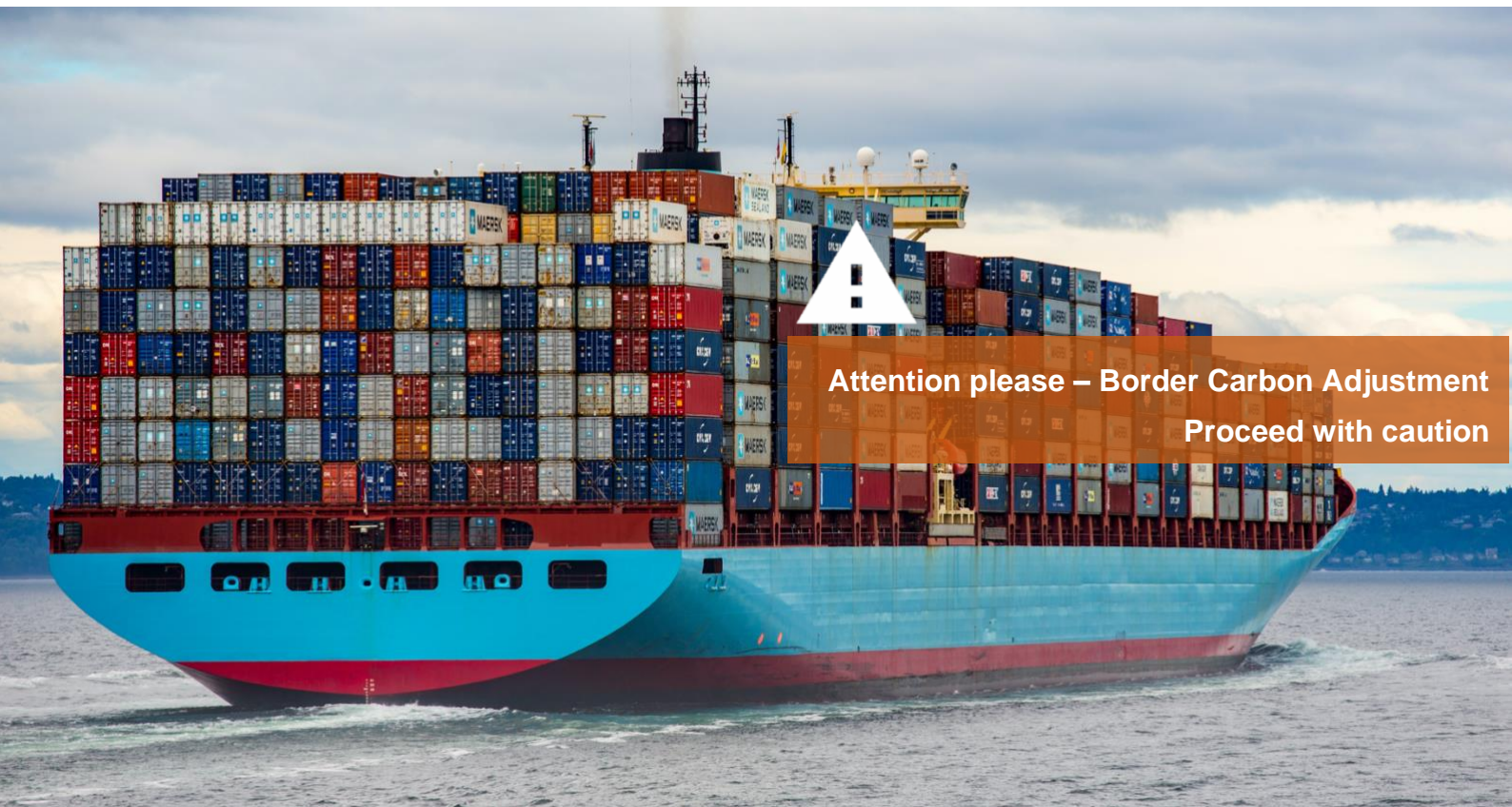


Border Carbon Adjustment in the EU: Treatment of Exports in the CBAM



Attention please – Border Carbon Adjustment
Proceed with caution

Andrei Marcu

Michael Mehling

Aaron Cosby

Alexandra Maratou

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Supporters

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ERCST Team Contributions to this Report from:

Anita Vollmer

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Table of Contents

1.	Introduction	4
2.	Why Exports Matter: The Export-Related Leakage Channel	4
2.1	Understanding the Concept of Export-Related Leakage	4
2.2	Impact of Carbon Costs on Competitiveness and Carbon Leakage	6
2.3	Avoiding Unintended Outcomes	9
3.	The Legal Implications of Addressing Exports	10
3.1	Options for an Export Adjustment	10
3.2	Substantive Aspects	11
3.2.1	First Pathway: Subsidy Precluded under Exclusion Clause	12
3.2.2	Second Pathway: Positive Finding of Subsidy	14
3.3	Procedural Aspects	15
4.	Assessment of Options	16
4.1	Assessing the Policy Options	17
4.2	Complementary Policy Options	18
4.3	Assessment	18
5.	Conclusions and recommendations	20

1. Introduction

The concept of a Carbon Border Adjustment Mechanism (CBAM) was introduced to address carbon leakage resulting from asymmetrical climate change policies and the EU's high ambition. As further elaborated below, one of the channels for carbon leakage could be the replacement of EU exports with products that have higher carbon intensity.

While carbon leakage was addressed through free allocation and compensation for indirect costs, leakage due to exports was not an issue that had emerged in the policy debate. As a matter of fact, exports did not figure in the CBAM debate in its initial phases, but then became one of the red lines for industrial stakeholders and those that would like to ensure that the outcome is a decarbonized and prosperous EU, and not a deindustrialized one.

The initial reference to CBAM that the then-candidate for European Commission President, Ursula von der Leyen, made in her agenda for Europe in July 2019, contained no reference of exports. Discussion of exports provisions and their impact appear in the Impact Assessment in one of the options discarded early, where export rebates are seen as a disincentive for mitigation and “undermining the global credibility of EU's raised climate ambitions”. References also appeared in the European Parliament resolution adopted on March 10th, 2021, as well as in the preceding opinion of the Committee on Economic and Monetary Affairs.

The debate has become more pointed with the EC's proposal issued in July 2021, as well as the Draft Report of the Rapporteur, Mohammed Chahim, and the draft opinions from the ITRE and INTA Committees.

Industrial stakeholders signaled that they saw this as do-or-die provision and a red line, while other stakeholders held equally passionate concerns regarding the impact of export provisions on EU ambition. The main avenues of discussion center on the relationship between export competitiveness and CBAM-coupled declining free allocation, as well as the legality of export provisions under WTO. Several legal opinions were issued by reputable law firms on the WTO legality of different provisions.

This paper is intended to review the policy options available and analyze them, as well as provide ERCST's own view on the way forward. With the French EU Presidency pushing for an early outcome, and the CBAM being central to the Fit for 55 package, it is hoped that this paper will provide views that will facilitate the policy decision making process.

2. Why Exports Matter: The Export-Related Leakage Channel

2.1 Understanding the Concept of Export-Related Leakage

Carbon leakage is an accepted concept that has been a subject of discussion since the introduction of the EU ETS in 2005. Both in EU, as well as general literature, carbon leakage has been central to addressing concerns that emerged from asymmetrical climate change policies, especially carbon prices.

Carbon leakage can be defined as an increase in GHG emissions in foreign jurisdictions induced by domestic climate change policies. The driver is the relocation of production from jurisdictions that have stringent climate change policies to other jurisdictions that have less stringent, or possibly very limited, climate change policies. Carbon leakage is a consequence of a loss of competitiveness due to additional costs, and the costs imposed by climate change policies are one of the components that impacts competitiveness. The clearest example of such

policies is carbon pricing through a cap-and-trade system or a carbon tax. However, other climate policies may also add costs to production, impact competitiveness, and result in carbon leakage.

Carbon leakage can occur through three channels : i) the relocation of existing production to jurisdictions where costs resulting from climate policies are lower; ii) the decision to make investments in productive capacity in jurisdictions with lower carbon costs, including both new investments and additional capital for existing facilities; and iii) an increase in emissions as a result of loss of competitiveness in export markets, where products with a lower carbon content, from jurisdictions with more stringent climate regulation, cannot compete in global markets, and are replaced by more carbon intensive products from jurisdictions that have less stringent carbon constraints.¹

In the export case, it must be remembered that many products that constitute significant EU exports are commodities, such as aluminum, and they are traded globally in intensely competitive markets. As such, the ability to pass through costs on the global market is limited. This makes it challenging to compete with products that do not have any carbon costs to internalize.

As will be shown below, many EU industries are very export-oriented, not only through a single product, but often through entire value chains. Loss of competitiveness in one segment can thus lead to impacts that extend well beyond that single product to a whole value chain, and not only for production for export.

Carbon leakage was initially not a significant issue in the EU ETS, as there was limited auctioning of allowances, with most of the allowances being allocated for free on a grandfathered basis. As the auctioning percentage increased, the risk of carbon leakage was addressed through the trio of free allocation, compensation (at Member State discretion) for indirect costs of carbon embedded in electricity, and linking to international carbon markets for Kyoto Protocol units.

These measures were meant to address direct and indirect costs, and in principle addressed all three types of carbon leakage described above. Over time, however, the international order in terms of emissions and economic power around the globe has drastically changed. At the same time the linear reduction factor (LRF) under the EU ETS has increased leading to a decrease in the amount of allowances available for free allocation. Taken together, these factors have resulted in an increasingly vocal chorus from EU institutions and some stakeholders demanding the phase out of free allocation.

This has led to the introduction of a proposal for a CBAM, a concept that was largely disliked and rejected in the EU prior to 2019, when it was put forward by the incoming President of the European Commission. The CBAM proposal, as currently formulated by the EC in its proposal of 14 July 2021 is expected to address carbon leakage caused by relocation of production and possibly new investments. The other avenue outlined above, that of exports, is totally absent.

This paper is intended to discuss the reality of carbon leakage resulting from lack of competitiveness on international carbon markets, as well as ways and means on how to address this issue.

¹ A fourth cause of leakage – increased fossil fuel use abroad as domestic measures drive down demand and price – is not relevant to the CBAM discussion and is not considered here.

2.2 Impact of Carbon Costs on Competitiveness and Carbon Leakage

The impact of carbon pricing on competitiveness, and the resulting carbon leakage, has been an issue of debate since the EU ETS was first introduced in 2005. Industry claims of a potentially strong impact have been contradicted by both EU institutions and most stakeholders in civil society. Studies have pointed to a significant surplus of EUAs accumulated by various sectors due to overallocation of free allowances in the first three EU ETS trading periods, and very limited, if any, evidence of carbon leakage.

As one recent assessment concluded, the “results of this literature tell us that to date there is no evidence of the EU ETS having had widespread negative or positive effects on the competitiveness of regulated firms, nor is there evidence of significant carbon leakage” (Verde, 2020). It must be pointed out that most studies have focused on the first and second trading period of the EU ETS, however, and that any studies drawing on more recent data have not factored in EUA prices that are even close to current levels, which far exceed the ranges commonly expected only some years ago.

The fact is that carbon leakage in terms of changes in production and investment induced by climate policy costs is not easy to demonstrate. This was especially valid during a period of extremely low EUA demand resulting in correspondingly low carbon prices following the financial crisis, coupled with a rigid EU ETS design that resulted in a total lack of flexibility on the supply side. The link to international carbon markets under the Kyoto Protocol added to this imbalance.

Decisions to allocate production to different facilities around the world, as well as asset allocation by management when it comes to investments, includes consideration of a variety of factors in which the impact of carbon costs is only one of many. Identifying specific cases is not impossible, but would involve access to commercially sensitive data, which is rarely available.

Given the preoccupation with the CBAM and the lack of provisions to address the potential carbon leakage resulting from the impact of the EU ETS on EU exports, there has also been an increasing debate on the materiality of exports in the CBAM covered sectors. Ex-ante literature has shown higher leakage rates if exports are not addressed. In fact, Branger & Quirion (2014) see addressing exports as “[one of] the most efficient features [...] to reduce the leakage ratio” (Abstract).² From a purely climate-related perspective, including exports into Border Carbon Adjustments (BCA) reduces global emissions, compared to a BCA considering only imports.³ In line with this, the Commission’s Impact Assessment finds that the Commission proposal, which does not address exports, would be associated with a 6.8% export market loss.⁴

In this context, several questions merit examining for the CBAM-covered sectors, including:

- Exports as a percentage of total EU production;
- Absolute value of exports;

² Frédéric Branger and Philippe Quirion, Would border carbon adjustments prevent carbon leakage and heavy industry competitiveness losses? Insights from a meta-analysis of recent economic studies, *Ecological Economics*, Vol. 99 (2014), pp. 29-39, <https://doi.org/10.1016/j.ecolecon.2013.12.010>

³ Stéphanie Monjon and Philippe Quirion, A border adjustment for the EU ETS: reconciling WTO rules and capacity to tackle carbon leakage, *Climate Policy*, Vol. 11, Issue 5 (2011), pp. 1212-1225, <https://doi.org/10.1080/14693062.2011.601907>.

⁴ European Commission, Impact Assessment Report, SWD(2021) 643 final, Part 1/2, Figure 15, pp. 65-66

- Impact of export competitiveness on the domestic EU market;
- Destination for export of EU products covered by CBAM;
- Competition in the respective markets;
- Carbon intensity of EU products vs. foreign competition.

ERCST has surveyed several sectors and concluded that exports are material in terms of their share of total EU production in that sector, and that by not addressing exports there is a high likelihood of carbon leakage because of the displacement of EU exports.

Eurostat data on EU exports of proposed CBAM production and sectoral production value for 2018 painted the following picture in terms of the share of EU exports relative to production value:

Sector	EU27 products covered by CBAM exported to non-EU27 countries (Euro) ⁽ⁱ⁾	Sector production value (million Euro) ⁽ⁱⁱ⁾	Share of EU27 exports of CBAM products, relative to production value (2018), in per cent
Fertilizers	2.968.442.352	20.670	14%
Cement	995.993.943	17.709	6%
Iron and steel	45.306.429.730	210.321	22%
Aluminum	8.968.505.098	50.625	18%

Table 1: Share of EU27 exports of CBAM products to sector-level production value, 2018

Notes: (i) for each sector EU27 exports include those products put forward for inclusion in CBAM as per Annex I of the European Commission July 2021 proposal; (ii) sector-level production value cover NACE codes ‘C2015 - Manufacture of fertilisers and nitrogen compounds’, ‘C2351 - Manufacture of cement’, ‘C241 - Manufacture of basic iron and steel and of ferro-alloys’, ‘C242 - Manufacture of tubes, pipes, hollow profiles and related fittings, of steel’, ‘C243 - Manufacture of other products of first processing of steel’, and ‘C2442 - Aluminium production’

Sources: Based on Eurostat ‘Annual detailed enterprise statistics for industry (NACE Rev. 2, B-E’ and ‘EU trade since 1988 by HS2,4,6 and CN8’ datasets.

In the fertilizer sector, for instance, exports represent about 14% of total EU production, but in some of the largest installations, they can represent closer to 50%. Based on Eurostat data, this translates to an absolute value of about 3 billion Euros in 2018 (in the case of Yara about 38% was sold outside the EEA. This 38% is an average, with some factories much above it).

For this sector, the main export countries are Brazil, the United States, Ukraine, the UK and China, where EU producers compete with producers from the United States, Canada, Russia and North Africa. For these markets, Figure 1 below shows the carbon intensity of different global producers, many of which are competitors to EU producers in export markets. The figure shows that EU products measure favorably against their main competitors in terms of carbon intensity.

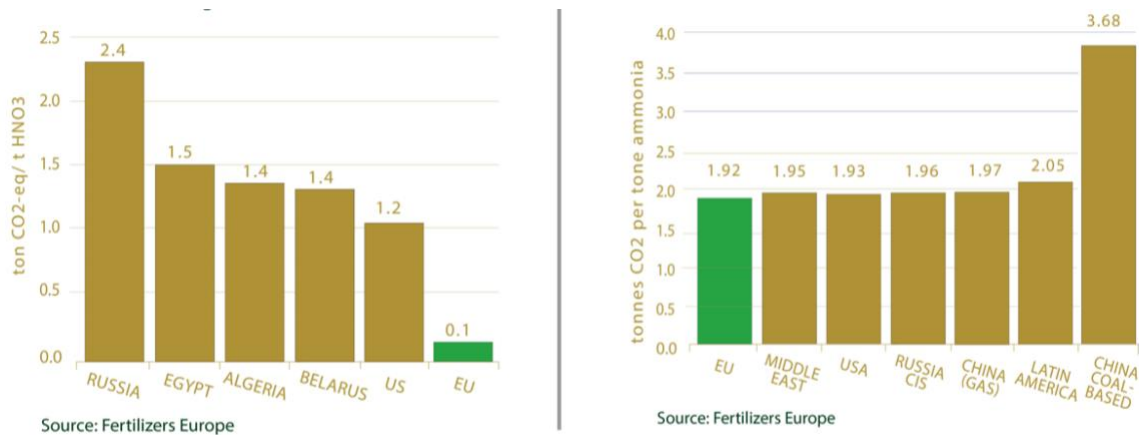


Figure 1: Carbon intensity of nitric acid (left) and ammonia (right) for selected global producers

With respect to aluminum EU27 exports to non-EU 27 countries, these represented about 18% of EU27 production value in 2018 (Table 1). The same share is even higher when production in and exports from EFTA countries are also taken into account: aluminum exports from EU27/EFTA to non-EU/EFTA countries, represented about 30% of EU27/EFTA production in 2019⁵. In terms of absolute value, EU27 exports of CBAM aluminium products to non-EU 27 countries represented close to 9 billion Euros in both 2018 and 2019, and close to 7.5 billion Euros in 2020, and were mainly destined to the UK, Switzerland, the United States, China, Turkey, Mexico, Canada, and Japan. The main competition in these markets comes from China, Russia, the Middle East, and the Republic of Korea. The regional average of emissions is shown in Figure 2 below, which again shows EU products comparing favorably with most external competitors.

Average emissions falling, but total still rising

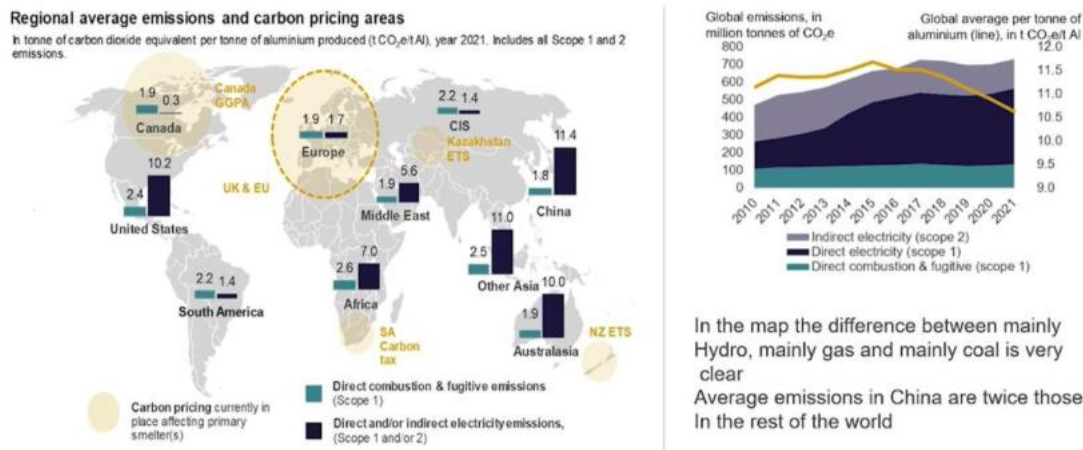


Figure 2: Carbon pricing areas and regional average emissions (left) and global emissions (right) from aluminium production. Source: European Aluminium

⁵ See figure 13, p25 in Agora Industry (2022), Getting the Transition to CBAM Right: Finding solutions to key implementation questions, https://static.agora-energiawende.de/fileadmin/Projekte/2021/2021_09_IND_Climate_Trade_CBAM_1A-EW_250_CBAM_WEB.pdf

This can be seen as a very cursory overview of the importance of exports for the EU economy and where the EU stands if the KPI is carbon intensity. In sum, the questions posed at the outset of this section can be answered affirmatively: yes, exports matter; yes, the EU compares favorably to many other jurisdictions at the global level in terms of average carbon intensity; and yes, failure to address the impact of carbon costs on EU products exported to global markets incurs a high likelihood of carbon leakage. A precise analysis can only be done on a case-by-case basis, with respect to products and installations.

2.3 Avoiding Unintended Outcomes

There are a number of issues that need to be considered when discussing carbon leakage in relation to exports. While they may be seen as falling in different buckets, they have been raised by stakeholders as serious concerns and therefore need to be addressed.

As discussed above, carbon leakage as a result of exports is not part of the currently envisioned solution – the proposed CBAM – that will replace the current free allocation for direct emissions, which has so far reduced the risk of carbon leakage through exports.

Depending on circumstances and context, however, providing a solution to export-related leakage under the CBAM, such as an export rebate, may in itself lead to a theoretical risk of increasing the amount of global emissions that needs to be balanced in terms of probability and outcome against the risk of not offering a solution for the issue of exports. There are many scenarios that can be envisaged, some probable, some possible, some very complex and unlikely. The following example illustrates some of these scenarios that have been articulated. In one possible scenario, EU exports of a particular product could be more carbon intensive than their competition in international markets. In such a scenario, should they receive an export rebate, they may displace products that are less carbon intensive, potentially increasing overall global emissions. Setting the CBAM at benchmark will significantly alleviate that risk. A further twist to this scenario would be if these exports are, at the same time, competing with products that are exposed to carbon costs in their country of origin, even if these costs are lower than costs borne under the EU ETS. In such a scenario, rebating EU exports could result in leakage from those other jurisdictions.

There are further concerns that can be articulated, and some will be seen as regarding the impact on the carbon price signal. An export rebate could be seen as reducing the incentive for industry to decarbonize production dedicated to exports. An unintended consequence could then be EU producers dedicating “dirty facilities” to exports. This would be a mirror image of the concerns expressed by EU producers who fear “resource shuffling”, whereby only clean products are exported to the EU to avoid the CBAM, while less clean products continue to be produced in other countries for domestic consumption or for export to countries other than the EU. In the EU context, this is a possible, but improbable scenario, as there are many other policies in the EU that will provide incentives for decarbonization, and it is unrealistic that EU production would be split into separate domestic and export streams, with different production assemblies and technologies for each. Reputational risk will also make such approach improbable.

One issue that we will come back to is whether or not a CBAM that also addresses exports is WTO-compliant. As the next section underlines, that can only be definitively ascertained following its introduction, and even then only after it is formally assessed in the WTO dispute settlement mechanism. That uncertainty not only applies to an export provision in the CBAM, but to the CBAM concept itself.

3. The Legal Implications of Addressing Exports

3.1 Options for an Export Adjustment

Legal concerns have featured prominently in the political debate about solutions to avoid export-related leakage. Traditional border tax adjustments (BTAs) on excise taxes, value-added taxes, and other indirect taxes have addressed competitiveness impacts for goods exported to foreign markets arising from the pass-through of the tax burden in the price of goods by rebating the tax upon export. Countries importing such goods, in turn, will typically apply their own excise, value-added, and other indirect taxes when these goods enter their market or reach the consumer. This system of import and export adjustments helps achieve the destination principle, according to which goods should be taxed where they are consumed.⁶

It bears emphasizing, however, that this system of import and export adjustments, and the attendant legal doctrine and jurisprudence, has evolved around such “traditional” fiscal instruments, including excise taxes, value added taxes or other indirect taxes. New instruments such as an ETS or CBAM have seen little to no relevant state practice or case law, an important caveat that limits the predictive strength of the legal analysis presented in this section.

Because climate policies around the world are more heterogeneous, and a majority of countries do not yet impose a price on carbon, the destination principle is not yet seen as a viable foundation for trade-related climate policy measures. Jurisdictions remitting a domestic carbon price on goods that leave their territory cannot expect that product to be subject to a carbon price in the destination country where that good is eventually consumed. What is more, the price borne by goods for carbon emitted during production is not as easily identifiable, nor passed through to the same extent in the price of those goods, as excise and value-added taxes are.⁷

Concerns have been raised about the legality of export adjustments for domestic carbon prices in general, and in particular about introducing such adjustments under the EU ETS and CBAM. Unlike for its counterpart applied to imports, this risk does not center around discrimination of foreign goods entering the territory of the applying country. Rather, legal concerns primarily relate to whether the export adjustment affords its goods an unfair advantage in global markets. Specifically, the question that arises is whether an export rebate amounts to a subsidy which, if found to be contingent on export performance, would be a prohibited subsidy under the law of the World Trade Organization (WTO).

Determining whether exemption from, or remission of, carbon costs for European exports constitutes a prohibited subsidy involves a complex multi-stage test under relevant provisions in the General Agreement on Tariffs and Trade (GATT) as well as the more specific – and thus principally relevant – Agreement on Subsidies and Countervailing Measures (ASCM).

Conceptually, three alternative approaches to export adjustments have been discussed in the context of the CBAM, involving either an exemption from otherwise applicable obligations for emissions embodied in exported goods, or remission (also sometimes referred to as a “rebate”)

⁶ GATT, Report by the Working Party on Border Tax Adjustments, L/3464 (BISD/18S/97) of 20 November 1970, https://www.wto.org/gatt_docs/English/SULPDF/90840088.pdf, p. 3 et seq.

⁷ Karsten Neuhoff and Robert A. Ritz, ‘Carbon Cost Pass-Through in Industrial Sectors’, Cambridge Working Paper in Economics 1988 (Cambridge: University of Cambridge, 2019), <https://doi.org/10.17863/CAM.46544>.

of the value of allowances paid or due to cover emissions embodied in exported goods. This remission could be either in the form of a monetary rebate or through non-monetary means, such as allocation of free allowances to cover the emissions embodied in exported goods. Several variants are conceivable for each approach and boundaries can be fluid, depending on the details of implementation as well as additional measures that may accompany the export adjustment.

For each of these conceptual approaches, we therefore define a representative option that is based on one or more proposals recently introduced into the EU policy debate:

- **Option 1 (“Exemption”)**: Free allocation for installations producing goods covered by the CBAM – regardless of whether these are intended for domestic consumption or exports – is *not* subject to an accelerated phase out. Additionally, importers and producers of domestically consumed CBAM-covered goods are subject to a new obligation to surrender “CBAM certificates” based on carbon content, whereas domestic production that is exported is *exempt* from this obligation;
- **Option 2 (“Monetary Adjustment”)**: Exporters receive a monetary *rebate* calculated on the basis of the existing product benchmarks or – for those producing below the benchmark carbon intensity level, which reflects the average carbon intensity of the 10% most efficient producers – on actual emissions embodied in exported goods, using the average closing cost of EUAs during the calendar week in which the relevant goods were exported;
- **Option 3 (“Non-monetary Adjustment”)**: Exporters are granted *adjustment allowances* to cover the declared emissions associated with goods exported to countries without a comparable limit or price on carbon emissions, and those certificates are netted against the obligation of exporters to surrender EUAs above the benchmark for covered activities.

All the foregoing options are export-specific, meaning that they favor exported goods relative to goods consumed in the domestic market. Aside from these export-specific options, policy makers could instead retain the current system of free allocation of EUAs for all installations producing goods covered by the CBAM, regardless of whether these goods are consumed domestically or in third countries. Although not an export adjustment in the strict sense, this option would still address the risk of export-related leakage and loss of market share in global markets, and is therefore discussed as “Option 4” in Section 4.1 below.

Section 4 below provides an assessment of these different approaches to an export adjustment and continued free allocation, as well as additional or complementary policy options to counteract export-related leakage.

3.2 Substantive Aspects

Determining whether any of these approaches to export-related leakage constitute a prohibited subsidy in violation of international trade law can follow two distinct pathways (see Figure 3 below). Each pathway is described in further detail below.

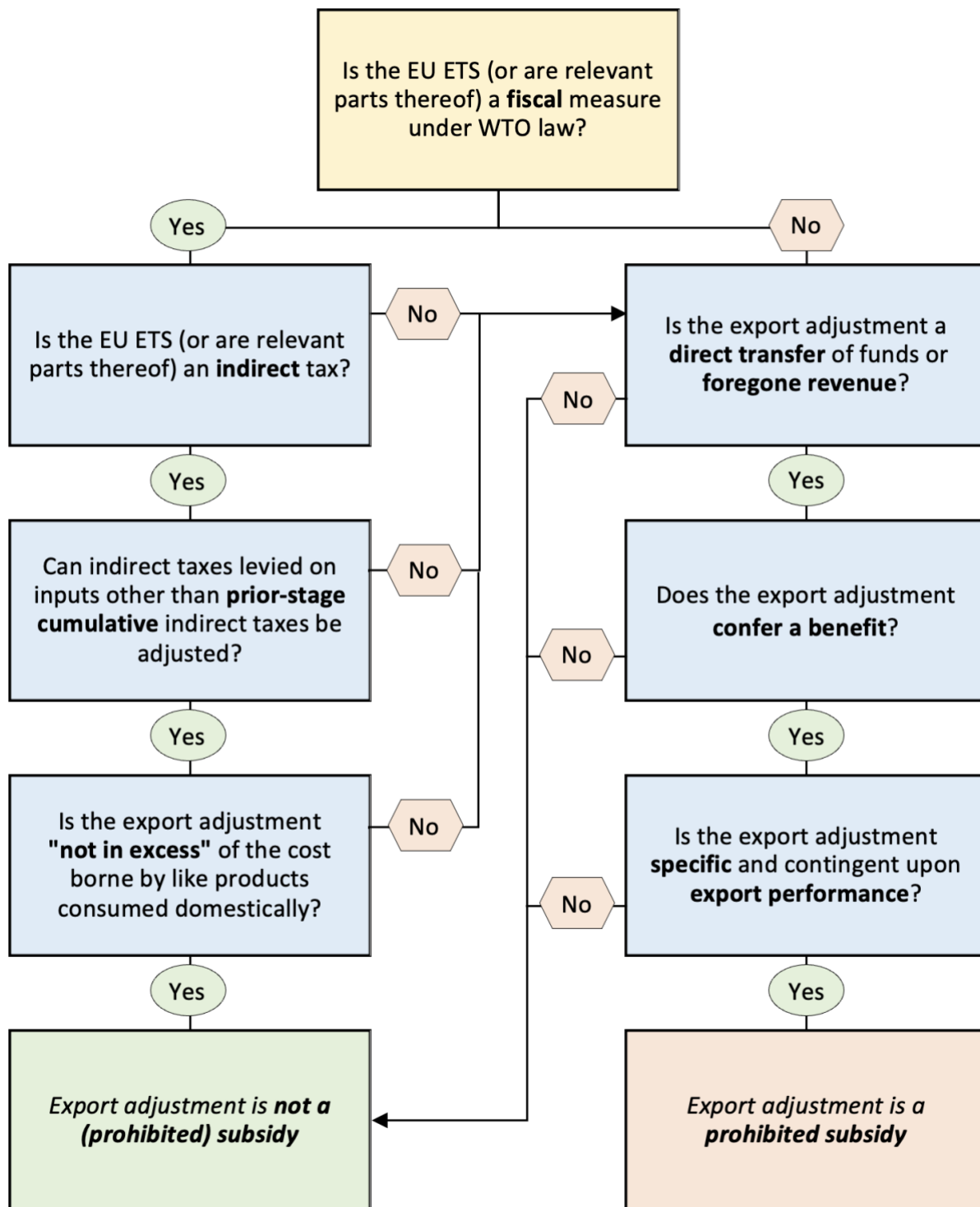


Figure 3: Checklist for the determination of a prohibited subsidy

3.2.1 First Pathway: Subsidy Precluded under Exclusion Clause

The first pathway relies on an exclusion clause contained both in the GATT and in the ASCM that precludes the existence of a subsidy, and with that also the attendant risk of violating subsidy disciplines. Footnote 1 of the ASCM states that “the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the

remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy.” This wording closely follows the language contained in an interpretative note accompanying Article XVI of the GATT. Each element of this exclusion clause is described and briefly discussed in the following overview:

- **“Duties or taxes”**: Because emitters covered by the EU ETS are required to purchase allowances from the state and obtain no direct benefits in return, some commentators and stakeholders have argued that the EU ETS constitutes a tax.⁸ This view contrasts with the jurisprudence of the European Court of Justice (ECJ) in Case C-366/10, however, which determined that the EU ETS, despite partial auctioning of allowances, cannot “be regarded as constituting a customs duty, tax, fee or charge.”⁹ At the same time, in its Manual on Government Deficit and Debt, the European Statistical Office instructs that “payments related to emission allowances ... should be recorded as other taxes on production.”¹⁰ Either way, it bears noting that neither ECJ decisions nor EU administrative practice bind the WTO Dispute Settlement Body (DSB).
- **“borne by the ... product”**: Based on this wording and long-standing state practice with border tax adjustments, the exclusion clause is generally held to apply only to indirect taxes imposed on products, where the tax incidence rests with the final consumer. Footnote 58 of the ASCM defines indirect taxes as “all taxes other than direct taxes and import charges.” Again, some commentators have argued that the EU ETS is an indirect tax whose cost is passed through by covered producers in the price of their products. Empirical evidence of cost pass-through has been mixed to date, however, although the transition to full auctioning of allowances and introduction of the CBAM is expected to increase pass-through rates.
- **Taxes occultes**: A further problem relates to the fact that the EU ETS does not impose a payment obligation on products as such, but on greenhouse gases emitted during the preceding production process. Annex II of the ASCM clarifies that prior-stage cumulative indirect taxes levied on inputs consumed in the production of the exported product – including, as per Footnote 61, “inputs physically incorporated, energy, fuels and oil used in the production process” – can be adjusted at the border. Some commentators have argued that only cumulative taxes, and not every kind of input tax, can be adjusted.¹¹ Also, while a “direct and inseverable link” exists between fuel consumption and related emissions, it is less clear that process emissions would be considered an indirect tax on inputs.
- **“not in excess”**: Because the cost “borne by the like product when destined for domestic consumption” is the variable market price of allowances purchased at auction or in the secondary market, typically in multiple individual transactions, an export rebate will require meticulous record keeping, a robust definition of the relevant time for determining the value of EUAs (e.g. the average closing price on the day of export), and some form of averaging of costs. Given these complexities, a residual risk may exist of discrepancies in the calculation and potential overcompensation of exporters in individual cases. Partial remission can reduce this risk.

⁸ Javier de Cendra, Can emissions trading schemes be coupled with border tax adjustments? An analysis vis-à-vis WTO law, *Review of European Community & International Environmental Law*, Vol. 15, Issue 2 (2006), p. 135 f.; Roland Ismer und Karsten Neuhoff, Border tax adjustment: a feasible way to support stringent emission trading, *European Journal of Law and Economics*, Vol. 24 (2007), p. 144; Joost Pauwelyn, Carbon leakage measures and border tax adjustments under WTO law, in Geert Van Calster und Denise Prévost (eds.), *Research Handbook on Environment, Health and the WTO* (Cheltenham: Edward Elgar, 2013), p. 486 et seq.

⁹ ECJ, Judgment of 21 December 2011, Case C-366/10, *Air Transport Association of America v Secretary of State for Energy and Climate Change*, ECLI:EU:C:2011:864, paras. 140-145.

¹⁰ European Statistical Office (Eurostat), *Manual on Government Deficit and Debt: Implementation of ESA 2010* (Luxembourg: Publications Office of the European Union, 2019), para. 6.5.2.7.

¹¹ Citing a statement by a U.S. official about the negotiating history of the ASCM: Matthew Genasci, ‘Border Tax Adjustments and Emissions Trading: The Implications of International Trade Law for Policy Design’, *Carbon & Climate Law Review*, Vol. 33, Issue 1 (2008), <https://doi.org/10.21552/CCLR/2008/1/30>, p. 30.

As the foregoing overview has shown, ascertaining whether an export rebate would benefit from the exclusion clause in Footnote 1 of the ASCM and the interpretative note accompanying Article XVI of the GATT involves interpreting several indeterminate or contested provisions for which doctrine and case law offer limited clarity, and also entail administrative complexities. In sum, this pathway can be based on reasonable arguments, although it remains subject to legal uncertainty.

3.2.2 Second Pathway: Positive Finding of Subsidy

Even if an export rebate is found not to meet the conditions set out in the exclusion clause, it will not automatically be considered a subsidy. For that to be the case, it would have to first meet the criteria of Article 1.1 of the ASCM, which positively defines a subsidy as “a financial contribution by a government” through which a “a benefit is ... conferred.” This is the second pathway visualized in Figure 1 above.

- **“Financial contribution”**: Article 1.1(a)(1) clarifies that a financial contribution occurs, *inter alia*, where (i) a government practice involves a direct or potential transfer of funds, (ii) government revenue that is otherwise due is foregone or not collected, or (iii) goods or services are provided below market rates. All three options for addressing export-related leakage identified earlier could fall under these definitions: an exemption from obligations under the EU ETS (Option 1) could constitute foregone revenue otherwise due; remission of costs associated with the purchase of EUAs (Option 2) could likewise constitute foregone revenue or a direct transfer of funds; and free allocation of EUAs (Option 3) could constitute foregone revenue or provision of a good or service.¹²

In this context, proponents of export rebates have drawn on the arguments of the European Commission (EC) in the U.S. Department of Commerce investigation into countervailing duties on the import of forged steel fluid end blocks from Germany and Italy, where the EC argued that “free allowances are not ‘otherwise due’ as they form an inherent component of the ETS” and that, thus, “the government has not given up its entitlement to collect revenue since there never was such entitlement by the government in the first place.”¹³

In the same case, the EC further argued that free allowances cannot “be seen as any other form of financial contribution, because they do not involve any transfer of funds of any type, nor do they involve any provision of goods or services,”¹⁴ as evidenced by the fact that free allowances never enter as an asset in the EU or national budgetary accounts. Drawing on this line of argument, some commentators have argued that, viewed holistically, an export rebate merely “calibrates the regulatory obligation and lessens the net regulatory burden imposed under” the integrated regime created by the EU ETS.¹⁵

¹² It bears noting, however, that the legal classification of emission allowances under international trade rules is a matter of debate, see James Munro, *Emissions Trading Schemes under International Economic Law* (Oxford: Oxford University Press, 2018), Chs.2 and 3.

¹³ European Commission, Anti-Subsidy Investigation Concerning Imports of Fluid End Blocks from, *inter alia*, Italy (Ref. C-475-841): Submission by the European Commission, 14 September 2020, available from <https://access.trade.gov>, p. 3.

¹⁴ European Commission, Anti-Subsidy Investigation Concerning Imports of Fluid End Blocks from, *inter alia*, Italy (Ref. C-475-841): Comments by the European Commission before preliminary determination, 8 May 2020, available from <https://access.trade.gov>, p. 7.

¹⁵ Hervé Jouanjean u.a., WTO Consistency of “Export Adjustments” in the Context of the EU Emissions Trading System (incorporating a Carbon Border Adjustment Mechanism) (Brussels: AEGIS Europe, June 2021), <https://static1.squarespace.com/static/5537b2f6e4b0e49a1e30c01c/t/61e591f6ee4baf0f9903d9ad/164243506398>

- **“a benefit ... conferred”**: If an export rebate were found to be a financial contribution, the next step would involve determining whether it confers a benefit on domestic producers, a test that generally involves assessing whether the financial contribution has improved the market position of the beneficiary relative to what it would have been absent that contribution. In the aforementioned investigation, the EC argued that current free allocation practice confers no benefit because it forms “an integral part” of a single system that has to be seen in its entirety rather than being “cut ... into pieces and parts” and taken “out of context in order to make a biased assessment.”¹⁶ Free allocation, this argument goes, merely diminishes what remains a net burden for domestic producers.

Although the foregoing overview traces a viable pathway to argue that an export rebate under the CBAM does not constitute a subsidy under the ASCM or GATT, it also evidences the uncertainties and multiple decision points that remain in any legal determination, which in turn could be leveraged by any petitioner in a judicial challenge. That legal risks remain is underscored by the fact that the U.S. Department of Commerce ultimately rejected the arguments submitted by the European Commission in the aforementioned investigation and determined that free allocation constituted a countervailable subsidy.¹⁷

In the event that the EU has to justify an export rebate in a dispute, it would have to navigate these uncertainties and carefully balance its defense, given that several of the arguments listed above are mutually exclusive or inconsistent. If the dispute results in a finding that the export rebate constitutes a subsidy contingent on export, the EU could invoke the general exceptions of Article XX of the GATT by arguing that the export rebate serves to avoid a net increase in global emissions as outlined in Section 2.2, although the applicability of that provision under the ASCM is a matter of long-standing debate.¹⁸

3.3 Procedural Aspects

As shown in the previous section, any export solution will involve some risk that the EU will be found in breach of WTO law. It is important to be clear about the process that could lead to that result, and what it would imply. Perhaps most obviously, to be found illegal, the CBAM would have to be taken to **WTO dispute settlement** by a complaining country. Assuming that happens, the WTO dispute settlement panel would have to rule that some aspects of the measure are illegal under WTO law, and if there is a subsequent appeal, the WTO Appellate Body would have to uphold that ruling. If that were to occur, one of the EU’s options would be to bring the measure into compliance which, if it does not prove to be to the complainant’s satisfaction, could lead to yet more complaints and appeals. This chain of events can take many years; the U.S. complaint against EU Airbus subsidies took 15 years to finally resolve.¹⁹ After a finding that WTO law has been breached, compliance is not the only option. When the U.S. and Canada

[5/AEGIS+Europe++Exports+Adjustments+-+WTO+Legal+Analysis+-+KS+and+NCTM+-+Confidential+28+June+2021.pdf](#), p. 8.

¹⁶ European Commission, *supra* note 7, p. 1-2.

¹⁷ Department of Commerce, International Trade Administration, Forged Steel Fluid End Blocks From the Federal Republic of Germany and Italy: Final Affirmative Countervailing Duty Determination, C-428-848, Federal Register, Vol. 85, No. 239 (11 December 2020), pp. 80011 and 80022. It bears noting, however, that the determination of the Department of Commerce is not dispositive of how the WTO would determine the case.

¹⁸ For an overview, see Christopher Tran, “Using GATT Art XX to Justify Climate Change Measures in Claims Under the WTO Agreements”, *Environmental and Planning Law Journal*, Vol. 27 (2010), p. 346. As noted in Section 2.3, moreover, an export rebate could lead to an emissions increase in individual cases.

¹⁹ See https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds316_e.htm.

won rulings against the EU's ban on hormone-treated beef imports, the EU chose not to amend the offending measures, but rather to face retaliatory tariffs from the complainants.²⁰ As an additional twist, the appellate procedure of the WTO is not currently functioning; since 2019, the U.S. has blocked appointments of Appellate Body members and now there are no cases to hear. Technically, the EU could appeal any Panel ruling into the legal void – this has been done many times since 2019. But the EU probably would not do this – it has been the champion of an alternative to the appeals procedure, the Multi-Party Interim Appeal Arbitration Arrangement (MPIA), and although several of trade partners prospectively affected by the CBAM are not party to that arrangement, it would likely respect that process if an appeal were to be filed before the MPIA.

Alternatively, complainants might choose not to seek restitution through the WTO, but rather through **national trade remedy law**. WTO law allows this as an alternative to WTO proceedings, setting out the rules that would apply. A finding of subsidy under national trade remedy law would allow countries to impose countervailing duties (CVDs) on the products. This is typically a quicker procedure, and it is widely seen as less friendly to foreign producers. Also, it is a procedure that is frequently used; between 2008 and 2020, the Global Trade Alert database recorded over 750 countervailing measures that it coded “red”, meaning that these almost certainly discriminate against foreign commercial interests.²¹ A finding of subsidy under the applicable rules, however, needs to establish not only that a subsidy exists, but also that there is injury and causation. Finding injury might be difficult, given that an export adjustment simply gives back to exporters what the ETS has already charged them. As such, it is hard to see how a CBAM export measure would result in injury, that is, have demonstrable effects on the volume of trade or the prices received by domestic producers. That said, as mentioned earlier, the U.S. recently found some elements of free allocation under the ETS to be a countervailable subsidy to certain goods.²²

While national trade remedies can be initiated through a petition by affected industries, the decision to initiate legal proceedings before the WTO is inherently political, and embedded in a complex web of intermingled interests and diplomatic priorities. Trade partners are more likely to hesitate before entering a lengthy and uncertain confrontation – not least given the unclear status of the WTO dispute settlement system going forward – if the EU engages actively and offers technical and financial support as part of its outreach strategy.

4. Assessment of Options

As noted above in Section 3.1, three basic options have been proposed to address the problem of exports under the CBAM. Additionally, calls have been made to simply not ramp down free allocation for both domestic goods and exports on an accelerated timetable for CBAM-covered sectors, or that it be reduced on a much slower timetable, to allow EU producers more time to

²⁰ See https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds26_e.htm and https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds48_e.htm.

²¹ This number includes not only the imposition of countervailing duties, but also the initiation of investigations. See www.globaltradealert.org.

²² US International Trade Administration. (2020). *Forged Steel Fluid End Blocks from the Federal Republic of Germany: Final Affirmative Countervailing Duty Determination*. <https://www.federalregister.gov/documents/2020/12/11/2020-27335/forged-steel-fluid-end-blocks-from-the-federal-republic-of-germany-final-affirmative-countervailing>.

lower their emissions and their costs, and reduce their exposure to leakage. This could be considered a fourth option, though it is not an export-specific approach.

The four proposals are summarized below. This is followed by an assessment of a few policy options that have been proposed to complement them, and of the basic design choices that are available.

4.1 Assessing the Policy Options

Option 1: Exemption. This option involves retaining high levels of free allocation for CBAM-covered sectors as a protection against loss of export markets. A carbon price signal is transmitted to producers by means of a requirement to acquire CBAM certificates based on carbon content, and these are required of both imports and domestically produced goods. They are not, however, required for exported goods; those are exempt.

This would involve an ex-post reporting of exports and issuance of certificates. The existing regimes for emissions reporting and for issuance of free allowances could be used with little modification.

Option 2: Monetary rebate. In the same way that indirect taxes such as VAT are levied domestically and then refunded at the point of export, this proposal would see rebates triggered by exported goods, to relieve the burden of carbon pricing.

The rebate would have to take into account the level of free allocation granted to the sector in question, refunding or crediting only the *effective* carbon price paid or due. The mechanics of payment could be either a cash liability created at the point of export, or credits against EUAs due for domestic production.

Option 3: Non-monetary rebate. This approach starts from the fact that free allocation of EUAs is slated to decline over time, with the current Commission proposal having them reduced to zero by 2036. CBAM protection would rise over the same time period, to replace free allocation as protection against leakage. But, since the CBAM does not protect exports, this approach would maintain free allocation at high levels (e.g., at current levels) just for those goods that are exported. One way to implement this option would be issuance of adjustment allowances that can be traded for EUAs due for domestic production. Caution is needed with this approach if the continued free allocation does not diminish in line with the shrinking emissions cap under the EU ETS; in that case, this option would in effect raise the cap on free allowances, by issuing free allowances for exports separate from those issued for domestic production.

Option 4: Extended timeline for phase out of free allocation. This option would see the proposed 10-year phase out of free allocation, and consequent ramp-up of CBAM, extended, or back-loaded, for all CBAM-covered sectors. A number of dynamics suggest that the risk of leakage via exports might be lower toward the end of that 10-year period: progress in decarbonizing the EU's electricity grids, should the CBAM eventually cover indirect emissions from electricity use; increasing action on industrial decarbonization and carbon pricing in trading partners; and falling costs of decarbonization as a result of technological innovation, learning by doing and economies of scale.

Other things being equal, however, an extended timeline approach would make it more challenging for the EU to attain the ambitious overall targets set out in the Fit for 55 package.

4.2 Complementary Policy Options

Alongside the basic approaches discussed above, there have been proposals for various policy complements. These include non-application of the rebate/refund/credit in the case of export to high-ambition countries; ongoing monitoring to determine whether the policy needs to continue; and parallel measures to reduce the costs of decarbonization.

Non-application of export solutions to high-ambition countries: Under this option, EU exporters would not send unadjusted goods to markets where a high carbon price exists, because doing so would be risk creating leakage risk for other countries. As such, some have suggested that rebates/refunds/crediting should not be applied to exports that have high-ambition countries as their destination. While it might sound reasonable, this approach also give rise to challenges. First, it could only work if the destination country had similar policies to the EU. It would need a carbon price close enough to the EU's that EU and foreign goods would compete with an equal carbon cost burden. Second, the destination country would need a CBAM similar to the EU's so that goods shipped unadjusted to third countries could not simply be re-exported to the high ambition country. But if it did have a CBAM, it would be pointless for the EU to not apply export solutions to goods sent to that destination in the first place. Carbon pricing could be removed at the EU border on export, and applied at the trading partner's border by means of its CBAM - an ideal outcome that respected the destination principle of taxation.

Ongoing monitoring for leakage risk: It has been suggested that any export solution should feature a review system that periodically reaffirmed that there would be leakage risk if that solution was not employed. Such a system might be combined with the feature discussed above such that low-risk countries would merit non-application of the export rebate, refund or crediting. It is worth highlighting that in some cases the calculations might indicate that there is risk of loss of market share to a specific country, but that the country has cleaner products than the EU exports. The result would not in fact be leakage, but rather an improvement in global emissions.

Parallel measures to reduce the costs of decarbonization: The risk of leakage drops across the board—including in export markets—as the cost of decarbonization drops for EU producers. As such, there is a strong case for government assistance in the process, whether through R&D support, support for demonstration projects, support for capital investment, government procurement, contracts for difference, etc. By itself, such investment will not be decisive in preventing leakage; for one thing its results only materialize over the longer term. But it is an important part of the overall roadmap.

4.3 Assessment

Aside from the legal questions that are treated in depth above, what can we say about the various options for an export solution?

Plan, or no plan? The most fundamental question is a basic choice: to implement the CBAM with a fleshed-out proposal for dealing with exports, or to do so without such a mechanism, building in review and monitoring processes that retain the option for such a mechanism in the future, or lengthening the timeline for phase out of free allocation to allow the risk of leakage to drop.

Considering the scale of impacts that we expect from a CBAM without an export mechanism, including impacts on leakage, on competitiveness in global markets, and on the integrity of

domestic markets, it seems at best ill-advised that we would proceed with a CBAM that does not contain, from the outset, a mechanism for addressing the challenge of exports. A longer timeline might also reduce those undesirable impacts, but could jeopardize the achievement of the 55% reduction target by 2030, and would give less certainty to covered firms making investment decisions with multi-decadal climate implications.

Benchmarking: Options 1 – 3 involve granting free allocation or rebates to covered sectors based on carbon content. A basic question is whether to base those on actual carbon content of exports, or on some benchmark value. There is considerable advantage in using the EU ETS benchmarks rather than actual data as the basis. For one thing, rebating or allocating based on actual data removes all carbon tax from the exported products, meaning no incentives to decarbonize. The benchmark still retains incentives, since full compensation will only be given to those high performers that meet or beat the benchmark emissions intensity. For another thing, using actual data creates a potential risk for a sort of “internal resource shuffling:” whereby the dirtiest production is routed to export, and the cleanest retained for domestic consumption. Benchmarking eliminates this risk.

Producers that beat the benchmark, being less GHG-intense, should probably not be compensated at the benchmark level. This would involve paying them more in monetary rebates than they spent on allowances, or issuing them more allowances than they purchased. In the domestic market context these are good incentives to decarbonize but, as an export adjustment, overcompensation is a trade law risk. To avoid that risk, those producers would have to be compensated for actual outlays, which would be less than the amount they would get in free allocation were they to sell domestically. At least initially, before free allocation begins to decline, this would create an incentive that would skew toward domestic production and away from exports.

The benchmark option in the long run suffers from the problem that the benchmark will be falling over time as EU industry decarbonizes, meaning the level of protection will also fall. But the fact that EU industry has decarbonized does not mean that its costs of production are lower than high-carbon competitors – in fact likely the opposite. So protection will fall even as it is more urgently needed.

A variation on benchmarking would see the rebates or allocation granted at only some percentage of benchmark levels. This would increase incentives to decarbonize. It would also, however, increase risk of leakage and loss of export markets. And at least initially it might create unintended incentives against exporting, since producers would be granted more under the domestic benchmark.

Allowances or cash? The non-monetary rebate and exemption options have the advantage of relative administrative ease since they could work through the existing regime for free allocation. They also avoid the possibility of over-allocation in the conversion process from allowances purchased to a cash or credit compensation; it would be difficult to determine the appropriate compensation price for EUAs given that their price shifts, and that there is no way to associate specific purchases of EUAs to specific shipments of exports. A non-monetary rebate also has the advantage that it can be designed to ensure that it does not breach the cap if the CBAM credits granted are converted into EUAs from under the cap.

But the non-monetary rebate option has the disadvantage of being more overtly discriminatory in the eyes of trade partners. The basic inequality of treatment of exports and non-exports in this regime seems certain to create friction, in contrast to the adjustment of a tax-like charge which, while it might also be controversial, is a more familiar and accepted mechanism.

The non-monetary rebate and the exemption options face a challenge in the longer term. As the cap is decreased, a high level of issued free allowances will take up an increasing percentage of the cap, and might even eventually exceed it.

Impacting the carbon price: Similarly to the current system of free allocation, options 1 – 3 all effectively reduce the carbon cost faced by EU producers for the exported share of production. One of the rationales for declining free allocation is to force innovation and decarbonizing investment, because covered firms will experience a higher carbon cost. To the extent that export adjustments delay or negate that dynamic, they can impede the desired outcome. Export-oriented facilities in particular would feel less need to decarbonize than would facilities with more output destined for domestic consumers. As noted above, however, those approaches that use the benchmark as a basis for free allocation or rebate still retain the carbon price signal and thereby create an incentive for decarbonization, functioning in the same vein as the EU ETS.

Complementary policies: To briefly assess the three complementary policies discussed above:

- Any of the first three options could make provisions for non-application to high-ambitious countries, but ultimately such a mechanism would not achieve much, and would be difficult to create and implement.
- An ongoing review mechanism could help assess the effectiveness and fairness of the mechanism. But if one of the criteria for effectiveness were leakage prevention, policymakers should be expect recommendations that may not favor domestic industry, given that loss of market share to some low-carbon foreign firms might not actually result in leakage.
- Parallel government support to lower the cost of decarbonization in the covered sectors, such as innovation fund spending, will be crucial to helping lower the risk of leakage in the long run. This is true for leakage in both domestic and foreign markets.

5. Conclusions and recommendations

As the analysis in this report has shown, exports from the EU to third countries matter in the context of emissions leakage and its avoidance through the proposed CBAM. European exports constitute a substantial share of overall production in affected sectors, and their continued viability has complex ramifications along the entire value chain of European producers, not limited to the volumes that are produced; in terms of carbon intensity, EC exports, in many instances, compare favorably to foreign production.²³ Because of that it is highly likely (and not unrealistic) that foreign production replacing EU exports may result in carbon leakage.

A loss of market share by European producers in global markets could therefore increase the average carbon intensity of goods consumed outside the EU. Failure to address a loss of market share of European producers in global markets could thus contribute to emissions leakage and threaten to counteract the objective of global decarbonization.

As currently proposed, however, the CBAM would only focus on averting emissions leakage related to loss of domestic market share. Neither it – nor any other measure in the EU “Fit for 55” package of legislative proposals – explicitly seeks to limit or reverse emissions leakage related to substitution of European exports in global markets, despite the impact assessment

²³ European Commission, Commission Staff Working Document: Impact Assessment Report Accompanying the document Proposal for a regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, Brussels, 14 July 2021, SWD(2021) 643 final, p. 47.

carried out for the CBAM showing that an absence of any such safeguard will result in a considerably decline in European exports.²⁴

Instead, the EC has opted for a deliberately slow phase-out of free allocation of EUAs over the course of a decade for all EU producers affected by the CBAM, regardless of whether production is destined for domestic consumption or export to third countries. Retaining sufficient amounts of free allocation for all producers is undoubtedly an effective solution to the threat of leakage, including export-related leakage. Moreover, it avoids conferring leakage safeguards specifically for exports, thereby minimizing the risk of being found a prohibited subsidy contingent on export performance.

Still, as the draft amendments currently discussed in the European Parliament underscore, there is considerable political pressure to accelerate the phase-out of free allocation under the EU ETS, which is seen as incompatible with the ambitious decarbonization targets of EU climate policy. For exported goods, moreover, it merely delays the onset of leakage risks in global markets, without however solving the underlying problem that the CBAM as currently proposed will only be effective to counteract leakage in the domestic EU market.

Given the importance of exports for both the economic viability of EU producers and the environmental objectives of the EU climate policy, this gap in the scope of the proposed CBAM regulation has understandably risen to the forefront of the policy debate, becoming a “red line” issue for key constituencies and threatening to undermine political support for this indispensable component of the European Green Deal.

Ironically, the same institutions that in the past objected to the very notion of a CBAM due to concerns about its WTO legality and that now champion the measure are again resisting inclusion – due to legal concerns – of an important policy provision: an export adjustment to counteract export-related leakage.

But just as any of the currently tabled CBAM proposals (be they from the European Commission, the EU Parliament and soon the EU Council) are — far from “guaranteed to comply” with WTO law, so also would an export adjustment not necessarily represent a violation of WTO law.

It must also be recalled that there have been significant developments in policy instruments, especially in areas such as climate change, which simply are not reflected in the current rules of the WTO and its case law. An ETS was simply not in the cards when past case law was adopted, and new case law will need to emerge to recognize this reality, just as is the case in e-commerce, the Internet, and other such fields. It seems illogical to recognize a climate emergency and take extraordinary measures to address it, while at the same time providing no recognition of this emergency in the interpretation of trade law for policy measures that did not exist when said trade law was first being developed.

Similarly, the political and societal environment in which any WTO or national body will examine the CBAM as well as any export provisions, has changed dramatically in the direction of a climate emergency and the acceptance of extraordinary measures not seen as acceptable up until very recently.

²⁴ European Commission, Commission Staff Working Document: Impact Assessment Report Accompanying the document Proposal for a regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, Brussels, 14 July 2021, SWD(2021) 643 final, p. 65-66.

The fact of the matter is that neither the CBAM itself nor an export adjustment can be implemented entirely free of legal risk, all the more so since there has been no directly relevant case law to offer greater legal clarity. As the legal analysis in this report has shown, however, reasonable arguments can be put forward – and indeed have been put forward by the EC with regard to free allocation under the EU ETS – to demonstrate that an export adjustment need not amount to a prohibited export subsidy. In other words, the legality of both the CBAM and an export adjustment may remain fundamentally uncertain, yet a reasonably strong legal case can be made for both. Ultimately, it will be a matter of political courage to balance risks and benefits and make the right decision.

As so often, moreover, policy design can significantly strengthen the legal case of a contested policy option. In the case of an export adjustment, a robust policy design would ensure that producers of exported goods continue to face an incentive to decarbonize their production, and it would also have to avoid overcompensating those producers with an exemption or remission that exceeds the cost faced by producers of domestically consumed goods. Different solutions have been proposed so far to address leakage related to exported goods, ranging from exemptions to export rebates in the form of monetary reimbursement or free allowances for exported goods, with multiple variants for each option.

Based on our assessment of proposals and discussions with a diverse group of stakeholders, as well as the foregoing analysis of the economic, political, legal, and environmental implications of an export adjustment, we believe that an export adjustment can be designed in a way that limits legal risks while opening the door to a policy option that is likely to prove pivotal for public and stakeholder support of the European Green Deal. Our analysis suggests that an export adjustment that leverages the dynamic incentive and existing administrative and regulatory structures of the system for free allocation of EUAs appears to offer the most favorable balance of environmental effectiveness, practical feasibility, and limited legal risk. However, it must also be acknowledged that the complexity of the whole approach will continue to increase, from what was initially seen as the appeal of carbon pricing, which was its simplicity, clarity and transparency.

What is needed is to evaluate the potential and hypothetical risk of WTO entanglement against the risk of export-related leakage and decreased industrial activity in the EU, with attendant consequences for EU prosperity. If the latter risk is deemed to be politically acceptable, then the gradual phase-out of free allowances as proposed by the EC, with an additional twist of backloading the decline of free allocation towards the end of the 2036 deadline, would be a fallback option in the view of ERCST.

However, while there is a hypothetical WTO or national retaliation risk, the way forward preferred by ERCST would be the option as described above in Box 1.

What our discussions with stakeholders in the process of elaborating this report have also clearly affirmed is the categorical importance ascribed to the treatment of exports by key constituencies. If the CBAM and, by extension, the pace and scale of industrial decarbonization in the EU are to find durable political footing, the legislation implementing it needs to identify a solution for export-related leakage from the outset and cannot afford deferring such determination to an uncertain future.

Ultimately, the decision on whether or not to include an export adjustment under the CBAM is a political – given the uncertainty of a potential challenge and/or its outcome – and not a legal

one, reflecting the political priorities of the EU and a careful calibration of potential risks and benefits.

Incentive-aligned Export Adjustment Certificates

- European producers of goods covered by the CBAM are required to annually declare the embodied emissions and volumes of covered goods exported to third countries during the preceding calendar year.
- Based on the existing product benchmarks used for free allocation of EUAs, these producers are issued non-tradable and non-transferable export adjustment certificates corresponding to the average emissions intensity of the 10% least carbon-intensive producers in the EU, or – for those producers meeting or exceeding the benchmark level – the actual emissions embodied in exported goods, prorated to reflect the gradually declining share of free allocation obtained by the producers.
- For the next compliance period, producers holding export adjustment certificates can exchange these for EUAs used towards compliance with their obligation to surrender EUAs for emissions from covered activities. The EUA will have to come from under the cap to ensure that the cap is not compromised.
- By providing an export adjustment based on product benchmarks, this approach retains a dynamic incentive for exporters to reduce the carbon intensity of production, avoiding an incentive to shift activities from production of goods for domestic consumption to goods destined for export.
- Also, by providing only partial remission of emission costs, a benchmark-based approach lowers the likelihood of overcompensating exported products relative to the compliance burden faced by products consumed domestically. Similarly, by being operationalized through export adjustment certificates rather than a financial reimbursement, it avoids the need to determine a process and timeline to establish the monetary value of EUAs (such as the weekly average closing price), which could introduce arbitrariness and again contribute to overcompensation. Finally, unlike EUAs or a financial reimbursement, export adjustment certificates do not constitute a direct transfer of funds or of tradable goods or services. Instead, they provide a partial remission of the costs borne by exported goods to comply with obligations under the EU ETS, and may thus be less likely to be considered a financial

Box 1: Incentive-aligned export adjustment

Moving ahead with the CBAM without a solution to an important potential carbon leakage channel such as leakage from exports is at best unwise, at worst potentially a political miscalculation that will be difficult and expensive to fix *post facto*.

Evolving circumstances around the globe prompted a dramatic change in how Brussels viewed the relative risks and benefits of a CBAM, and the same principle should also guide the decision about an export adjustment: if, as our analysis and stakeholder discussions suggest, an export adjustment under the CBAM is a both a political and environmental imperative, a residual risk under international trade rules conceived more than a generation ago in a very different context and currently overseen by a WTO regime in need of being adapted, should not prevent the EU from taking the necessary measures to address one of the greatest challenges of present and future generations.