooling the resources from the various international regimes would increase the funds and reduce the overhead and transaction costs relative to several individual efforts. In terms of timing this may not be a helpful option for foreign exporters that are already feeling the effects of CBAM, given that funds even from the CBAM will not be available for several years, and there are more distant and uncertain lead times associated with revenue streams from other countries' efforts.

6. Takeaways/recommendations

Following up on the analysis above, a number of takeaways and recommendations can be formulated to inform the ongoing discussion about revenue use under the CBAM:

1. As a matter of principle, and to have a treatment similar to how revenues are used under the EU ETS, a significant amount of CBAM revenue should be used towards decarbonization of exporters in countries that are most impacted by the CBAM and are least capable of adapting to those impacts.
2. Funding should be ensured for the administrative costs of the EC, not only in the Member States.
3. It is important, possibly essential, for the credibility of the EU and its international diplomacy that the CBAM revenue not be counted towards international climate finance contributions of the EU. This is especially true in light of the efforts being made by the EC to set up new structures for international diplomacy, and the promotion of carbon pricing.
4. CBAM funds should be returned to enterprises and not governments. They could be directed to firm-level decarbonization and awarded by reverse auction, which would retain how the CBAM mirrors the EU ETS and its treatment of domestic enterprises. Similar to free allocation, the allocation of funds could be made conditional upon the development of

[7] Current efforts, organized under a biennial workplan for 2023-2024, centre on food security, digital connectivity, and mainstreaming trade in national development strategies.

non-prescriptive commitments (ideally a road map or maybe a commitment) for enterprise decarbonization, and the funds should be used for very specific projects, rather than a general refund. Alternatively, they could be directed to softening the impacts of compliance for exporters, for example subsidizing the verification of GHG-intensity data.

5. One alternative that should be considered is the creation of a fund that could disburse the CBAM revenue, but that means that a certain critical amount needs to be collected in order to make this fund impactful and economically efficient. That may be achieved by potentially pooling funds from a number of countries that have their own border carbon adjustment (BCA) measures, which could lead to the formation of a very simple "Carbon Club" to disburse money potentially through a reverse auctioning approach – to exporting enterprises that meet certain criteria in certain countries.

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