



Guide to the European Carbon Border Adjustment Mechanism



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1 Introduction and Overview

1.1 About this Guide

An important element of the comprehensive suite of climate and environmental policies advanced under the "European Green Deal" (EGD) is the Carbon Border Adjustment Mechanism (CBAM). Representing a type of policy instrument more commonly known as border carbon adjustments (BCAs), the CBAM is intended to provide a safeguard against emissions leakage: the relocation of carbon-intensive economic activities from the European Union (EU) to third countries due to the effect of EU climate policy ambition on production and investment decisions. Deployment of some form of BCA to address emissions leakage had been periodically discussed in the EU for over a decade, but never gained political traction until 2019, when Ursula von der Leyen – at the time still a candidate for President of the European Commission (EC) – included a BCA in her "Political Guidelines for the next European Commission 2019-2024" (von der Leyen, 2019). Following a rapid sequence of preparatory steps (see Chapter 2.2), the EC released a legislative proposal in July 2021 as part of its "Fit for 55" package of initiatives to operationalize the enhanced climate ambition under the EGD.

Throughout this period, ERCST has accompanied the policy discussion on the CBAM with a series of activities, including analytical reports, briefings, and policy recommendations, as well as extensive engagement with relevant stakeholders inside and beyond the EU. As the earliest analysis by ERCST already underscored, a CBAM is a highly complex instrument, and each design element offers numerous options for implementation that entail a variety of trade-offs for the environmental and economic benefits of the measure as well as its technical, legal and political viability (Marcu et al., 2020). Any CBAM design has to contend with considerable heterogeneity across relevant sectors, moreover, in terms of domestic and international production and trading patterns, the drivers of carbon cost and emissions leakage, and the pathways towards deep decarbonization (Marcu et al., 2021b). For affected stakeholders and civil society at large, understanding the evolution, rationale, and technical design of the CBAM – including its strengths and weaknesses – is thus no easy task; that is where this detailed guide comes in.

With its legislative proposal of July 2021 for an EU regulation operationalizing the CBAM, the EC has provided the clearest indication of a potential CBAM design and timeline of implementation. Still, that first important step in the process will now undergo deliberation in the legislative procedure, and is likely to see a number of changes before it can be finally adopted and enter into force. Indeed, early reactions from both domestic and foreign stakeholders have highlighted a number of concerns and considerable divergences of views and priorities, illustrating the high stakes as the CBAM continues to take shape. Building on ERCST's extensive record of analytical work and stakeholder engagement, this continuously updated guide will accompany the evolution of the CBAM, tracing the relevant policy debate within the EU and at the international level, and dissecting all critical design and implementation choices. For each of these choices, it describes the relevant design element, tracks the political discussion and views of key stakeholders in the political and legislative process, and discusses the merits of the chosen design based on, *inter alia*, a set of evaluation criteria, including environmental and competitiveness benefits as well as administrative, legal, and political viability.



1.2 Approach and Structure

For its approach, this guide follows in the tradition of a legal commentary, offering a systematically structured description and detailed analysis of the contents of a legislative act. It traces the textual evolution of the most important CBAM design elements, reflecting the *travaux préparatoires*, the views and positions of different stakeholders as expressed during consultations and other formal processes, and any relevant case law, administrative practice, and academic literature. As such, it aims to provide a comprehensive and accessible reference to the CBAM that enables readers to obtain, in one coherent document, an overview of each CBAM design feature, along with information on the history, political context, and rationale of these features that can help guide the interpretation of underlying provisions. Finally, it offers a critical analysis of each design element drawing on relevant primary and secondary sources.

Building on the methodology used in previous ERCST reports (Marcu et al., 2020; Marcu et al., 2021a), the guide does not approach the CBAM on a provision by provision basis, but instead dissects the CBAM into eleven design elements, reflecting key choices of the legislator that will determine the final shape and implementation of the instrument. These are:

- Objectives and Principles: The guiding rationale and justification of the CBAM;
- Policy Mechanism: The type of policy instrument used to implement the CBAM;
- Coverage of Trade Flows: The trade flows covered by the CBAM;
- Geographic Scope: The trade partners of the EU that are affected by the CBAM;
- Sectoral Scope: The economic sectors whose products are affected by the CBAM;
- Emissions Scope: The emissions direct and indirect covered by the CBAM;
- **Determination of Embedded Emissions:** The approaches used to calculate the carbon embodied in covered products;
- **Calculation of the Adjustment:** The approaches used to calculate the CBAM and consider policies imposed in the country of origin;
- Use of Revenue: The designated use of revenue collected with the CBAM;
- Administration and Governance: The administrative structures and allocation of implementation powers;
- Timeline and Sequence: The time horizon for implementation and phases;

For each element, the analysis uses five assessment criteria to identify the strengths and weaknesses of the design choices reflected in the CBAM design. These are:

- Environmental benefit: Does the option prevent leakage and reduce global GHGs?
- Competitiveness benefit: Does the option prevent erosion of EU industrial competitiveness?
- Technical and administrative feasibility: Is the option implementable in practice?
- Legal feasibility: Does the option align with WTO law, EU law, and other areas of law?
- Political and diplomatic feasibility: Will the option create political and diplomatic backlash?



2 Context and Evolution of the CBAM

2.1 Political and Economic Context

Historically, a border carbon adjustment (BCA) has not been an approach favoured by the EU. The risk of carbon leakage from the EU ETS has therefore been addressed through free allocation, and most jurisdictions around the world with emissions trading systems (ETS) have adopted the same or a similar approach.

The EU has adopted the ambitious targets of reaching climate neutrality by 2050 and cutting greenhouse gas emission by 55% compared to 1990 by 2030 as a key milestone. On a global scale, these commitments have highlighted an asymmetry of climate efforts around the world. This has led to increased interest, and urgency, in examining options to address the risk of carbon leakage and competitiveness arising from such asymmetry, as well as measures to address them.

At the same time, the increasingly stringent EU mitigation targets, and the European Commission's (EC) action plan - the European Green Deal¹ (EGD) - have resulted in growing scarcity and dramatically higher prices of EU emission allowances (EUAs). Coupled with predictions that the EU ETS would run out of free allocation before the end of the decade, and a desire to nudge other Parties to the Paris Agreement to raise the ambition of their commitments, this has led to a change of political heart.

The notion of a CBAM in the EU was first introduced by the then incoming EC President, Ursula van der Leyen, in her Political Guidelines of 16 July 2019. About two years later, on 14 July 2021, the EC published its CBAM legislative proposal, as part of the 'Fit for 55' package, a comprehensive series of proposals that will underpin the EU's increased 2030 climate ambition. Besides CBAM, the package contains proposals to revise the entire EU 2030 climate and energy framework, including strengthening the EU emissions trading system (ETS) and extending to the maritime sector, a proposed new emissions trading system for road transport and buildings, revised legislation on renewable energy, energy efficiency, effort sharing, land use and forestry, emission standards for new cars and vans, and the Energy Taxation Directive.

Even if it can be argued that most of the legislative proposals under the 'Fit for 55 package' are updates of existing legislation, such a massive legislative review has no precedent in the EU climate and energy history. It is meant to change European society in a period when the public debate on policy matters is stunted due to the response that governments have given to the COVID outbreak.

In this context, the proposed changes to the EU ETS, which the CBAM seeks to adjust for, are of particular importance. In the next decade, the ETS will be increasingly asked to tackle emissions by the industrial sector. Its review will therefore have to reconcile the preservation of the EU industrial competitiveness with the enhancement of the climate ambitions of the EU Bloc.

2.2 History of the European Debate

The notion of a CBAM was first introduced by the incoming President of the European Commission (EC), Ursula van der Leyen, in her Political Guidelines of 16 July 2019 as follows: "To complement this work,

¹ European Commission 2019, Communication on the European Green Deal (See more)



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and to ensure our companies can compete on a level playing field, I will introduce a Carbon Border Tax to avoid carbon leakage. This should be fully compliant with World Trade Organization rules. It will start with a number of selected sectors and be gradually extended."

The EC's work on a CBAM proposal was endorsed by the European Council in December 2019. Since then, all three EU institutions have included CBAM revenues in light of financing the EU's recovery plan, and the July 2020 European Council conclusions included reference to the potential entry into operation of the CBAM by the start of 2023.

The EC commenced its impact assessment and stakeholder consultation procedure, with the Inception Impact Assessment published in March 2020, a public consultation which concluded in October 2020, followed by a proposal for a CBAM regulation in July 2021. As the policy and political process continued, increasingly more was known about the scope and design of the mechanism the EC's was leaning towards. For instance, it became increasingly clear with time that the European Commission would propose a 'notional' ETS with a separate pool of allowances for importers as part of the CBAM design².

In parallel, CBAM has been a topic that attracted the attention of the European Parliament (EP) from an early stage: the March 2021 EP resolution on an EU CBAM³ provided some indication on where the EP stood on the CBAM, even before the EC put forward its proposal that formal launches the negotiations among the European Commission, Parliament and Council.

In the run up to the publication of the July 2021 EC proposal, the debate in Brussels gradually evolved from a more conceptual one to one focused on more practical considerations concerning its implementation and methodological aspects, with some industry stakeholders expressing reluctance to a possible coverage of their sectors in the mechanism. Some of the issues subject to debate by stakeholders included:

- Whether CBAM could co-exist with existing carbon leakage measures (e.g. allocation of free allowances under the EU ETS) while not constituting double-protection for domestic industry. Some industry stakeholders were cautioning against moving too quickly from a tested approach to addressing carbon leakage to a new approach, fearing that such a move would be irreversible in case CBAM would not prove to be effective.
- Whether CBAM should cover imports only, or also exports, a point of particular importance for export-oriented EU sectors for which a limited trade flow coverage may exacerbate leakage risks facing their products exported to foreign markets. Overall, coverage of imports only has been the preferred option throughout the political discussion of the CBAM, although stakeholders and the European Parliament signaled varied levels of concern about the need to assess impacts on, and explore options for, exports.
- The type of emissions covered by CBAM, and whether to include Scope 1 emissions only, or also reflect Scope 2 emissions from off-site electricity/heat/steam and even Scope 3 emissions. While the fact that EU producers face pass through of carbon price on electricity/heat would argue for Scope 2 coverage, this could disadvantage EU producers as the carbon cost pass-through they face is a result of price formation in the wholesale electricity market and not linked to Scope 2

² The European Commission initially considered four policy mechanism options for a CBAM design: 1) Import tax; 2) ETS extension; 3) Notional ETS with a separate pool of allowances; 4) Consumption tax (excise or VAT type).

³ European Parliament resolution of 10 March 2021 towards a WTO-compatible EU carbon border adjustment mechanism (2020/2043(INI))'. https://www.europarl.europa.eu/doceo/document/TA-9-2021-0071_EN.html



emissions per se. The inclusion of (part of) Scope 3 emissions from raw material inputs would protect vulnerable products further downstream whose carbon intensity is largely linked to raw material input(e.g. extruded products), but at the same time add administrative complexity.

2.3 International Reactions and Developments

Internationally, the most visible reactions to the EU's intention to introduce CBAM have come from those trade partners that would potentially be impacted by the measure the most or are in the direct EU neighborhood.

Both the Russian Federation and China, for instance, have been vocal in their opposition to the CBAM. The Chinese government voiced its concerns as early as 2019, saying that border carbon adjustments would damage international action to fight climate change. In June 2021, the Russian government noted that the planned measure may clash with the global trade rules and threaten the safety of energy supplies. In August 2021, BRICS countries issued the New Delhi Statement on Environment and "noted with grave concern the proposals for introducing trade barriers, such as unilateral carbon border adjustment, that are discriminatory" (BRICS, 2021, p. 2).

In the US, president Joe Biden had embraced during his election campaign the aim of imposing "carbon adjustment fees or quotas on carbon-intensive goods from countries that are failing to meet their climate and environmental obligations"; however, a more wary stance towards the EU's plan to introduce CBAM was subsequently taken, as it became increasingly clear that the CBAM proposal would only credit foreign carbon pricing measures, which are lacking in the US at the national level. Special Presidential Envoy for Climate John Kerry told the Financial Times in March 2021 that the tax adjustment should be a "last resort" and that it had "serious implications for economies, and for relationships, and trade."

These reactions allude to the CBAM being perceived by some trade partners as a measure to protect European industry rather than a climate action instrument.

Yet, at the same time as expressing their opposition in diplomatic circles, countries have been increasingly taking steps to introduce or expand carbon pricing domestically, and enhance climate targets along with industrial transformation. China, for example, launched in 2021 a national ETS for the electricity sector, with additional sectors (iron and steel, cement, and aluminum) likely to be added by 2025, while roadmaps for key sectors (iron & steel and non-ferrous metals) are being drafted that would aim to peak emissions by 2025 or earlier.

In this respect, the CBAM is part of the EU's climate diplomacy tools, already at work before the CBAM proposal was even issued. As more and more countries adopt climate policies and put in place measures to mitigate emissions from industry, they also start being faced with the issues of carbon leakage and competitiveness, which in turn makes them gradually more understanding of the EU's carbon border adjustment approach.

As the EU prepares to introduce CBAM, some jurisdictions are observing its example and are considering similar initiatives:



- Shortly after the EU CBAM proposal was issued, US Democratic lawmakers proposed a legislative bill on a border carbon adjustment starting in 2024 for the sectors of aluminium, cement, iron, steel, natural gas, petroleum and coal.
- Canada's government is exploring the introduction of a border carbon adjustment scheme, and launched consultations in August 2021 at the same time as releasing a paper that outlines key considerations (Canada Department of Finance, 2021).

Countries have also reacted to the EU's plans to establish the CBAM in the context of international fora.

In the World Trade Organisation (WTO), discussions on BCAs are still at a relatively initial stage. Different WTO bodies looked into the topic, while the EU was in the process of developing its notion of the CBAM through 2020 and 2021. The Council for Trade in Goods required further details on how a BCA would be implemented and the assurance that it would not be used as disguised barriers to trade. The EU presented the Green Deal at the Committee on Trade and Environment and received questions on the design and implementation of the CBAM.

At a meeting of the WTO Committee on Market Access, WTO members raised a number of trade concerns, including the EU's planned CBAM. During this meeting, members were concerned about the consistency of a future CBAM with WTO rules and requested the EU to shed light on the status of the relevant legislation, as well as the sectors and products affected. Several members pointed out that this measure needs to be designed and implemented fairly, recognizing carbon pricing systems already in place in other countries (including at the sub-national level) and recalled the Paris Agreement's principle of 'common but differentiated responsibilities'. Similarly, some members criticized the EU's intention to use the CBAM as a new source of EU own revenue.

In March 2021, the WTO convened the inaugural meeting of a new "Trade and Environmental Sustainability" joint initiative group, which is expected to be a forum to discuss carbon border taxes. Over 50 WTO member countries have already expressed their interest in participating to identify goals and objectives related to trade and sustainable development through "structured discussions ... on actions and deliverables" in this area.

Export issues, political acceptability, equivalence of measures and calculation of adjustment value – are central to the discussion in the OECD Round Table on Sustainable Development.

On the sidelines of the July 2021 UNFCCC ministerial, the EU CBAM was mentioned in the context of response measures, with the discussion to potentially continue at the COP in Glasgow.

The UN Conference on Trade and Development (UNCTAD) published a report immediately after the EU CBAM proposal, noting that the EU mechanism could help avoid "carbon leakage", but its impact on climate change would be limited – only a 0.1% drop in global CO2 emissions – with higher trade costs for developing countries (UNCTAD, 2021).

IMF also appears on the map of key fora where carbon border adjustments can be discussed. In June 2021, an IMF climate staff note was published putting forward a proposal for an international carbon price floor among large emitters. "Reinforcing the Paris Agreement with an international carbon price floor (ICPF) could jump-start emissions reductions through substantive policy action, while circumventing emerging pressure for border carbon adjustments", according to the paper (IMF, 2021).



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Carbon pricing is gaining traction around the world, with 45 national jurisdictions across the world having already implemented, or in the process of implementing, carbon pricing measures according to the World Bank's Carbon Pricing Dashboard. Against this backdrop, in June 2021, the G7 seven nations – the US, UK, Canada, France, Germany, Italy, and Japan – pledged cooperation on carbon pricing and carbon leakage. Subsequently, during a G20 Summit in July 2021, finance ministers collectively endorsed carbon pricing for the first time, describing the idea as one of a wide set of tools to tackle climate change. The issue of pricing carbon dioxide emissions has long divided G20 members, with the US in particular historically opposed.



3 Guide to CBAM Design Elements

3.1 Objectives and Principles

3.1.1 Summary

According to the objectives laid out in paragraph 4 of the European Commission proposal's recital, the CBAM would focus on the objective of preventing carbon leakage, as a necessary condition to reducing EU GHG emissions. Leakage occurs when the climate policies of one jurisdiction give rise to emissions increases in other jurisdictions, for example because firms in the implementing jurisdiction face higher costs of production than their competitors, and production shifts abroad.

Preventing leakage is an environmental objective; the CBAM would allow the carbon price to be felt by EU consumers and would motivate EU producers to invest in low-carbon technologies in the expectation of a level competitive playing field for their final products. An environmental objective is desirable, both because it comports well with WTO law, and because it may reduce conflicts with trading partners. To some extent, it also allows for an instrument that protects the competitiveness of EU producers, though that protection is weaker to the extent the firms involved are export-oriented and the measure does not address exports.

Relevant Provision	Content
	Recital
	1. General objectives Considering the problems described above, a CBAM has the overarching objective of addressing the risk of carbon leakage in order to fight climate change by reducing GHG emissions in the EU
Recital	 2. Specific Objectives The overarching objective of addressing climate change is further articulated in a number of specific objectives, namely:
	• Addressing the risk of carbon leakage under increased EU ambition, which would ensure that EU climate policies, as translated in the carbon price of the EU ETS, can be fully effective without resulting in increasing emissions abroad, which would undermine climate mitigation efforts. The applied carbon price reflects the polluter-pays-principle and supports the reduction of GHG emissions from industry through the internalisation of external costs from GHG emissions that is achieved by the carbon price;

3.1.2 Relevant Provisions



	 Addressing the issue of competitiveness which is the cause of carbon leakage; Contributing to the provision of a stable and secure policy framework for investments in low or zero carbon technologies; Ensuring that domestic production and imports are subject to similar level of carbon pricing; Encouraging producers in third countries who export to the EU to adopt low carbon technologies. Minimising the risk of the measure being circumvented, thus providing environmental integrity; 3 Ancillary effects
	The CBAM, as envisaged by the above-mentioned objectives, may also give rise to several secondary and ancillary positive effects. These refer to the relevance of the CBAM as a climate tool to push third countries to adopt more stringent climate measures, as well as to the possibility to obtain revenues from the introduction of the measure. Specifically the ancillary positive effects of the CBAM include:
	 Strengthening the joint climate action needed by all the Parties of the Paris Agreement to meet the goal of holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels; While not introduced with revenue raising as its purpose and it not playing a role in the design of the measure, the CBAM will raise revenue on GHG emissions at the border. This is acknowledged in the Interinstitutional agreement including the CBAM in the list of future own resources in the context of NextGenerationEU. The introduction of a CBAM would also incentivise key trading partners to consider the revenue generation dimension of carbon pricing policies.
	Scope
Art. 1	1. This Regulation establishes a carbon border adjustment mechanism (the 'CBAM') for addressing greenhouse gas emissions embedded in the goods referred to in Annex I, upon their importation into the customs territory of the Union, in order to prevent the risk of carbon leakage.

3.1.3 Evolution

Marcu et al. (2021a) list a number of potential objectives for a CBAM, including prevention of leakage, preservation of competitiveness for domestic firms, incentivizing increased climate ambition in partner countries, and raising revenue. The objectives of the CBAM have remained constant in their main thrust throughout the evolution of the instrument to date, focusing on just one of those objectives: preventing leakage.

Ursula von der Leyen, in her campaign platform for EU Presidency, promised a "Carbon Border Tax to avoid carbon leakage" (von der Leyen, 2019). Consistent with that, the EU Green Deal Communication argued the need for a CBAM in the event that differences in levels of climate ambition persist worldwide.





In that context, it describes the objective as "reduc[ing] the risk of carbon leakage" (European Commission, 2019).

The European Commission's Inception Impact Assessment for the CBAM lays out the foreseen objectives: "The main objective of the carbon border adjustment is fighting climate change by avoiding carbon leakage," and notes that the starting point for the exercise is the EU's increased climate ambition as expressed in the Fit for 55 package (European Commission, 2020b).

With the resolution adopted in March 2021 as part of its "Own Initiative", the European Parliament stressed objectives along the same lines, stating "unequivocally that a CBAM should be exclusively designed to advance climate objectives and not be misused as a tool to enhance protectionism," and that "the primary aim of the CBAM is environmental" (European Parliament, 2021).

The proposal for a regulation published by the European Commission in July 2021 starts from the same place: "a CBAM has the overarching objective of addressing the risk of carbon leakage in order to fight climate change by reducing GHG emissions in the EU and globally" (European Commission, 2021a). It further outlines a number of more specific objectives contained within the general objective, including preventing leakage, ensuring that imports and domestic production face the same carbon price, contributing to a stable platform for low-carbon investment, encouraging third-country producers to decarbonize, and minimizing the risk of the BCA's circumvention. Finally, it lists two "ancillary benefits" (impacts that are not specifically sought, but which will fortunately result from pursuit of the objectives): revenue generation, and strengthening international climate action.

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Prevention of leakage and enabling of climate ambition are major environmental benefits	Leakage is caused by competitive pressures as companies relocate due to competitive pressures. Leakage and competitiveness are two sides of the same coin, and they need to be looked at hand-in-hand. This is true in the domestic markets as well as in the export market.	Objectives and principles have no major implications for technical and administrative feasibility	The objective of leakage prevention is arguably the only one that stands a chance of passing a GATT Article XX test	The objective of leakage prevention is arguably the least controversial politically and diplomatically

3.1.4 Analysis

The European Union needs to explicitly cast the CBAM as a leakage prevention measure makes sense from a number of perspectives. Legally, for the CBAM to survive a challenge in the WTO, it would probably need to resort to the general exceptions set out in Article XX of the GATT, which would demand that the measure be purely environmental in its elaboration and implementation. As well, any of the other possible motivations for a CBAM—for example, protecting EU industry competitiveness, raising revenues,





compelling climate ambition in other countries—would elicit negative reactions from the international community.

From the perspective of environmental protection, preventing leakage is an enabler of climate ambition. It allows an increase in carbon pricing to EU consumers without the undercutting impact of cheaper noncarbon-priced foreign goods. For the most part, addressing competitiveness will ensure prevention of leakage. While the EC proposal clearly stated that competitive pressures are in no way only caused by carbon prices and climate mitigation measures; it did list protection of competitiveness was listed as an ancillary benefit of the CBAM. Preventing leakage and protecting competitiveness are not always aligned, however. It is noted below that even if the proposed CBAM achieved excellent leakage prevention on the import channel, it might still leave export-oriented firms vulnerable to loss of competitiveness (Evans et al., 2020), since it cannot legally protect their market share outside the EU.

Ultimately, the positive assessment rendered here is provisional. The environmental and competitiveness benefits of preventing leakage will accrue only to the extent that the final regime is effective at doing so.



3.2 Policy Mechanism

3.2.1 Summary

As proposed, the CBAM complements the EU ETS by creating a system of notional allowances, which are designated 'certificates.' These certificates originate from an uncapped pool, and their price mirrors the price of EU allowances based on the average closing price on the common auction platform during each calendar week. Declarants have to purchase and surrender a sufficient amount of certificates each year to cover the emissions associated with covered imports during the preceding calendar year. Certificates are not tradable and have limited validity and thus bankability, but competent authorities in the Member States will re-purchase up to a third of certificates acquired by a declarant during the previous year.

Aside from determining the ability to adjust for European exports, the choice of policy mechanism has limited implications for the environmental benefits of the CBAM, but important consequences for its administrative, legal, and political feasibility: designed to complement the EU ETS, it allows for easier passage through qualified majority voting, but also makes it more difficult to administer and increases the legal risk under any adjustment for exports. Also, despite the formal distinction between certificates and EU ETS allowances, risk hedging by declarants may impact market dynamics in the EU ETS. Article 1 of the proposed regulation clarifies that the CBAM complements the EU ETS, and Articles 20 to 23 outline the process through which CBAM certificates are issued and re-purchased, priced, surrendered, and cancelled.

Relevant	Content	
FIOVISION		
	Subject matter	
Art. 1	2. The CBAM complements the system established for greenhouse gas emission allowance	
	trading within the Union by Directive2003/87/EC by applying an equivalent set of rules to	
	imports into the customs territory of the Union of goods referred to in Article 2.	
	Definitions	
Art. 3	For the purposes of this Regulation, the following definitions apply: ()	
	(5) 'EU ETS' means the system for greenhouse gas emissions allowance trading within the Union	
	in respect of activities listed in Annex I to Directive 2003/87/EC other than aviation activities;	
	Sale of CBAM certificates	
Art 20	1. The competent authority of each Member State shall sell CBAM certificates to declarants	
Art. 20	authorised in that Member State at the price calculated in accordance with Article 21.	
	2. The competent authority shall ensure that each CBAM certificate is assigned a unique unit	
	identification code upon its creation and shall register the unique unit identification number, the	

3.2.2 Relevant Provisions



	price and date of sale of the certificate in the national registry in the account of the authorised declarant purchasing it.
	Price of CBAM certificates
	1. The Commission shall calculate the price of CBAM certificates as the average price of the closing prices of EU ETS allowances on the common auction platform in accordance with the procedures laid down in Commission Regulation (EU) No 1031/201026 for each calendar week.
Art. 21	For those calendar weeks in which there are no auctions scheduled on the common auction platform, the price of CBAM certificates shall be the average price of the closing prices of EU ETS allowances of the last week in which auctions on the common auction platform took place.
	2. This average price shall be published by the Commission on its website on the first working day of the following calendar week and shall be applied from the following working day to the first working day of the following calendar week.
	3. The Commission is empowered to adopt implementing acts to further define the methodology to calculate the average price of CBAM certificates and practical arrangements for the publication of the price. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).
	Surrender of CBAM certificates
	1. By 31 May of each year, the authorised declarant shall surrender a number of CBAM certificates to the competent authority that corresponds to the embedded emissions declared in accordance with Article 6(2)(c) and verified in accordance with Article 8 for the calendar year preceding the surrender.
Art. 22	2. For the purposes of paragraph 1, the authorised declarant shall ensure that the required number of CBAM certificates is available on its account in the national registry. In addition, the authorised declarant shall ensure that the number of CBAM certificates on its account in the national registry at the end of each quarter corresponds to at least 80 per cent of the embedded emissions, determined by reference to default values in accordance with the methods set out in Annex III, in all goods it has imported since the beginning of the calendar year.
	3. Where the competent authority finds that the number of CBAM certificates in the account of an authorised declarant is not in compliance with the obligations pursuant to paragraph 2, second sentence, that authority shall notify the adjustment and request that the authorised declarant surrenders the additional CBAM certificates within one month.
	4. The recipient of the notification referred to in paragraph 3 may lodge an appeal of the notification. The recipient of the notification shall be provided with information regarding the procedure to be followed in the event of an appeal.
	Re-purchase of CBAM certificates
Art. 23	1. The competent authority of each Member State shall, on request by a declarant authorised in that Member State, re-purchase the excess of CBAM certificates remaining on the account of the declarant in the national registry after the certificates have been surrendered in accordance with



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	Article 22. The request to re-purchase shall be submitted by 30 June of each year when CBAM
	certificates were surrendered.
	2. The number of certificates subject to re-purchase as referred to in paragraph 1 shall be limited
	to one third of the total CBAM certificates purchased by the authorised declarant during the
	previous calendar year.
	3. The re-purchase price for each CBAM certificate shall be the price paid by the authorised
	declarant for that certificate at the time of purchase.
	Cancellation of CBAM certificates
Δrt. 24	By 30 June of each year, the competent authority of each Member State shall cancel any CBAM
	certificates that were purchased during the year before the previous calendar year and that
	remained in the accounts in the national registry of the declarants authorised in that Member
	State.

3.2.3 Evolution

In the earliest mention of the plan to adopt a "Carbon Border Tax" in the July 2019 political guidelines of the incoming European Commission President (von der Leyen, 2019), the chosen terminology suggested that the policy mechanism would be a fiscal instrument, but the subsequent European Commission communication on the European Green Deal of December 2019 introduced the more agonistic term "Carbon Border Adjustment Mechanism" (European Commission, 2019). This term has remained in use since. In March 2020, the European Commission released a document accompanying the Inception Impact Assessment consultation in which it indicated that options for the type of policy instrument include "a carbon tax on selected products – both on imported and domestic products, a new carbon customs duty or tax on imports, or the extension of the EU ETS to imports" (European Commission, 2020a). The full consultation, launched in July 2020, mentioned a further option in its questionnaire: "[t]he obligation to purchase allowances from a specific pool outside the ETS dedicated to imports, which would mirror the ETS price" (European Commission, 2020b).

With the resolution adopted in March 2021 as part of its "Own Initiative", the European Parliament expressed its "opinion that importers should buy allowances from a separate pool of allowances to the EU ETS whose carbon price corresponds to that of the day of the transaction in the EU ETS", and rejected a fixed duty or tax on imports on the grounds that it would be "a less flexible tool to mirror the evolving price of the EU ETS" and that it could trigger the more onerous voting requirement of Article 192(2) of the Treaty on the Functioning of the European Union (TFEU) (European Parliament, 2021). The proposal for a regulation published by the European Commission in July 2021 states that the CBAM "complements" the EU ETS "by applying an equivalent set of rules" to imports of covered goods into the EU customs territory (European Commission, 2021a). The chosen policy mechanism thus reflects the option of a notional system of allowances introduced for the full consultation, and follows the recommendation of the European Parliament. In the recitals set out in the preamble of the proposal, the European Commission highlights that, in "order to preserve its effectiveness as a carbon leakage measure, the CBAM needs to reflect closely the EU ETS price."

3.2.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Aside from determining the ability to adjust for exports, the choice of policy mechanism has no major implications for environmental benefit	As a complement to the EU ETS rather than an internal tax or charge, the CBAM faces greater risk if its covers exports	Implementation as a complement to the EU TS is more complex than defining a fixed price	CBAM as a complement to the EU ETS is easier to pass than a tax	Policy mechanism has no major implications for political and diplomatic feasibility

Given that the CBAM is intended as an alternative to current measures addressing the risk of carbon leakage under the EU ETS, and in view of the role of the latter as a cornerstone of European climate policy, choice of a policy mechanism that complements the EU ETS was the favored option in the consultation preceding adoption of the legislative proposal (European Commission, 2020b). Still, despite being described as a complement to the EU ETS, the proposed CBAM presents many differences compared to the EU ETS, including in terms of the supply of CBAM certificates, the possibility to trade them, and their validity over time. While the EU ETS sets an absolute cap on the GHG emissions from the activities under its scope and allows tradability of allowances, the CBAM "should not establish quantitative limits to import, so as to ensure that trade flows are not restricted" (European Commission, 2021a). In the reasoning of the European Commission, the absence of a cap also necessitates precluding the ability to trade and carry forward CBAM certificates, as their price otherwise "would no longer reflect the evolution of the price in the EU ETS" (European Commission, 2021a). Further differences from the EU ETS include the application to imports of goods rather than to installations and a different compliance timeline to avoid a capacity shortfall of accredited verifiers. Still, the reliance on units that can be, albeit within limits, carried forward and sold again, coupled with the use of other design elements and administrative features familiar from the EU ETS – such as a registry – arguably suffice to consider the proposed CBAM distinct from a fiscal instrument with variable pricing.

Regarding the environmental and competitiveness benefits offered by the CBAM, there are few immediate differences between the various policy mechanisms considered by the European Commission. That said, the different options have widely divergent administrative, legal, and political implications, which in turn have repercussions for the environmental and competitiveness impacts. Notably, a major benefit of introducing the BCA as a measure related to the EU ETS rather than as a tax or other fiscal measure is that it can be based on Article 192(1) of the Treaty on the Functioning of the European Union (European Commission, 2021a), and hence only requires a qualified majority vote in the Council of the European Union. At the same time, while a measure related to the EU ETS may face less stringent voting requirements during the legislative process, it can increase the risk of legal challenges under international law: it is treated differently from a tax or charge under rules of the World Trade Organization (WTO), including the Agreement on Subsidies and Countervailing Measures (ASCM), and increases the risk that any adjustment applied to exports would be challenged as a prohibited subsidy (see below, Section 3.3). The choice of policy mechanism also has implications for revenue use: whereas revenue from a tax or charge would, by default, accrue to the Member States, and revenue from a customs duty would be



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shared between the EU and the Member States, the legislative proposal, in its explanatory memorandum, implies that CBAM revenue will be mostly assigned to the EU budget (European Commission, 2021a; see also below, Section 3.9). Administratively, implementing the CBAM as a complement to the EU ETS adds some complexity relative to a fiscal instrument due to the need to establish a registry, manage the sale and repurchase of certificates, and oversee the surrender and cancellation of certificates.

Finally, an important uncertainty raised by the chosen CBAM design are the potential interactions with the market for EU ETS allowances. Although EU ETS allowances and CBAM certificates are formally distinct, the link in prices between both is likely to result in strategic behavior – such as hedging positions – that affects demand and supply in the market for EU ETS allowances. Understanding and managing this link between the CBAM and the EU ETS may add a further layer of technical and administrative difficulty.

However, the choice of not allowing trading and the use of these certificates for hedging purposes, provides and uneasy signal in the choice between markets and regulation in the EU approach and preferences.



3.3 Coverage of Trade Flows

3.3.1 Summary

The proposed CBAM regulation covers only imports into the customs territory of the EU and makes no provision for exports from the EU. Despite stakeholder pressure to extend the CBAM to exports, the European Commission has instead opted to retain a gradually declining share of free allocation for installations in the EU ETS, regardless of whether their production is destined for domestic or foreign markets. With that approach, the proposed regulation avoids legal risks arising from favorable treatment conditional on export performance, but it also defers addressing potential impacts of decarbonization on European export industries. Coverage of imports offers the clearest environmental benefits but suffers some tradeoffs in terms of technical and administrative feasibility as well as political and diplomatic feasibility. Coverage of imports by the CBAM is specified throughout the proposed regulation, including in Article 1 on its subject matter, Article 2 on scope, Article 3 on definitions, and Article 4 on the importation of goods.

	3.3.2	Relevant	Provisions
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Relevant Provision	Content
	Subject matter
Art. 1	1. This Regulation establishes a carbon border adjustment mechanism (the 'CBAM') for addressing greenhouse gas emissions embedded in the goods referred to in Annex I, upon their importation into the customs territory of the Union, in order to prevent the risk of carbon
	2. The CBAM complements the system established for greenhouse gas emission allowance trading within the Union by Directive2003/87/EC by applying an equivalent set of rules to imports into the customs territory of the Union of goods referred to in Article 2.
	Scope
Art. 2	 This Regulation applies to goods as listed in Annex I, originating in a third country, when those goods, or processed products from those goods as resulting from the inward processing procedure referred to in Article 256 of Regulation (EU) No 952/2013 of the European Parliament and of the Council, are imported into the customs territory of the Union. This Regulation applies to the goods referred to in paragraph 1 where those goods are brought to the continental shelf or the exclusive economic zone of a Member State.
	3. By way of derogation from paragraphs 1 and 2, this Regulation does not apply to goods originating in countries and territories listed in Annex II, Section A.



	4. Imported goods shall be considered as originating in third countries in accordance with non- preferential rules of origin as defined in Article 59 of Regulation (EU) No 952/2013.
	Definitions
	For the purposes of this Regulation, the following definitions apply: ()
Art 3	(4) 'importation' means the release for free circulation provided for in Article 201 of Regulation (EU) No 952/2013;
	(7) 'continental shelf' means the continental shelf as defined in the United Nations Convention on the Law of the Sea;
	(8) 'exclusive economic zone' means the exclusive economic zone as defined in the United Nations Convention on the Law of the Sea and which has been declared as exclusive economic zone by a Member State pursuant to that convention;
	Importation of goods
Art. 4	Goods shall only be imported into the customs territory of the Union by a declarant that is authorised by the competent authority in accordance with Article 17 ('authorised declarant').

3.3.3 Evolution

Which trade flows would be covered by the prospective "Carbon Border Tax" was not mentioned in the earliest announcement of the measure with the July 2019 political guidelines of the incoming European Commission President (von der Leyen, 2019). Later that year, however, the Commission communication on the European Green Deal released in December 2019 indicated that the Carbon Border Adjustment Mechanism "would ensure that the price of imports reflect more accurately their carbon content." (European Commission, 2019). Likewise, the document accompanying the Inception Impact Assessment consultation released by the European Commission in March 2020 stated that "a carbon border adjustment mechanism would ensure that the price of imports reflect more accurately their carbon content" (European Commission, 2020a). All options identified in that document would either apply to imports only or to imports and domestic products, which remained the case with the "[m]ost appropriate options to design the CBAM" included in the questionnaire for the full consultation, mentioned in the questionnaire; in the summary report, however, the European Commission acknowledged that "most participants argued that the possibility to grant a rebate to EU exporters should be explored under the CBAM" (European Commission, 2020b).

With its "Own Initiative" resolution adopted in March 2021, the European Parliament recommended that the CBAM "cover all imports of products and commodities covered by the EU ETS", and also referred to imports variously throughout the remainder of the resolution; elsewhere, it emphasized the importance of "assessing the impact on exports", without, however, endorsing their inclusion in the scope of the CBAM (European Parliament, 2021). The proposed regulation published by the European Commission in July 2021 affirms that the CBAM applies to covered goods originating in third countries "upon their importation into the customs territory of the Union", without mentioning extension to exports in the draft regulation or any of the accompanying documents (European Commission, 2021a). Overall, coverage of



imports only has been the preferred option throughout the political discussion of the CBAM, although stakeholders and the European Parliament signaled varied levels of concern about the need to assess impacts on, and explore options for, exports.

3.3.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Coverage of imports only offers the relatively greatest environmental benefit due to maximum emissions coverage	Coverage of imports only levels the playing field in the domestic market, but not in international markets	Due to data gaps and limited jurisdiction, coverage of imports is relatively more complex to implement than coverage of exports	Coverage of imports only offers the strongest case under Article XX GATT because it expands the scope of carbon pricing	Relatively more controversial than coverage of exports, given perception as a unilateral measure with extraterritorial effect; excluding exports does not meet demands of some domestic stakeholders

In terms of trade flow, a CBAM can adjust for uneven climate policies when foreign goods are imported, when domestic goods are exported, or a combination of both. Throughout the political process preceding the release of the legislative proposal, the European Commission only considered the application of the measure to imports. All else being equal, coverage of imports offers the greatest environmental benefits and raises the least legal concerns. Because it has to be imposed on goods produced abroad, however, it raises technical and administrative challenges. Coverage of imports also affects the competitive position of foreign producers in the European market, and may invite diplomatic challenges.

As the European Commission acknowledged in its summary report on the CBAM consultation, most stakeholders had called for coverage of exports to be explored (European Commission, 2020b). Several stakeholders, including major European trade associations, expressed serious concerns about the potential loss of existing leakage safeguards without any comparable provision for exports under the CBAM. Such concerns were premised on leakage risks facing exported EU products sold in foreign markets: covering only imports under a BCA can help level the playing field for domestic producers in the domestic market, but will not protect the market position of domestic products sold in foreign markets.

Leakage related to exports is not only a political and economic challenge, but also environmentally problematic: if the absence of an adjustment on exports results in loss of market share or even closure of domestic production, and relatively more carbon intensive foreign products fill the resulting shortfall, failure to address the leakage and competitiveness impacts of domestic climate policies with regard to exports could have an overall negative environmental effect (Evans et al., 2020). Those reasons presumably also motivated the European Parliament to favor assessment of the impacts of the CBAM on exports (European Parliament, 2021).

All else being equal, however, a CBAM design that exempts exported goods from the scope of the EU ETS reduces the coverage of carbon pricing, and could create an incentive for domestic producers to increase the carbon intensity of exports. Offering a rebate that is conditional on export, moreover, also raises risks



under the WTO Agreement on Subsidies and Countervailing Measures. Because the CBAM accompanies a regulation rather than an indirect tax, it risks being classified as a prohibited export subsidy (de Cendra, 2006). Because it reduces the coverage of the domestic climate policy it adjusts for, moreover, a CBAM that also covers exports may be less successful in invoking the environmental exceptions of Article XX of the GATT.

Rather than introduce a rebate for exports, therefore, the European Commission has opted for a design that maintains a declining share of free allocation for both domestically sold and exported European products during the pilot phase. Continued, but declining free allocation retains the benchmark-induced incentive to improve environmental performance, without the legally vulnerable conditionality on export. At least initially, this solution likely addresses concerns about export-related leakage, but it also defers finding a solution for one of the most intractable challenges related to emissions leakage from European climate policy ambition.



3.4 Geographic Scope

3.4.1 Summary

Only countries that are integrated in or linked with the EU ETS - currently Iceland, Liechtenstein, Norway and Switzerland - are exempted from the scope of the proposed CBAM regulation, as are some special territories of the EU. Temporary exemptions may also be provided for imports of electricity from countries that become coupled with the EU electricity market. The proposal does not, however, exempt Least Developed Countries or Small Island Developing States from its scope, as recommended by the European Parliament.

In terms of environmental and competitiveness benefits, these limited exemptions strengthen the proposed CBAM, although they may also incite political objections for ignoring established principles and practices in international climate cooperation and trade diplomacy. Legally, exemptions for countries or country groups are problematic, although the clear criteria provided by the legislative proposal reduce the risk of perceived arbitrariness. In the proposed regulation, provisions relevant to the geographic scope are found, *inter alia*, in Article 2 on scope, Article 3 on definitions, and in Annex II.

Relevant Provision	Content			
	Scope			
	3. By way of derogation from paragraphs 1 and 2, this Regulation does not apply to goods			
	originating in countries and territories listed in Annex II, Section A.			
	4. Imported goods shall be considered as originating in third countries in accordance with non-			
	preferential rules of origin as defined in Article 59 of Regulation (EU) No 952/2013.			
	5. Countries and territories shall be listed in Annex II, Section A, subject to the cumulative fulfilment of the following conditions:			
Art. 2	 (a) the EU ETS established pursuant to Directive 2003/87/EC applies to that country or territory or an agreement has been concluded between that third country or territory and the Union fully linking the EU ETS and the third country or territory emission trading system; 			
	(b) the price paid in the country where the goods are originating in is effectively charged on those goods without any rebate beyond those also applied in the EU ETS. ()			
	7. If a third country or territory has an electricity market which is integrated with the Union internal market for electricity through market coupling, and it has not been possible to find a technical solution for the application of the CBAM to the importation of electricity into the Union, from that third country or territory, such the importation of electricity from the country or territory shall be exempt from the application of the CBAM, provided all of the following conditions are satisfied:			
	(a) the third country or territory has concluded an agreement with the Union, setting out an obligation to apply the Union law in the field of electricity, including the legislation on the			

3.4.2 Relevant Provisions



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development of renewable energy sources, as well as other rules in the field of energy, environment and competition;

- (b) the national law in that third country or territory implements the main provisions of the Union electricity market legislation, including on the development of renewable energy sources and the coupling of electricity markets;
- (c) the third country or territory has submitted a roadmap to the Commission, containing a timetable for the adoption of measures to implement the conditions set out in points (d) and (e);
- (d) the third country or territory has committed to climate neutrality by 2050 and has accordingly formally formulated and communicated, where applicable, to the United Nations Framework Convention on Climate Change a mid-century, long-term low greenhouse gas emissions development strategy aligned with that objective, and has implemented that obligation in its domestic legislation;
- (e) the third country or territory has, when implementing the roadmap pursuant to point (c), demonstrated substantial progress towards the alignment of domestic legislation with Union law in the field of climate action on the basis of that roadmap, including towards carbon pricing at an equivalent level as the Union at least insofar as the generation of electricity is concerned. The implementation of an emission trading system for electricity, with a price equivalent to the EU ETS, shall be finalised by 1 January 2030;
- (f) the third country or territory has put in place an effective systems to prevent indirect import of electricity in the Union from other third countries not meeting the requirements set out in points (a) to (e).

8. A third country or territory satisfying the conditions set out in paragraph 7, points (a) to (f), shall be listed in Annex II, Section B, of this Regulation, and shall submit two reports on the fulfilment of the conditions pursuant to paragraph 7, points (a) to (f), one before 1 July 2025 and another before 1 July 2029. By 31 December 2025 and by 31 December 2029, the Commission shall assess, notably on the basis of the roadmap pursuant to paragraph 7, point (c), and the reports received from the third country or territory, whether that third country or territory continues to respect the conditions set out in paragraph 7.

9. A third country or territory listed in Annex II, Section B of this Regulation, shall be removed from that list:

- (a) if the Commission has reasons to consider that the country or territory has not shown sufficient progress to comply with one of the requirements listed in paragraph 7, points (a) to (f), or if the country or territory has taken action incompatible with the objectives set out in the Union climate and environmental legislation;
- (a) if the third country or territory has taken steps contrary to its decarbonisation objectives, such as providing public support for the establishment of new generation capacity that emits more than 550 g of CO_2 of fossil fuel origin per kWh of electricity.

10. The Commission is empowered to adopt delegated acts in accordance with Article 28 to set out requirements and procedures for countries or territories that are deleted from the list in Annex II, Section B, to ensure the application of this Regulation to their territories with regard to electricity. If in such cases market coupling remains incompatible with the application of this Regulation, the Commission may decide to exclude the third countries or territories from Union market coupling and require explicit capacity allocation at the border between the Union and the third country, so that the CBAM can apply.



	11. The Commission is empowered to adopt delegated acts in accordance with Article 28 to			
	amend the lists in Annex II, Sections A or B, depending on whether the conditions in paragraphs			
	5, 7 or 9 are satisfied.			
	Definitions			
	Definitions			
	For the nurnoses of this Regulation, the following definitions apply: $(-(6))$ (third country' means a			
	country or territory outside the customs territory of the Union:			
Art. 3	country of territory outside the customs territory of the onion,			
	(9) 'market coupling' means allocation of transmission capacity via an Union system which			
	simultaneously matches orders and allocates cross-zonal capacities as set out in Commission			
	Regulation (EU) 2015/1222;			
	Countries and territories outside the scope of this Regulation			
	1. Soction A: Countring and territories outside the grane of this Regulation			
	1. Section A: Countries and territories outside the scope of this Regulation			
	This Regulation shall not apply to goods originating in the following countries:			
	– Iceland			
	– Liechtenstein			
	– Norway			
	– Switzerland			
Annex II	This Regulation shall not apply to goods originating in the following territories:			
	– Busingen			
	– Melilla			
	2. Contrine D. Countries and to with the control of this Deputation with a read to the			
	2. Section B: Countries and territories outside the scope of this Regulation with regard to the			
	importation of electricity into the customs territory of the Onion			
	[Currently empty]			

3.4.3 Evolution

None of the early announcements and preparatory documents for the prospective measure, including the July 2019 political guidelines of the incoming European Commission President (von der Leyen, 2019), the Commission communication on the European Green Deal of December 2019 (European Commission, 2019), and the document accompanying the Inception Impact Assessment consultation (European Commission, 2020a), make any indications about the geographic scope of the envisioned CBAM. One of the questions raised in the consultation process for the proposed CBAM asks whether the future measure "should allow for exemptions for least developed countries", however; in the summary report based on the full consultation held between July and October 2020, the European Commission acknowledged that "[c]onsulted stakeholders ... leave room for exempting partner countries with established climate policies that create incentives for emission reductions, similar to those in force in the EU" (European Commission, 2020b). By contrast, the European Parliament, in its March 2021 "Own Initiative" resolution, stressed that



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"Least Developed Countries and Small Island Developing States should be given special treatment in order to take account of their specificities and the potential negative impacts of the CBAM on their development", and called on the Commission to "assess carefully the impact of the different CBAM options on Least Developed Countries" (European Parliament, 2021).

Likewise, the European Parliament highlighted "the specific constraints and challenges facing the outermost regions, compounded, in particular, by their remoteness, their insularity and the limited size of their market", and called for the CBAM "to give special consideration to their specific characteristics, in accordance with Article 349 of the Treaty on the Functioning of the European Union (TFEU)" (European Parliament, 2021). With its Annex II, the legislative proposal released by the European Commission in July 2021 sets out exemptions for countries that are fully integrated in, or linked to, the EU ETS, as well as selected overseas and special territories (European Commission, 2021a). Additionally, the proposal includes the possibility of a temporary exemption for third countries that become integrated into the EU electricity market via market coupling, but no such countries are yet included in Annex II. Likewise, Least Developed Countries are not exempted – contrary to the recommendation of the European Parliament – and the Staff Working Document accompanying the proposal explains that "blanket exemptions from a CBAM should be avoided" as it would "encourage LDCs to increase their level of emission and run counter to the overarching objective of the CBAM" European Commission, 2021d). Instead, it recommends targeted support for such countries, which the legislative proposal, in its preamble, takes up by declaring that the "EU stands ready to work with low and middle-income countries towards the decarbonisation of their manufacturing industries" and "should support less developed countries with the necessary technical assistance in order to facilitate their adaptation to the new obligations established by this regulation" (European Commission, 2021a).

3.4.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Because of carbon price convergence, the exclusion of countries integrated into or linked with the EU ETS does not weaken the environmental benefits of the CBAM; prospective exclusion of countries with coupled electricity markets could reduce environmental benefits if not preceded by climate policy approximation	Wide geographic scope levels the playing field for the most important competitors; countries integrated into or linked with the EU ETS already have equivalent carbon price in place; exclusion of countries with coupled electricity markets could reduce competitiveness benefits if not preceded by climate policy approximation	Wide geographic scope is relatively feasible due to limited need to exclude countries and clear criteria for their exclusion; coverage of large share of countries, including least developed countries where producers are likely to have reduced capacities for emissions monitoring and reporting, may create obstacles	Exclusion of jurisdictions integrated into or linked with the EU ETS, or prospective exclusion of countries with coupled electricity markets, risks violating Art. I GATT	Extension of geographic scope to least developed countries likely to be perceived as unfair and incite strong resistance, potentially spilling over to other political processes

Border carbon adjustments can cover products from all countries, or can specify exemptions for certain countries or groups of countries. Such exemptions can be made conditional on different country



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attributes, including, but not limited to: their level of economic development; their contribution to global emissions; the intensity of trade with the implementing country; their domestic climate policy ambition; or their engagement in multilateral climate cooperation. Depending on the criterion used for its application, an exemption can thus be motivated by a desire to avoid undue hardship for countries with limited financial and technical capacities; or it can be the result of a more pragmatic balancing exercise between the environmental and competitiveness benefits offered by the border carbon adjustment and the administrative burden it entails; or finally, it may seek to incentivize other countries to adopt more ambitious domestic climate action or join an international cooperative arrangement. Importantly, geographic scope is separate from the possibility of crediting products based on climate policies in place in their countries of origin (see Section 3.8 below).

For its geographic scope, the proposed CBAM has opted to exempt only countries that are fully integrated in, or linked to, the EU ETS, as well as selected overseas and special territories listed in Annex II of the legislative proposal (European Commission, 2021a). Additionally, third countries that become integrated into the EU electricity market via market coupling may be temporarily excluded from the CBAM. In the preamble to the proposal, the European Commission recommends that it should be delegated the power to adopt acts in accordance with Article 290 of TFEU to amend the list of countries in Annex II. Finally, the proposed regulation specifies in its preamble that it "should apply to the continental shelf and to the exclusive economic zone" declared by Member States pursuant to the United Nations Convention on the Law of the Sea, with a view to preventing the risk of carbon leakage in offshore installations.

As explained in a Staff Working Document accompanying the legislative proposal, the European Commission opted against exempting Least Developed Countries from the CBAM. Its argument – that such an exemption could encourage greater emissions – will have to be tested against the position of the European Parliament, which recommended affording Least Developed Countries and Small Island Developing States special treatment to avoid negative impacts on their development. Not exempting these countries may also be challenged on grounds of inequity, and for contravening established principles both in the UNFCCC (Common but Differentiated Responsibilities and Respective Capabilities) and the WTO (Special and Differential Treatment) regimes.

Any exemption of individual countries or groups of countries – including the exemptions contained in Annex II of the proposed regulation – risks violating Article I of the GATT, shifting an assessment of the legality of the CBAM to the requirements for application of the general exceptions in Article XX of the GATT. Because countries integrated into, or linked with, the EU ETS already impose equivalent carbon costs on their producers to those imposed by the EU ETS, the risk of leakage to such countries is negligible, and does not undermine the environmental benefits of the proposed CBAM. Granting national exemptions can raise the risk of transshipment of products, however, whereby goods produced in countries that are not exempt from the CBAM could be routed through exempt countries and then be exported to the EU from there in order to avoid the CBAM (Kortum et al., 2016). As soon as individual countries are exempted, administratively complex rules and procedures might have to be put in place to trace the origin of traded goods and identify and prevent transshipment, which would undermine the purpose and rationale of the CBAM.



3.5 Sectoral Scope

3.5.1 Summary

As proposed, the CBAM would cover a limited set of four basic material sectors – cement, nitrogen fertilizers, iron and steel, and aluminum – as well as electricity. These five sectors were chosen based first on their inclusion in the ETS, and then based on several criteria including total aggregate emissions, risk of leakage, and administrative and technical feasibility. Within those sectors (other than electricity), coverage extends down the value chain to create a total of 30 proposed covered goods. The selection of downstream coverage was almost exclusively dictated by risk of leakage, which decreases, among other things, with higher value added, and with the incompleteness of cost pass-through from further upstream.

Electricity finds itself in something of a special category, being in almost all respects unlike basic materials. It is not assessed for risk of leakage under the ETS, nor is it granted free allocation. But it is included in the proposal because it is such a significant source of EU GHG emissions, at 30%, and because there is high localized risk of leakage via the interconnections between the EU and third country generators. While it is included, it is subject to a separate set of rules.

There is provision for review of the sectors covered, and of the downstream coverage within those sectors, with a view to potentially expanding the list of covered goods. Before the end of the transition period in 2026, a report is due with any recommendations on either question, based in part on a review of data collected, and the results of further analysis. Transportation is specifically mentioned as a candidate for addition, given its possibility for future inclusion in the ETS.

Relevant Provision	Content
	Subject matter
Art. 1	 This Regulation establishes a carbon border adjustment mechanism (the 'CBAM') for addressing greenhouse gas emissions embedded in the goods referred to in Annex I, upon their importation into the customs territory of the Union, in order to prevent the risk of carbon leakage. The CBAM complements the system established for greenhouse gas emission allowance trading within the Union by Directive2003/87/EC by applying an equivalent set of rules to imports into the customs territory of the Union of goods referred to in Article 2.
Art. 2	Scope 1. This Regulation applies to goods as listed in Annex I, originating in a third country, when those goods, or processed products from those goods as resulting from the inward processing procedure referred to in Article256 of Regulation (EU) No 952/2013 of the European Parliament and of the Council customs territory of the Union.

3.5.2 Relevant Provisions



	2. This Regulation applies to the goods referred to in paragraph 1 where those goods are brought
	to the continental shelf or the exclusive economic zone of a Member State.
	Definitions
Art. 3	For the purposes of this Regulation, the following definitions apply: ()
	(1) 'goods' mean goods listed in Annex 1;
	Review and Reporting by the Commission
	1. The Commission shall collect the information necessary with a view to extending the scope of
	this Regulation to indirect emissions and goods other than those listed in Annex I, and develop
	methods of calculating embedded emissions based on environmental footprint methods.
	2. Before the end of the transitional period, the Commission shall present a report to the
Art. 30	European Parliament and the Council on the application of this Regulation. The report shall
	contain, in particular, the assessment of the possibilities to further extend the scope of
	embedded emissions to indirect emissions and to other goods at risk of carbon leakage than
	those already covered by this Regulation, as well as an assessment of the governance system. It
	shall also contain the assessment of the possibility to further extend the scope to embedded
	emissions of transportation services as well as to goods further down the value chain and
	services that may be subject to the risk of carbon leakage in the future.
	List of goods and greenhouse gases
	1. For the number of the identification of goods this Deputation shall each the goods listed in the
	1. For the purpose of the identification of goods, this Regulation shall apply to goods listed in the following sectors currently falling under the combined nomenclature ('CN') codes listed below
Annex I	and shall be those of Council Regulation (EEC) No 2658/87.
	[List that follows includes thirty goods included the following sectors: cement, electricity,
	fertilisers, iron and steel, and aluminium]

3.5.3 Evolution

In her Political Guidelines, then-candidate for EU Presidency Ursula von der Leyen stated her intent to implement a "carbon border tax" that would "start with a number of selected sectors and be gradually extended" (von der Leyen, 2019). The Inception Impact Assessment launched by the EC to gather initial input on the shape of the instrument also spoke to the question of scope:

An important part of the work will also relate to the selection of sectors subject to this measure. A scoping in terms of sectors concerned will have to be defined to ensure that the measure applies where the risk of carbon leakage is the highest. The assessment will take as starting point the study currently underway that the Commission launched to identify the risk of carbon leakage in the third and fourth trading phases of the EU ETS. (European Commission, 2020a).



This passage suggests an alignment with the proposed objective of the CBAM as an instrument to prevent leakage; only those sectors most at risk of leakage would be covered.

The European Parliament's March 2021 'Own Initiative' recommended that the CBAM cover "all imports of products and commodities covered by the EU ETS, including when embedded in intermediate or final products" (European Parliament, 2021). This suggests a broad coverage including not only upstream goods covered under the ETS, but also any goods containing the products of those upstream sectors, the aim being to avoid competitiveness and leakage risks in downstream sectors. The EP seems to set this up as an *ultimate* objective, with a more proximate goal ("as a starting point") to cover the "power sector and energy-intensive industrial sectors like cement, steel, aluminium, oil refinery, paper, glass, chemicals and fertilisers."

The legislative proposal released by the European Commission in July 2021 covers 30 specific goods, ranging from 2-digit Combined Nomenclature (CN) classification to 10-digit, in the following sectors: cement, electricity, fertilisers, iron & steel, and aluminium (European Commission, 2021a). These specific sectors and sub-sectors were chosen on the basis of an internal assessment using criteria that extended beyond simply the risk of leakage, including (*Ibid.*, Section 5.2.1.3):

- Coverage under the ETS;
- Size of aggregate emission profiles;
- Exposure to significant risk of leakage (as defined by EU Directive 2003/87/EC);
- Balancing broad coverage with technical and administrative feasibility, entailing that:
 - Goods should be easily identifiable, easily linked to their definition, and expressable in CN codes;
 - There should be sufficient information to determine reference values for embedded emissions.

3.5.4	Ana	lysis
		/

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
High environmental benefit from leakage prevention in covered and downstream sectors, but may expose uncovered sectors, sub-sectors	Competitiveness benefit from protection of covered and downstream sectors, but may expose uncovered sectors, sub-sectors	Limited choice of sectors and sub- sectors increases feasibility	The proposal's choice of sectors does not give rise to legal issues	Should not cause major controversy

There are two key decisions to make with respect to sectoral scope: first, what broad sectors should be included in the CBAM's initial elaboration, and second, how far down the value chain coverage should extend in those sectors.

On which sectors to include the coverage in the legislative proposal presented by the European Commission in July 2021 represents a winnowing down from a shortlist of candidate sectors, with a final list that drops: refineries, organic basic chemicals, pulp and paper, lime and plaster, inorganic chemicals,

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glass, ceramics, and polymers. It is important reflect if that list should not have been pared down further in this first round, given the little experience that exists with this proposed mechanism. The final choice of sectors was informed by the criteria set out above. For example, organic chemicals and refinery products were left off the final list because of the administrative and technical challenges involved with attributing emissions to specific imported goods produced by industrial processes that create many different products in the same plant. Aluminum was included in part because steel was included, and the two are in direct competition in some end uses. As well, the EC proposes to consider including indirect emissions in the CBAM in future, and these are a significant portion of aluminum production emissions. Pulp, paper and glass may have been left off because they have complex downstream value chains, and risk of leakage, while high in both sectors, is lower than that of all other goods in the final list.

The resulting final list represents a pragmatic final proposal, with covered sectors and downstream sectors protected from leakage and competitiveness impacts to the extent such protection is needed. The exceptions are those sectors that are left off the list for reasons other than low leakage risk, such as organic chemicals, refinery products, and pulp and paper. In such sectors, the instrument as currently formulated will not provide the requisite protection as the cost of carbon increases, and other forms of protection will be necessary. Alternatively, it may be that the mandated review will propose ways to overcome the existing technical and administrative challenges to inclusion in the CBAM.

The limited proposed coverage both sectorally and down the value chain, while being much narrower than that proposed by the European Parliament, results in an instrument that is technically and administratively relatively feasible. It also means that the choice of sectoral scope in and of itself will likely not face legal challenges, and will not give rise to significant political or diplomatic controversy.

There is a close connection between sectoral coverage and other design elements, as well as other elements of the European Green Deal. Coverage of aluminum production, for example, was strongly opposed by industry if the CBAM were to include coverage of Scope 2 emissions and to eliminate compensation under the ETS for indirect emissions. As explained in Marcu et al. (2021a), such a regime would, it was argued, lead to resource shuffling, and would not level the playing field with respect to indirect carbon costs. Most sectors objected to being included in the CBAM if it meant immediate cessation of free allowances, given the CBAM's focus only on import protection. And transportation was mooted as a candidate for future coverage in part because it is also being considered for future inclusion in the ETS.

The mandated review of sectoral coverage will be delivered in time to consider expanded coverage of the instrument after the end of the transition period in 2026.

3.6 Emissions Scope

3.6.1 Summary

The proposed CBAM would cover direct (Scope 1) emissions – those emissions produced within the boundaries of an installation by sources owned by the producers, such as those associated with fuel combustion in furnaces and boilers, and those associated with production-related chemical processes. This is straightforward, as these are the same emissions covered under the ETS – the regulatory regime that the CBAM aims to mirror at the border.

It would not cover Scope 2 emissions, or emissions associated with purchased electricity, steam or heat. While electricity generation is covered under the ETS and the CBAM (see Section 3.5 – Sectoral Scope), the proposed CBAM would not adjust at the border for the Scope 2 emissions embodied in goods.

Annex III of the proposal notes that the CBAM would cover emissions associated with "input materials (precursors) consumed in the productions process." The final details of what this entails will be covered in the implementing legislation that accompanies the CBAM. Presumably it means that, for any covered good that has another covered good as an input, the CBAM coverage will include direct emissions from both the manufactured good and the input good.

This coverage is aimed at preventing leakage and competitiveness impacts in downstream sectors. Because it would involve discriminatory treatment of imports, however, there is a risk that it would breach WTO obligations and elicit reprisals from trading partners.

Relevant Provision	Content
	Definitions
	15. 'direct emissions' mean emissions from the production processes of goods over which the producer has direct control
Article 3	16. 'embedded emissions' mean direct emissions released during the production of goods, calculated pursuant to the methods set out in Annex III
	28. 'indirect emissions' mean emissions from the production of electricity, heating and cooling, which is consumed during the production processes of goods.
A.t. 7	Calculation of embedded emissions
Art. 7	1. Embedded emissions in goods shall be calculated pursuant to the methods set out in Annex III.
Annex III	Definitions

3.6.2 Relevant Provisions



a) 'Simple goods' means goods produced in a production process requiring exclusively input materials and fuels having zero embedded emissions.

b) 'Complex goods' means goods requiring the input of other simple goods in its production process.

Determination of actual direct embedded emissions for simple goods

2. For determining the specific actual embedded emissions of simple goods produced in a given installation, only direct emissions shall be accounted for.

Determination of actual direct embedded emissions for simple goods

3. For determining the specific actual embedded emissions of complex goods produced in a given installation, only direct emissions shall be accounted for. ... [The formula includes] the embedded emissions of the input materials (precursors) consumed in the production process. Only input materials listed as relevant to the system boundaries of the production process as specified in the implementing act adopted pursuant to Article 7(6) are to be considered. ... [The calculation] shall use the value of emissions resulting from the installation where the input material was produced, provided that that installation's data can be adequately measured.

3.6.3 Evolution

In the European Commission's Inception Impact Assessment for the CBAM, with respect to methodology, the Commission noted that, "to the extent that a sector is covered by the EU ETS, a border measure could be based on similar methodological considerations as for ETS" (European Commission, 2020a). This observation is made with respect to benchmark calculations, but it could also be read as assuming that the scope of emissions coverage would be consistent with existing ETS methodology, which is based on only direct emissions.

The European Parliament report on CBAM, by contrast, "considers that the carbon pricing of imports should cover both direct and indirect emissions." (European Parliament, 2021). This was also the approach considered in a widely circulated leaked draft of the EC proposal from June 2021, which in Annex III showed a formula for calculating specific embedded emissions that included scope 2 (indirect) emissions.

The final EC proposal as released in July 2021 does not include indirect emissions in that calculation, specifying that "[f]or determining the specific actual embedded emissions of [simple or complex] goods produced in a given installation, only direct emissions will be accounted for" (European Commission, 2021).

The proposal also includes a distinction between simple goods, which are produced with inputs of goods and fuel that have zero embedded emissions, and complex goods, which are produced with inputs of simple goods. To calculate the embedded emissions of complex goods, the methodology in the proposal includes emissions embedded in "input materials (precursors) consumed in the production process," within a set of project boundaries to be detailed in the implementing legislation.



Consequently, it is as yet unclear which inputs will be covered by this provision. But the uncertainty is more fundamental than that. It remains unclear whether the inputs materials in question are fuels and chemicals that are "consumed" (i.e., destroyed) in the production process, or goods that are still present in modified form in the final product. The terms "consumed" and "precursor" might suggest the former interpretation, and the definition of simple goods does specify that their input materials *and fuels* must embody zero emissions. On the other hand, emissions from such inputs are already assumed to be included among direct emissions, and so it would seem strange to single them out.

3.6.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
If sectoral scope is properly set, covering input emissions will prevent risk of downstream leakage	To prevent competitiveness impacts, Scope 2 emissions would need to be covered by some other instrument until such time as they are covered by CBAM. If sectoral scope is properly set, covering input emissions will prevent risk of downstream competitiveness impacts	Coverage of direct emissions is straightforward. It would be more complex to also cover emissions embedded in inputs	No legal issues with coverage of direct emissions. Coverage of emissions embedded in inputs risks creating different treatment for imported goods <i>vis-à-vis</i> domestic goods	Coverage of emissions embedded in inputs might create political and diplomatic controversy, as it could be argued to be discrimination

Coverage of direct emissions only is in line with the objective of having the CBAM closely mirror the ETS, such that it becomes a domestic regulation applied at the border without discrimination against foreign goods. As a rule this close mirroring is desirable for WTO compliance, and to help avoid political and diplomatic push-back.

Not covering Scope 2 emissions, however, means that as EU electricity prices increase—the result of a lower EUA cap and higher EUA prices—electricity-intensive sectors in the EU will be at a competitive disadvantage vis-à-vis their unregulated foreign competitors. Within the broader 'Fit for 55' package this is addressed by maintaining the current regime whereby national governments can furnish (partial) compensation for indirect costs. Electricity-intensive sectors such as non-ferrous metals strongly opposed a regime that would eliminate that compensation and replace it with Scope 2 CBAM coverage, since the CBAM adjustment would be limited to the costs of embedded indirect emissions, but the EU's marginal electricity pricing model means that firms are often paying costs that are higher than that (Marcu et al., 2021a). They also worried that inclusion of Scope 2 emissions would allow for widespread resource shuffling, that is, a rearrangement of existing trade patterns such that goods produced with clean electricity would be exported to the EU, without any real change in production patterns. Ultimately, the proposed solution was probably instrumental in defusing non-ferrous metals producers' opposition to inclusion in the CBAM.



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Covering emissions embedded in upstream input goods makes sense from the perspective of preventing leakage. Without such a provision, processors of basic steel, aluminum, pulp, etc., would face higher costs of inputs, but would be provided no protection under the CBAM from competition by foreign producers that do not face such costs. The result would be to simply shift the risk of leakage down the value chain from basic goods to producers that add value to those goods. This concern becomes less pronounced the further up the value chain a product is, for a number of reasons. For one thing, increasing value added means that more processed goods have lower carbon costs relative to their final price, and thus lower risks of leakage and competitiveness impacts. As such, it matters how far up the value chain coverage of the CBAM will extend; sectoral scope should only extend to goods that are at risk of leakage. The same considerations apply to competitiveness concerns; covering emissions embedded in input goods protects downstream producers from loss of competitiveness, as long as the sectoral scope extends far enough to cover them.

The complexity of the regime is increased by the inclusion of coverage for embedded emissions in input goods. If the adjustment were to be based on actual data, then foreign producers would be responsible for obtaining emissions intensity data from their upstream suppliers, who might not actually keep such records. If a default value were used, presumably the same defaults used for basic goods would be applicable to those same goods used as inputs.

There is some legal risk to covering emissions that are not covered in the ETS, since this moves away from a non-discriminatory treatment of foreign goods. That is, the CBAM would not mirror the ETS in this respect; EU producers are not forced to purchase ETS allowances to cover the embedded emissions in their inputs. It could be argued that because those producers face carbon costs via their input materials, there is a sort of equivalency of treatment, but such an argument would face uncertain chances of success in a WTO legal setting. In the same vein, there is some risk that the EU's trading partners would argue against this design element as a form of discrimination against their producers.



3.7 Determination of Embedded Emissions

3.7.1 Summary

The European Commission proposal contemplates two systems by which to determine the embedded emissions of imports: one for goods and one for electricity. For goods, actual data is required in the first instance, on direct emissions of CO_2e per tonne of goods produced in the reporting period in the producing installation. For complex goods, the emissions data would also include emissions attributed to the input materials consumed in the process of manufacture. If the necessary data cannot be adequately provided, the applied default value would be the sectoral average emission intensity in the country of export, plus an as-yet-undetermined mark-up. If there is no reliable national data, the second default would be the average emissions intensity of the 10% worst EU performers.

For electricity, embedded emissions are determined based on default values in the first instance, set at the average emissions intensity of all price-setting sources in a country of export, a group of countries, or a region within a country. Where a default value has not been determined for a country, group of countries, or region within a country, the second default would be the weighted average emissions intensity of EU fossil fuel-generated electricity. Importers of electricity could instead request to use actual emissions intensity values, if they complied with conditions that are designed to limit the potential for resource shuffling. Importers would also have the ability to argue for a lower default value for the region in which electricity is produced, based on specific local characteristics such as geography, natural resources, market conditions, energy mix, or industrial production.

For goods, foreign producers could register in a central database, and furnish verified emissions intensity data. That data could then be used by importers to fulfil their obligations in submitting emissions intensity data. It is not specified how long the submitted intensity data in the database would be valid, but presumably it would need to be periodically renewed.

Relevant Provision	Content
	Definitions
	15. 'direct emissions' mean emissions from the production processes of goods over which the
	producer has direct control
Article 3	16. 'embedded emissions' mean direct emissions released during the production of goods, calculated pursuant to the methods set out in Annex III
	28. 'indirect emissions' mean emissions from the production of electricity, heating and cooling,
	which is consumed during the production processes of goods.
	Calculation of embedded emissions

3.7.2 Relevant Provisions



	1. Embedded emissions in goods shall be calculated pursuant to the methods set out in Annex III.
Art. 7	 2: Embedded emissions in goods other than electricity shall be determined based on the actual emissions in accordance with the methods set out in Annex III, points 2 and 3. When actual emissions cannot be adequately determined, the embedded emissions shall be determined by reference to default values in accordance with the methods set out in Annex III, point 4.1. 3: Embedded emissions in imported electricity shall be determined by reference to default values in accordance with the method set out in Annex III, point 4.2, unless the authorised declarant chooses to determine the embedded emissions based on the actual emissions in accordance with
	that annex, point 5. 6: The Commission is empowered to adopt implementing acts concerning detailed rules regarding the elements of the calculation methods set out in Annex III, including determining system boundaries of production processes, emission factors, installation-specific values of actual emissions and default values and their respective application to individual goods as well as laying down methods to ensure the reliability of data on the basis of which the default values shall be determined, including the level of detail and the verification of the data. Where necessary, those acts shall provide that the default values can be adapted to particular areas, regions or countries to take into account specific objective factors such as geography, natural resources, market conditions, prevailing energy sources, or industrial processes. The implementing acts shall build upon existing legislation for the verification of emissions and activity data for installations covered by Directive 2003/87/EC, in particular Implementing Regulation (EU) No 2018/2067.
	Registration of operators and installations in third countries
	1. The Commission shall, upon request by an operator of an installation located in a third country, register the information on that operator and on its installation in a central database referred to in Article 14(4).
	5. The operator referred to in paragraph 1 shall be obliged to:
Art. 10	 a) determine the embedded emissions calculated in accordance with the methods set out in Annex III, by type of goods produced at the installation referred to in paragraph 1; b) ensure that the embedded emissions referred to in point (a) are verified in accordance with the verification principles set out in Annex V by a verifier accredited pursuant to Article 18;
	c) keep a copy of the verifier's report as well as records of the information required to calculate the embedded emissions in goods as laid down in Annex IV for a period of four years after the verification has been performed.
	7. An operator may disclose the information on the verification of embedded emissions referred to in paragraph 5 to an authorised declarant. The authorised declarant shall be entitled to avail itself of that disclosed information to fulfil the obligation referred to in Article 8.
	Definitions
Annex III	a) 'Simple goods' means goods produced in a production process requiring exclusively input materials and fuels having zero embedded emissions.

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b) 'Complex goods' means goods requiring the input of other simple goods in its production process.
 Various provisions
 Annex III lays out detailed methodologies for the following calculations:

 Determination of actual direct embedded emissions for simple goods
 Determination of actual direct embedded emissions for complex goods
 Determination of default values for goods
 Determination of default values and alternative default values for electricity

- Conditions applying to actual embedded emissions in electricity
- Adaptation of default values based on region-specific features

3.7.3 Evolution

The European Commission's Inception Impact Assessment contemplated a regime for goods that in the first instance would rely on default values for emissions intensity, which might then be challengeable by importers on the basis of actual data:

"Under the EU ETS, a system of harmonised EU-wide benchmarks has been developed for industrial processes. To the extent that a sector is covered by the EU ETS, a border measure could be based on similar methodological considerations as for ETS, i.e. benchmark values, unless the exporter certifies a lower carbon content and/or a higher carbon cost at origin." (European Commission 2020)

The report of the European Parliament seems to conceive of the instrument in the same way, recommending that the furnishing of actual data be provided as an "option" for importers, to prove the lower carbon intensity of their imports (European Parliament, 2021). They argue that such an option would "encourage innovation and investment in sustainable technologies across the world."

The July proposal tabled by the European Commission reverses the preference order suggested in those two prior documents. It proposes a first-instance requirement for actual data, and if that data is not available the default would be exporting-nation average emission intensity figures for the sector or good in question (European Commission, 2021a). If those disaggregated data are not available for the country of export, then a second default would be used: the weighted average of the 10% worst EU producers for that sector or good.

That proposal represents an evolution from the widely circulated unofficial (leaked) draft of the EC proposal from June 2021, in which the first-instance default value for imported goods was the second default from the July proposal: the average of the 10% worst EU performers. This would have applied in any case where data was not submitted, or was not verifiable. Similarly, in the leaked draft the first-instance default value for electricity was the second default in the July proposal: the weighted average emissions intensity of EU fossil-fuel-generated electricity.



Outside of the leaked draft proposal, there was no prior mention in any official documents of how to determine embedded emissions in imported electricity.

3.7.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Basis in actual data (for goods) creates incentives for foreign decarbonization. Provisions to avoid resource shuffling (for electricity) seem effective.	Use of national averages for default values allows savings for those foreign firms that are worse than average.	May be difficult to determine, keep current, national sectoral averages for all goods in all trading partners. But national data may be "voluntarily" supplied.	Basis in actual data probably helps in Art XX challenge (unless request found too onerous) vis-à- vis domestic goods.	Could work if regime facilitates provision of national data by foreign governments. But might be controversial if there's disagreement over data.

In the treatment of goods, there are several reasons it makes sense to try to determine embedded emissions using actual data as a first-instance case, only resorting to default values where that data is not available. It works well from a trade law perspective, since it mirrors requirements for actual data in the ETS; a default as a first-instance tool would risk being ruled illegal discrimination. And from an environmental perspective, it may offer incentives to foreign producers to decarbonize (though not any more so than a regime that used a challengeable default as the first-instance procedure).

The details of the default arrangements are important. The more punitive the default, the more incentive for foreign producers to decarbonize, and the more competitive protection for domestic producers, but also the more the regime would risk breaching non-discrimination obligations under international trade law, and the more push-back it would receive from trading partners. The shift away from the more punitive defaults featured in the leaked draft proposal probably reflects concern about the latter challenges. Use of sectoral national averages from the country of export is defensible as a default, as it cleaves reasonably closely to actual values. But it suffers from three weaknesses as proposed.

- First, it would be administratively challenging for the EU to compile and maintain national-level emissions intensity figures disaggregated at the level of the thirty covered products (or even four covered sectors) for each of the EU's trading partners. In reality, the expectation might be that the EU's major trading partners would furnish such data to avoid the punitive second default; they would be clearly motivated to do so as a way to support the compliance of their exporters. It might be easiest if formal arrangements were made to receive such data, but disagreements over submitted national numbers might be a flashpoint.
- Second—and closely related to the first—most of the EU's trading partners do not have sectorally disaggregated data at the product level for the covered goods or sectors, meaning they would be subject to the punitive second default: the weighted average of the 10% worst EU performers. This might be found unreasonably punitive and demanding by trade law and by trading partners,



especially considering it would disproportionately target developing and least developed countries with less rigorous existing systems of economy-wide carbon accounting.

• Third, the default as proposed would feature a mark-up above national sectoral averages, in an amount to be determined in the implementing legislation. This seems hard to justify as an environmental measure, and would be unfavourably viewed under trade law and by the international community.

In the treatment of electricity, using national averages as a first-instance procedure is probably intended a part of a suite of measures aimed at preventing resource shuffling. Certainly the conditions under which actual data can be used reflect this concern. They seem likely to be effective in preventing such problems.

3.8 Calculation of the Adjustment

3.8.1 Summary

The CBAM base adjustment, or charge per tonne of CO_2e , is proposed to be equal to the average closing price of the EU's ETS allowances, calculated on a weekly basis. That base adjustment will be modified in two ways:

- It will be reduced by a credit equal to the per-tonne price paid for carbon by the foreign producer. This could be a national carbon price or a sub-national one, but it must be verified as having been paid by an "independent person". There is provision for bilateral agreement between the EU and exporting countries on the amount of credit to be accorded to their products.
- It will be reduced by an adjustment to account for any free allowances received by competing installations in the EU.

3.8.2 Relevant Provisions

Relevant Provision	Content
	Price of CBAM certificates
Art. 21	1. The Commission shall calculate the price of CBAM certificates as the average price of the closing prices of EU ETS allowances on the common auction platform in accordance with the procedures laid down in Commission Regulation (EU) No 1031/2010 for each calendar week.
	Carbon price paid in a country of origin
Art. 9	 An authorised declarant may claim in its CBAM declaration a reduction in the number of CBAM certificates to be surrendered in order for the carbon price paid in the country of origin for the declared embedded emissions to be taken into account. The authorised declarant shall keep records of the documentation, certified by an independent person, required to demonstrate that the declared embedded emissions were subject to a carbon price in the country of origin of the goods and keep evidence of the proof of the actual payment for that carbon price which should not have been subject to an export rebate or any other form of compensation on exportation.
Art. 2	Scope
	12. The Union may conclude agreements with third countries with a view to take account of carbon pricing mechanisms in these countries in the application of Article 9.
Art. 31	Free allocation of allowances under the EU ETS and obligation to surrender CBAM certificates



1. The CBAM certificates to be surrendered in accordance with Article 22 shall be adjusted to reflect the extent to which EU ETS allowances are allocated free of charge in accordance with Article 10a of Directive 2003/87/EC to installations producing, within the Union, the goods listed in Annex I.

3.8.3 Evolution

The European Commission's Inception Impact Assessment sets out the basic need for parallelism between the ETS price and the charge under the CBAM, noting that: "The measure should be commensurate with the internal EU carbon price" (European Commission, 2020).

The European Parliament's 'Own Initiative' report of June 2021 makes several recommendations on the calculation of the CBAM charge. On the base adjustment, it argues that to respect WTO law while addressing the risk of leakage, "the CBAM needs to charge the carbon content of imports in a way that mirrors the carbon costs paid by EU producers" (European Parliament, 2021). On crediting for foreign carbon price paid, it recommends that the CBAM must ensure that "importers from third countries are not charged twice for the carbon content of their products." And on the adjustment of the charge to account for free allocation within the EU, it is less straightforward in its recommendations, noting that "the modalities for the design of a CBAM should be explored alongside the revision of the EU ETS so as to ensure they are complementary and consistent, and to avoid overlapping that would lead to double protection of EU industries."

The European Commission proposal of July 2021 accords with all of the recommendations made by the Parliament. The base adjustment would equal the average price of the closing prices of EU ETS allowances on the common auction platform, calculated on a weekly basis, and applicable each week based on the previous week's numbers. That base would be potentially modified in two respects:

- First, any carbon price paid by the foreign producer would be credited against the base adjustment, subject to that price being verified by an "independent person". The goods in question should not have been granted any sort of export rebate or other form of compensation at the point of export. There is provision for the EU to negotiate agreements with exporting countries on the level of credit due as a result of their carbon pricing.
- Second, the base adjustment would be modified "to reflect the extent to which EU ETS allowances are allocated free of charge." The methodology for that modification would be laid out in the implementing legislation to accompany the CBAM.

3.8.4 Analysis

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Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Credit for foreign carbon prices, and adjustment for free allowances, are in line with environmental objectives	Credit for foreign carbon prices, and adjustment for free allowances, have neutral impact on competitiveness	Challenging to arrive at agreement on the <i>effective</i> foreign carbon price. Crediting for non-price policies would arguably have been unworkably difficult	Proposed credit and adjustments are probably necessary for successful Article XX defence	Proposed credit and adjustments are probably necessary to avoid major push- back from trading partners. Partners will push for crediting for non- price policies

The proposed design elements for calculating the charge make sense from an environmental perspective, and from the perspective of WTO law, which – in any Article XX defense – would demand an environmental motivation for the CBAM. To prevent leakage, the base adjustment should accord with the internal ETS allowance price for which the CBAM is supposed to be adjusting. Modifying the base adjustment to account for any free allocation within the EU is similarly desirable in that it makes the CBAM adjustment closely align with the actual internal carbon price paid by EU producers. Credit for foreign carbon pricing avoids double charging for the embedded carbon in imported goods, which would work against the objective of reducing GHG emissions by penalizing good climate policy abroad. All of those design features should be welcomed by the EU's trading partners, so diplomatic and political impacts from these design choices are likely to be low.

It will be administratively and methodologically difficult to calculate and periodically revise the amount of credit due to foreign producers as a result of the carbon price paid in the country of origin. In the same way that the EU's base adjustment must be modified to take account of free allocation, foreign carbon pricing needs to account for any similar features that lower the effective carbon price: free allocation, carbon tax breaks, output-based allowances, offset schemes, etc. The provision for bilateral negotiation of the credit due is a sensible proposal that would negate the need to perform such calculations on an *ad hoc* basis, although disagreement on credit due could be problematic. It is not clear how that design feature relates to the provision that an "independent person" could certify a carbon prices, and to what extend that sort of certification might be able to override a bilateral agreement. Nor is it clear what qualifications the independent person would have to possess.

A welcome feature of this design element is the ability for the CBAM to take account of subnational carbon prices, such as those paid by producers in the U.S. Regional Greenhouse Gas Initiative, even in the absence of national carbon pricing.

Any scheme for crediting creates a risk of trans-shipment: the routing of foreign goods through a third country to unfairly take advantage of the preferable treatment accorded that country's goods. The final CBAM design will need to include provisions to prevent trans-shipment.



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It is worth noting that the proposal does not allow for credit for non-price-based climate policies in the country of export. While this may give rise to political and diplomatic tensions with climate ambitious trading partners with no carbon price, it is defensible on conceptual and methodological grounds. Giving such credit would mean that the base adjustment should account for not only the ETS allowance price, but also for the EU's internal non-price-based climate policies, which would greatly expand the scope and complexity of the instrument, and arguably place it on the wrong side of WTO law. It would present other administrative and methodological challenges as well, including: the need to create and maintain a price equivalent estimate of the sum total of all climate-related regulations in all the EU's trading partners, and the need to determine which sorts of policies should be counted as "climate-related."

The proposal to modify the base adjustment to take account of any free allowances granted allows the ETS to decrease free allocation over time, with the CBAM adjustment increasing at the same time to increase protection.

3.9 Use of Revenue

3.9.1 Summary

As proposed, the CBAM will not generate revenue in the transitional period from 2023 to 2025. During this period, the CBAM mechanism will apply as a monitoring and reporting obligation that will entail no financial adjustments. Revenue will be generated as of 2026 and will be collected nationally by competent authorities.

Overall, CBAM revenues are expected to exceed administrative costs (see section 3.9.4). The proposed regulation includes no provisions regarding the use of this revenue, besides a reference in the explanatory memorandum specifying that most of it will accrue to the EU budget, thereby contributing to the EU's own resources. The proposed CBAM regulation falls short of providing any articles setting out the principles or provisions regarding the earmarking of revenues for specific purposes e.g. for climate-related investments domestically or abroad, or for covering incurred administrative and compliance costs. It thus also remains agnostic with respect to the extent to which the revenues will be retained domestically or sent abroad.

The absence of earmarking scores well in terms of environmental and competitiveness effectiveness, as it does not introduce constraints that can lead to non-optimal decision-making. It is also technically and administrative less complex. On the other hand, the absence of earmarking might come at the cost of reducing legal, political, and diplomatic feasibility, as the CBAM might be perceived as a revenue-raising tool rather than a tool to address carbon leakage.

Relevant Provision	Content
	Explanatory Memorandum
	Most revenues generated by CBAM will go to the EU budget ⁴ . In the special European Council
	of 17-21 July 2020 ⁵ , EU leaders agreed on the recovery instrument NextGenerationEU. The
4. Budgetary	instrument will provide the EU with necessary means to address the challenges posed by the
Implications	COVID-19 pandemic and, therein, support investment in the green and digital transitions. In
	order to finance it, the Commission will be able to borrow up to EUR 750 billion on financial
	markets. In that context, the European Parliament, the Council and the Commission agreed
	that 'the Institutions will work towards introducing sufficient new own resources with a view
	to covering an amount corresponding to the expected expenditure related to the repayment'

3.9.2 Relevant Provisions

⁴ Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom (OJ L 424, 15.12.2020, p. 1).

⁵ See European Council conclusions, 17-21 July 2020. <u>https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf</u>



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	of NextGenerationEU ⁶ . The Commission committed to put forward proposals on new own
	resources, which would include the CBAM in the first semester of 2021.
	Preamble
	(55) As the CBAM aims to encourage cleaner production processes, the EU stands ready to
§ 55	work with low and middle-income countries towards the decarbonisation of their
	manufacturing industries. Moreover, the Union should support less developed countries with
	the necessary technical assistance in order to facilitate their adaptation to the new
	obligations established by this regulation.

3.9.3 Evolution

In the months leading up to the CBAM proposal, there was political direction and a strong desire within the EU institutions to assign CBAM revenues as new own resources of the EU, with indications that there was also strong political support for this approach.

With its resolution adopted in March 2021 as part of its 'Own Initiative', the European Parliament backed the Commission's intention to use revenues generated by the CBAM as new 'Own Resources' for the EU budget, asking, however, in addition "the Commission to ensure full transparency about the use of those revenues". The European Parliament resolution also called for those new revenues to allow "for greater support for climate action and the objectives of the Green Deal, such as the just transition and the decarbonisation of Europe's economy, and for an increase in the EU's contribution to international climate finance in favour of Least Developed Countries and Small Island Developing States, which are most vulnerable to climate change, in particular to support them to undergo an industrialisation process based on clean and decarbonised technologies [...]".

Notwithstanding, the July 2021 CBAM proposal does not include any details about the channeling of revenues.

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
No earmarking of	No earmarking of	Revenues accruing to	Not allocating a share	CBAM might be
revenues entails	revenues entails	EU budget without	of revenue to minimize	perceived as a
no constraints in	no constraints in	having to define	the transaction cost of	domestic revenue
their use, leading	their use, leading	revenue allocation	foreign producers and	raising tool,
to optimal	to optimal	rules to multiple uses	promote mitigation	decreasing its
decision-making	decision-making	nor carry out a process	effort, likely weakens	acceptance by

3.9.4 Analysis

⁶ Interinstitutional Agreement of 16 December 2020 between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources (OJ L 433I, 22.12.2020, p. 28).



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international law pushback		to award funding for projects entails minimum administrative burden	the case under Article XX GATT and increases the risk of legal challenges under international law	international partners, like increasing diplomatic pushback
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The proposed regulation includes a reference in the explanatory memorandum specifying that most of the revenue will accrue to the EU budget, thereby contributing to the EU's own resources. One interpretation of the wording "most of the revenue" could be that it leaves some room for a share of the revenue collected by Member States to be retained by them to cover incurred administrative costs, with the rest accruing to the EU budget. As a parallel, existing EU own resources such as customs duties and sugar levies are levied on economic operators and collected by Member States retain as collection that Member States retain as collection costs.

The proposed regulation includes no provisions regarding the use of revenue. It falls short of setting out guiding principles or provisions regarding the earmarking of revenues to specific purposes e.g. for climate purposes domestically or abroad, or for covering incurred administrative and compliance costs.

It thus remains agnostic with respect to a fundamental CBAM design choice, i.e. the extent to which the revenues will be retained domestically or sent abroad (e.g. through funds that help developing country producers decarbonize production, or that support the costs of any required emissions auditing and certification). Sending part of the revenues abroad would help ensure that the BCA respected the UNFCCC principle of common but differentiated responsibility and respective capabilities (CBDR-RC). It would also help support the argument that the BCA is a *bona fide* environmental measure, should it be forced to resort to a GATT Article XX defense. In contrast, any option that retained revenues within the implementing jurisdiction might fare worse in a GATT Article XX defense than the international options. The absence of earmarking might therefore come at the cost of reducing legal, political, and diplomatic feasibility, as CBAM might be perceived as a revenue raising tool rather than a tool to address carbon leakage, thereby reducing its acceptance by international partners, and increasing the risk of legal challenges under international law and diplomatic pushback.

Notwithstanding, the preamble of the proposed regulation does make references to the EU working with low and middle-income countries towards the decarbonisation of their industries and offering technical assistance to less developed countries to enable them to adapt to CBAM obligations. This is telling of the EU's intention to work closely with international partners, and signals a possible increase in international cooperation and finance targeted at addressing any negative economic impacts of CBAM. Yet, the current text does not provide a commitment to do so within the context of the CBAM regulation, in the way earmarking would have. Such assurances could still come through commitments under separate international cooperation fora or bilateral agreements.

With respect to environmental effectiveness and competitiveness, earmarking of revenues would entail that their use is somehow constrained and can thus be considered as leading to non-optimal decisionmaking. The absence of earmarking therefore fares well in terms of environmental and competitiveness



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effectiveness. Similarly, a CBAM whereby revenues accrue to EU budget without having to define revenue allocation rules to multiple uses nor carry out a process to award funding for projects entails minimum technical complexity and administrative burden.

Overall, CBAM revenues are expected to exceed administrative costs. The yearly revenue directly generated by CBAM itself is estimated to be above EUR 2.1 billion in 2030, with a further EUR 7 billion expected from additional auctioning in the CBAM sectors (European Commission, 2021a, p.58). This compares to estimates of aggregate costs for businesses of EUR 9.8 to 14.3 million annually, and estimated enforcement costs for authorities of EUR 15 million per year (European Commission, 2021c, p.2). Should the geographical, sectoral and emissions scope of the CBAM evolved to widen during the political negotiations or through future amendments, potential revenues may likewise increase if they are not offset by falling carbon intensities of production.



3.10 Administration and Governance

3.10.1 Summary

Administratively, the CBAM will impose a burden shared by EU and Member States. In the proposed regulation released in July 2021, a majority of administrative tasks is delegated to the so-called 'competent authorities' in the Member States, designated by each Member State in accordance with Article 11. For instance, the competent authorities are charged with reviewing and approving the application for authorisation of declarants to import covered goods (Articles 5 and 17), administering the system of CBAM declarations stating the quantity, embedded emissions and other properties of imported goods covered by the CBAM (Articles 6 and 19), and deciding on crediting of carbon prices paid in the country of origin (Article 9). They also are mandated with establishing a national registry of declarants – consisting of a standardised electronic database - that also contains the data regarding the CBAM certificates of those declarants (Articles 14 and 16). Competent authorities in the Member States also administer most aspects of the system of notional CBAM certificates that need to be purchased and surrendered by importers (Articles 20, 22, 23 and 24). Additionally, because goods that enter the customs territory of the EU cross the physical border of a Member State prior to their release into the market, the customs authorities of the Member States are charged with implementing responsibilities, such as ensuring that goods are imported by authorised declarants and communicating information on such goods declared for importation (Article 25). Finally, national accreditation bodies have responsibility to accredit verifiers for the certification of emissions (Article 18) and applying enforcement provisions, such as penalties (Article 26).

By contrast, under the regulation proposal, the European Commission holds a subsidiary role in the administration of the CBAM, where it "shall assist the competent authorities in carrying out their obligations" under the regulation and "coordinate their activities" (Article 12). An important task it will execute at the centralized level is the elaboration and adoption of implementing acts under several provisions of the proposed regulation (e.g. Articles 5, 6, 7, 8, 9), and operation of a central database for the registration of information related to third country installations (Articles 10 and 14). The European Commission is also charged with acting as the 'central administrator', tracking the purchase, holding, surrender, re-purchase and cancellation of CBAM certificates and ensuring coordination between national registries (Article 15), and also determining and publishing the price of CBAM certificates (Article 21).

Relevant Provision	Content
Provisions conc	erning Member State Competent Authorities
Article 11	Competent Authorities
	Each Member State shall designate the competent authority to carry out the obligations
	under this Regulation and inform the Commission thereof.

3.10.2 Relevant Provisions



Relevant Provision	Content
Article 4	Importation of goods
	Goods shall only be imported into the customs territory of the Union by a declarant that is authorised by the competent authority in accordance with Article 17 ('authorised declarant'). []
Article 5	Application for an authorisation
	Any declarant shall, prior to importing goods as referred to in Article 2, apply to the competent authority at the place where it is established, for an authorisation to import those goods into the customs territory of the Union. []
Article 6	CBAM declaration
	By 31 May of each year, each authorised declarant shall submit a declaration ('CBAM declaration'), for the calendar year preceding the declaration, to the competent authority. []
Article 14	National registries and central database
	The competent authority of each Member State shall establish a national registry of declarants authorised in that Member State in the form of a standardised electronic database containing the data regarding the CBAM certificates of those declarants, and to provide for confidentiality in accordance with the conditions set out in Article 13. []
Article 16	Accounts in the national registries
	1. The competent authority shall assign to each authorised declarant a unique CBAM account number.
	2. Each authorised declarant shall be granted access to its account in the registry.
	3. The competent authority shall set up the account as soon as the authorisation referred to in Article 17(1) is granted and notify the authorised declarant thereof.
	4. If the authorised declarant has ceased its economic activity or its authorisation was revoked, the competent authority shall close the account of that declarant.
Article 17	Authorisation of declarants
	1. The competent authority shall authorise a declarant who submits an application for authorisation in accordance with Article5(1), if the following conditions are fulfilled: []
Article 19	Review of CBAM declarations
	1. The competent authority may review the CBAM declaration within the period ending with the fourth year after the year in which the declaration should have been submitted. The review may consist in verifying the information provided in the CBAM declaration on the



Relevant Provision	Content
	basis of the information communicated by the customs authorities in accordance with Article 25(2) and any other relevant evidence, and on the basis of any audit deemed necessary, including at the premises of the authorised declarant. []
Article 20	Sale of CBAM certificates
	 The competent authority of each Member State shall sell CBAM certificates to declarants authorised in that Member State at the price calculated in accordance with Article 21. The competent authority shall ensure that each CBAM certificate is assigned a unique unit identification code upon its creation and shall register the unique unit identification number, the price and date of sale of the certificate in the national registry in the account of the
	authorised declarant purchasing it.
Article 22	Surrender of CBAM certificates
	 By 31 May of each year, the authorised declarant shall surrender a number of CBAM certificates to the competent authority that corresponds to the embedded emissions declared in accordance with Article 6(2)(c) and verified in accordance with Article 8 for the calendar year preceding the surrender [] Where the competent authority finds that the number of CBAM certificates in the account of the surrender is a surrender in a surrender in a surrender in the surrender is a surrender in the surrender in the surrender in the surrender is a surrender in the s
	of an authorised declarant is not in compliance with the obligations pursuant to paragraph 2, second sentence, that authority shall notify the adjustment and request that the authorised declarant surrenders the additional CBAM certificates within one month. []
Article 23	Re-purchase of CBAM certificates
	1. The competent authority of each Member State shall, on request by a declarant authorised in that Member State, re-purchase the excess of CBAM certificates remaining on the account of the declarant in the national registry after the certificates have been surrendered in accordance with Article 22. The request to re-purchase shall be submitted by 30 June of each year when CBAM certificates were surrendered. []
Article 24	Cancellation of CBAM certificates
	By 30 June of each year, the competent authority of each Member State shall cancel any CBAM certificates that were purchased during the year before the previous calendar year and that remained in the accounts in the national registry of the declarants authorised in that Member State.
Article 26	Penalties
	[] 4. If the competent authority determines that an authorised declarant has failed to comply with the obligation to surrender CBAM certificates as specified in paragraph 1, or that a



Relevant Provision	Content
	person has introduced goods into the customs territory of the Union as specified in paragraph 2, the competent authority shall impose the penalty and notify the authorised declarant or, in the situation under paragraph 2, the person []
	5. Member States may apply administrative or criminal sanctions for failure to comply with the CBAM legislation in accordance with their national rules in addition to penalties referred to in paragraph 2. Such sanctions shall be effective, proportionate and dissuasive.
Provisions conce	erning Member State accreditation bodies
Article 18	Accreditation of verifiers
	1. Any person accredited pursuant to Implementing Regulation (EU) No 2018/2067 shall be regarded as an accredited verifier under this Regulation.
	2. In addition to paragraph 1, a national accreditation body may on request accredit a person as a verifier under this Regulation after checking the documentation attesting its capacity to apply the verification principles referred to Annex V to perform the obligations of control of the embedded emissions established in Articles 8, 10 and 38.
	3. The Commission is empowered to adopt delegated acts in accordance with Article 28 for the accreditation referred to in paragraph 2, specifying conditions for the control
Provisions conce	erning Member State Customs Authorities
Article 25	Procedures at the border when goods are imported
	1. The customs authorities shall not allow the importation of goods unless the declarant is authorised by a competent authority at the latest at the release for free circulation of the goods.
	2. The customs authorities shall periodically communicate information on the goods declared for importation, which shall include the EORI number and the CBAM account number of the declarant, the 8-digit CN code of the goods, the quantity, the country of origin, the date of declaration and the customs procedure, to the competent authority of the Member State where the declarant has been authorised.
	3. The custom authorities shall carry out controls on the goods in accordance with Article 46 of Regulation (EU) No 952/2013, including the 8-digit CN code, the quantity and the country of origin of the imported goods. The Commission shall include the risks relating to CBAM in the design of the common risk criteria and standards pursuant to Article 50 of Regulation (EU) No 952/2013.
	4. The customs authorities may communicate in accordance with Article 12(1) of Regulation (EU) No 952/2013, confidential information acquired by the customs authorities in the course of performing their duty or provided on a confidential basis, to the competent authority of the Member State where the declarant has been authorised. The competent authorities of



Relevant Provision	Content
	the Member States shall treat and exchange this information in accordance with Council Regulation (EC) No 515/97.
Article 33	Importation of goods [during the transitional period]
	1. A declarant importing goods shall be obliged to fulfil a reporting obligation as set out in Article 35.
	2. The customs authorities shall, at the moment of the release of those goods for free circulation at the latest, inform the declarant of the obligation referred to in paragraph 1.
	3. The customs authorities shall, by means of the surveillance mechanism established pursuant to Article 56(5) of Regulation (EU) No 952/2013, communicate to the competent authority of the Member State of importation information on imported goods, including processed products resulting from the outward processing procedure. Such information shall include the EORI number of the declarant, the 8- digit CN code, the quantity, the country of origin and the declarant of the goods, the date of declaration and the customs procedure.
Provisions conc	erning the European Commission
Article 12	Commission
	The Commission shall assist the competent authorities in carrying out their obligations under this Regulation and coordinate their activities.
Article 10	Registration of operators and installations in third countries
	The Commission shall, upon request by an operator of an installation located in a third country, register the information on that operator and on its installation in a central database referred to in Article 14(4). []
Article 14	National registries and central database
	[] The Commission shall establish a central database accessible to the public containing the names, addresses and contact details of the operators and the location of installations in third countries in accordance with Article 10(2). An operator may choose not to have its name, address and contact details accessible to the public.
Article 15	Central administrator
	 The Commission shall act as central administrator to maintain an independent transaction log recording the purchase of CBAM certificates, their holding, surrender, re-purchase and cancellation and ensure coordination of national registries. The central administrator shall carry out risk-based controls on transactions recorded in
	national registries through an independent transaction log to ensure that there are no



Relevant Provision	Content				
	irregularities in the purchase, holding, surrender, re-purchase and cancellation of CBAM certificates.				
	3. If irregularities are identified as a result of the controls carried out under paragraph 2, 5 Commission shall inform the Member State or Member States concerned for further investigation in order to correct the identified irregularities.				
Article 21	Price of CBAM certificates				
	1. The Commission shall calculate the price of CBAM certificates as the average price of the closing prices of EU ETS allowances on the common auction platform in accordance with the procedures laid down in Commission Regulation (EU) No 1031/201026 for each calendar week.				
	For those calendar weeks in which there are no auctions scheduled on the common auction platform, the price of CBAM certificates shall be the average price of the closing prices of EU ETS allowances of the last week in which auctions on the common auction platform took place.				
	2. This average price shall be published by the Commission on its website on the first working day of the following calendar week and shall be applied from the following working day to the first working day of the following calendar week.				
	3. The Commission is empowered to adopt implementing acts to further define the methodology to calculate the average price of CBAM certificates and practical arrangements for the publication of the price. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).				
Article 5	Application for an authorisation				
	[]				
	6. The Commission is empowered to adopt implementing acts, concerning the standard format of the application and the delays and procedure to be followed by the competent authority when processing applications for authorisation in accordance with paragraph 1 and the rules for identification by the competent authority of the declarants for the importation of electricity. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).				
Article 6	CBAM declaration				
	[] 6. The Commission is empowered to adopt implementing acts concerning the standard format and the procedure for submitting the CBAM declaration and the arrangements for surrendering CBAM certificates provided for in paragraph 2, point (c). Those implementing				



Relevant Provision	Content		
	acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).		
Article 7	Calculation of embedded emissions		
	[]		
	6. The Commission is empowered to adopt implementing acts concerning detailed rules regarding the elements of the calculation methods set out in Annex III, including determining system boundaries of production processes, emission factors, installation-specific values of actual emissions and default values and their respective application to individual goods as well as laying down methods to ensure the reliability of data on the basis of which the default values shall be determined, including the level of detail and the verification of the data. Where necessary, those acts shall provide that the default values can be adapted to particular areas, regions or countries to take into account specific objective factors such as geography, natural resources, market conditions, prevailing energy sources, or industrial processes. The implementing acts shall build upon existing legislation for the verification of emissions and activity data for installations covered by Directive 2003/87/EC, in particular Implementing Regulation (EU) No 2018/2067.		
Article 8	Verification of embedded emissions		
	[]		
	3. The Commission is empowered to adopt implementing acts concerning the principles of verification referred to in paragraph 1 as regards the possibility to waive the obligation for the verifier to visit the installation where relevant goods are produced and the obligation to set thresholds for deciding whether misstatements or non- conformities are material and concerning the supporting documentation needed for the verification report.		
	The implementing acts referred to in the first subparagraph shall be adopted in accordance with the examination procedure referred to in Article 29(2).		
Article 9	Carbon price paid in a country of origin		
	[]		
	4. The Commission is empowered to adopt implementing acts establishing the methodology for calculating the reduction in the number of CBAM certificates to be surrendered, regarding the conversion of the carbon price paid in foreign currency into euro at yearly average exchange rate in accordance with paragraph 1, and regarding the qualifications of the independent person certifying the information as well as elements of proof of the carbon price paid and the absence of export rebates or other forms of compensation on exportation being applied as referred to in paragraph 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).		



Relevant Provision	Content				
Article 18	Accreditation of verifiers				
	[]				
	3. The Commission is empowered to adopt delegated acts in accordance with Article 28 for				
	oversight of accredited verifiers, for the withdrawal of accreditation and for mutual				
	recognition and peer evaluation of the accreditation bodies.				
Article 25	Procedures at the border when goods are imported				
	[]				
	5. The Commission is empowered to adopt implementing acts defining the information, the				
	implementing acts shall be adopted in accordance with the examination procedure referred				
	to in Article 29(2).				
Article 27	Circumvention				
	1. The Commission shall take action, based on relevant and objective data, in accordance with this Article, to address practices of circumvention of this Regulation.				
	[]				
	5. Where the Commission, taking into account the relevant data, reports and statistics,				
	including when provided by the customs authorities of Member States, has sufficient re to believe that the circumstances referred to in paragraph 3 are occurring in one or more				
	Member States, it is empowered to adopt delegated acts in accordance with Article 28 to				
	anti-circumvention purposes.				
Article 31	Free allocation of allowances under the EU ETS and obligation to surrender CBAM				
	1. The CBAM certificates to be surrendered in accordance with Article 22 shall be adjusted to reflect the extent to which EU ETS allowances are allocated free of charge in accordance with				
	Article10a of Directive2003/87/EC to installations producing, within the Union, the goods listed in Annex I.				
	2. The Commission is empowered to adopt implementing acts laying down a calculation				
	methodology for the reduction referred to in paragraph1. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 29(2).				



3.10.3 Evolution

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The proposed CBAM regulation released in July 2021 puts forward a fairly decentralized administration setup of CBAM, with a majority of administrative tasks delegated to the 'competent authorities' in the Member States, and the European Commission holding a central coordinator and administrator role, as well as being tasked with the elaboration and adoption of implementing acts that will specify how legislation should be implemented with regards to highly technical aspects.

In the run up to the CBAM proposal, alternative administrative setups were considered, including a more centralised one, whereby the vast majority of administrative tasks would have accrued to the EU itself. Under that scenario, the Commission would have designated and staffed a centralized CBAM Authority that would inter alia have decided on applications by importers for authorization to import goods, administered the system of customs declarations stating the quantity, embedded emissions and other properties of imported goods covered by the CBAM, and operated the system of notional CBAM certificates that would have been purchased and surrendered by importers. Relatively few implementation tasks would have been left for the Member State authorities to perform through their customs authorities, notably ensuring that declarants of covered goods are registered with the centralized CBAM Authority, and periodically communicating to the centralized CBAM Authority available information on those goods, such as quantity, country of origin, and declarant of the goods.

Should the geographical, sectoral and emissions scope of the CBAM evolve and widen during the political negotiations or through future amendments, the required administrative effort may likewise increase.

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Limited impact	Limited impact	Measured approach in terms of sharing of responsibilities between the EU and Member States, following a similar setup as in the EU ETS, and allowing to capitalise on national competent authorities past experience	Limited impact	Decentralised approach respects Member State competences and the principle of subsidiarity

3.10.4 Analysis

The administrative setup of CBAM has limited implications for the environmental and competitiveness benefits of the CBAM, or the degree of its legal feasibility. In terms of technical feasibility, it has little bearing on the overall required administrative effort, but significant bearing on how this is shared between Member States and the EU.

The proposed CBAM administration and governance takes a mostly measured approach in terms of allocating responsibilities between the EU and Member States: the proposed day-to-day administration

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is fairly decentralized and falls mostly on EU Member States in a similar manner that the EU ETS is, with the European Commission acting as the 'central administrator'. The set-up whereby national competent authorities play a key role mirrors to a large extent the set-up used in the EU ETS, allowing Member States to capitalize on their experience in managing the EU ETS. In addition, the Commission will execute at the centralized level the important task of elaborating and adopting implementing acts to specify how the CBAM regulation should be implemented with regard to highly technical aspects (e.g. calculation of embedded emissions). Member States will also have a say in this work, as the Commission will need to consult the 'CBAM Committee' (created with Article 29) in which every EU country will be represented.

The overall decentralised approach respects Member State competences and the principle of subsidiarity, and should not really result in much political pushback by EU Member States. Nonetheless, the allocation of administrative tasks might still be subject to discussions and changes in the run up to the adoption of the CBAM regulation. It is difficult to predict which stance different Member States might take in this respect: on the one hand, a decentralized setup will entail an increased administrative burden to be borne by them, while most revenue would presumably still accrue to the EU budget. On the other hand, a greater role of Member States in the administration of the CBAM could provide an argument in favour of retaining part of the revenue domestically at the Member State level to cover administrative costs. Notwithstanding, the apportionment of administrative responsibilities can be expected to be subject to interinstitutional negotiations, with economy size and geographical location of countries possibly impacting their positions.

While all Member States of the EU can, in principle, be the port of first entry of imported goods (given carriage of many goods by air), the nature of goods most likely covered by the CBAM – basic materials and electricity – means that any implementation burdens accruing to the Member States will disproportionately fall on those Member States along the EU external borders that see heavy goods traffic, notably Eastern and Southeastern European countries, countries along the Mediterranean Sea, and countries – such as Belgium, France, Germany, and the Netherlands – with large commercial ports. Additionally, coverage of electricity would exclusively affect Member States with power grid interconnectors with non-EU electricity grids, again primarily Eastern and Southeastern European countries (due to existing electricity trade with Russia, Belarus, Ukraine, Moldova, Turkey, and non-EU countries in the Balkan Peninsula), Spain (due to electricity trade with Morocco), and Belgium and the Netherlands (due to electricity trade with the UK). This burden might be counterbalanced in case Member States are allowed to retain a certain share of CBAM revenue as collection costs before the remainder accrues to the EU budget.



3.11 Timeline and Sequence

3.11.1 Summary

As proposed, the CBAM takes a mostly measured approach in terms of implementation timeline: payment obligations for importers do not begin until 2026, following a transitional period; free allocation will be phased out gradually, prorating the initial payment obligation for importers. Similarly, the proposed CBAM takes a prudent approach in terms of initial sector/product scope (small number of sectors included initially), as well as emissions scope (only direct emissions are covered, with a review to decide the inclusion of Scope 2 emissions due in 2026).

The gradual introduction of the CBAM, involving an initial phase without financial adjustments, will provide sufficient time for regulated entities to adjust to requirements, and authorities to set up administrative systems and obtain experience with respect to their operation. Similarly, the gradual transitioning from free allowances to the CBAM will allow time and resources to develop methodologies that will ensure equivalent carbon pricing between domestic and imported goods.

Overall, the proposed design of a gradual introduction of the CBAM strengthens its political, legal and technical feasibility, increasing the chances of a mechanism that will not be challenged to be adopted. This is however at the cost of forgoing part of the environmental benefits during the early stages of implementing the CBAM.

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3.11.2 Relevant Provisions

Relevant Provision	Content		
Provisions in the CBAM proposal (European Commission, 2021a)			
Article 1	Subject matter		
	[]		
	3. The mechanism will progressively become an alternative to the mechanisms established under Directive 2003/87/EC to prevent the risk of carbon leakage, notably the allocation of allowances free of charge in accordance with Article 10a of that Directive.		
Article 31	Free allocation of allowances under the EU ETS and obligation to surrender CBAM certificates		
	1. The CBAM certificates to be surrendered in accordance with Article 22 shall be adjusted to reflect the extent to which EU ETS allowances are allocated free of charge in accordance with Article10a of Directive2003/87/EC to installations producing, within the Union, the goods listed in Annex I.		
Article 36	Entry into force		
	1. This Regulation shall enter into force on the [twentieth] day following that of its publication in the Official Journal of the European Union.		
	2. It shall apply from 1 January 2023.		
	3. By way of derogation from paragraph 2:		
	(a) Articles 32 to 34 [transitional provisions] shall apply until 31 December 2025.		
	(b) Article 35 shall apply until 28 February 2026.		
	(c) Articles 5 and 17 shall apply from 1 September 2025.		
	(d) Articles 4, 6, 7, 8, 9, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 31 shall apply from 1 January 2026.		
Provisions in the	e proposal for the review of the EU ETS (European Commission, 2021b)		
(30)	Preamble		
	The Carbon Border Adjustment Mechanism (CBAM), established under Regulation (EU) [/] of the European Parliament and of the Council, is an alternative to free allocation to address the risk of carbon leakage. To the extent that sectors and subsectors are covered by that measure, they should not receive free allocation. However, a transitional phasing-out of free allowances is needed to allow producers, importers and traders to adjust to the new regime. The reduction of free allocation should be implemented by applying a factor to free allocation for CBAM sectors, while the CBAM is phased in. This percentage (CBAM factor) should be equal to 100% during the transitional period between the entry into force of [CBAM Regulation] and 2025, 90 % in 2026 and should be reduced by 10 percentage points		

Relevant Provision	Content		
	each year to reach 0 % and thereby eliminate free allocation by the tenth year. The relevant delegated acts on free allocation should be adjusted accordingly for the sectors and subsectors covered by the CBAM. []		

3.11.3 Evolution

The political direction in the EU in the months leading up to the CBAM proposal called for a CBAM introduction as of 2023: The European Council of 17 to 21 July 2020 noted that "as a basis for additional own resources, the Commission will put forward in the first semester of 2021 proposals on a carbon border adjustment mechanism and on a digital levy with a view to their introduction at the latest by 1 January 2023" (European Council, 2020). The same starting date was echoed by European Parliament in its March 2021 'Own Initiative' echoed 2023 as the target starting date. At the same time, it became increasingly clear during the preparatory discussions in Brussels that the proposed regulation would likely include some sort of phasing of the mechanism or a pilot phase during which the CBAM would prove its viability. Thus, a sequenced CBAM introduction of some form was expected. What was perhaps less anticipated was the specific way of gradual introduction whereby the transitional period would be a reporting obligation involving no financial payments.

3.11.4 Analysis

Environmental Benefit	Competitive- ness Benefit	Technical & Administrative Feasibility	Legal Feasibility	Political & Diplomatic Feasibility
Reduced environmental benefit compared to CBAM without transitional period, or CBAM with immediate phase out of free allocation	Transitional period with (some) free allocation and the CBAM safeguards competitiveness better than the immediate phase-out of free allocation. Negative impact on long-term competitiveness because of slower decarbonisation pathway.	Gradual introduction of CBAM allows time to develop systems and methodologies, and to gain experience during the transitional phase	Gradual introduction of CBAM allows partners to adjust to requirements, minimising chances of legal challenges	Gradual introduction of CBAM strengthens its political feasibility, in the EU and internationally

During an initial 3-year transitional period (2023-2025), the CBAM applies solely as a reporting obligation for importers, while the current approach to leakage protection free allocation is fully retained. Starting in 2026, payment obligations begin for importers, and free allocation will be phased out gradually during a ten year period (2026-2035), prorating the initial payment obligation for importers.

Similarly, the proposed CBAM takes a prudent approach in terms of initial sector/product scope, as well as emissions scope. It starts with products in a selected number of sectors with relatively homogeneous products where there is a risk of carbon leakage, with the European Commission having the possibility to



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add products/sectors to the list in the future through delegated acts. Moreover, initially only direct emissions are covered, and a review will make recommendations in 2026 on whether to include indirect emissions from electricity (Scope 2) going forward.

This measured approach in terms of implementation timeline is likely owed to preempting potential diplomatic and legal pushback from trade partners, a desire to minimize resource shuffling, as well as power wrangling and industry concerns articulated by the Member States.

Advancing from theoretical concept to a practised reality, the design and implementation of a CBAM will reveal conceptual and methodological shortcomings, prompt legal and political responses from domestic and foreign stakeholders, and operate in an evolving landscape of national and international climate policies, changing trade patterns, and technological change. The proposed sequenced approach to CBAM implementation mitigates the attendant uncertainties by reducing its initial impacts on both domestic and international stakeholders (through requiring no financial adjustments before 2026, and through the initial retention and subsequent gradual phase out of free allocation, which significantly reduces the volume of emissions to which a CBAM applies) before subsequent phases expand the scope and impact of the CBAM. Such phased approach also yields additional time to review and improve system design, refine applicable methodologies and collect relevant data, meaningfully engage trade partners through consultations and negotiation, and afford trade partners more time to enact or strengthen domestic climate policies as well as foreign producers to prepare for compliance.

Reviewing the continued need of a CBAM in light of international developments is also enabled by this timeline, which aligns with the Paris Agreement ambition cycle to reflect the outcomes of the first 'Global Stocktake' process to review climate policy effort by its parties in 2023, and the deadline for communication of new or updated Nationally Determined Contributions (NDCs) in 2025.

Overall, the proposed design of a gradual introduction of CBAM strengthens its political, legal and technical feasibility: it reduces legal risk while improving political viability both within the EU and with its diplomatic partners, increasing the chances of a mechanism that will not be challenged to be adopted. Moreover, the transitional period signals to partners that CBAM is not a revenue raising instrument.

In terms of competitiveness, the proposed gradual introduction of CBAM entails two effects that work in opposite directions: on the one hand, the transitional period with both (some) free allocation and the CBAM in place safeguards domestic competitiveness better than an immediate phase-out of free allocation would; on the other hand, the slower introduction of CBAM provides a somewhat muted decarbonization signal to regulated entities, and to some degree delay decarbonization of domestic industry and to that effect hamper their long-term competitiveness and viability.

This comes, however, at the cost of forgoing part of the environmental benefits during the transitional period of implementation without financial adjustments, as well as during the period of gradual phase out of free allocation, and more generally until subsequent reviews of the CBAM expand its scope and impact.



4 Conclusions

The European Commission has done well in proposing a CBAM that is seen as "pragmatic" and with a commensurate pace, given that it is a central plank in the 'Fit for 55' legislative package – a necessary but not sufficient condition. The Commission's July 2021 proposal, analyzed and assessed herein, is a pragmatic compromise solution to the many competing objectives that drive the formulation of such a complex instrument.

That said, pragmatism may not meet the expectation of urgency that the law drives. While a slow timeline for phase-in plays well in terms of diffusing opposition at home and abroad, giving time for EU producers and others to invest in low-carbon technology and implement systems of compliance, a gradual approach stands in contrast to the ambitious timelines outlined in the EU Climate Law and the European Green Deal's 'Fit for 55' package.

Also, some notably difficult issues have been pushed down the road without much-needed clarity on how they will eventually be addressed. Leakage and competitiveness impacts in export markets may be the most prominent challenge on this list, which also includes dealing with indirect (Scope 2) emissions and extending the regime to cover complex sectors like chemicals, and pulp and paper.

Clearly, some of the outstanding issues will need to be addressed by means of policies outside the CBAM – policies for example aimed at creating markets for low-carbon goods, increasing the viability of new low carbon technologies, and securing international cooperation on industrial decarbonization. ERCST analysis has consistently noted that the CBAM cannot be imagined as a silver bullet – a single instrument to address all the EU's risks of leakage and competitiveness impacts in a world of uneven climate ambition.

Some elements of the proposal as presented may also need to be revised. For example, our recommendations describe the need for change in the Commission's plans to denote CBAM revenues as own resources. Such changes may come in the process of consultation and final agreement on the shape of the regime.

Finally, together with other provisions in the EGD, the fact that the proposed CBAM is a companion to the EU ETS, a market mechanism, while not being allowed a market flexibility, may lead to seeing market approaches lose some of the importance that they were initially given, and the EU increasingly leaning towards regulation.

As it did when it established the Emissions Trading System, the EU is exploring new ground in aiming to create a CBAM. It is an inherently complex and controversial instrument, but it is nonetheless one of the few available tools to help facilitate climate ambition in the absence of global agreement on carbon pricing. The road ahead may not be smooth, but it seems at least to be heading in the right direction.

References

BRICS (2021). New Delhi Statement on Environment, 7th Meeting of BRICS Environment Ministers,

https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/aug/doc20218273 1.pdf

- Canada Department of Finance (2021), Exploring Border Carbon Adjustments for Canada, August 2021, <u>https://www.canada.ca/en/department-</u> <u>finance/programs/consultations/2021/border-carbon-adjustments/exploring-border-</u> <u>carbon-adjustments-canada.html</u>
- Council of the EU (2020). Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom, OJ L 424, 15 December 2020. <u>https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32020D2053</u>
- de Cendra de Larragán, Javier (2006). Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law, Review of European Community and International Environmental Law, Vol. 15, Issue 2, pp. 131-145.
- European Commission (2021a). Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism, COM(2021) 564 final, 14 July 2021. <u>https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A52021PC0564&qid=1629724352616</u>
- European Commission (2021b). Proposal for a Directive amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757, COM(2021) 551 final, 14 July 2021. <u>https://eurlex.europa.eu/resource.html?uri=cellar:618e6837-eec6-11eb-a71c-01aa75ed71a1.0001.02/DOC 1&format=PDF</u>
- European Commission (2021c). European Commission Staff Working Document, Executive Summary of the Impact Assessment Report Accompanying the document Proposal for a Regulation of the European Parliament and of the Council, establishing a carbon border adjustment mechanism, SWD(2021) 644 final, 14 July 2021.
- European Commission (2021d). 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, SWD(2021) 643 final, 14 July 2021. <u>https://eur-lex.europa.eu/legal-</u> content/EN/TXT/?uri=CELEX%3A52021SC0643&gid=1628080168792



- European Commission (2020a). EU Green Deal (Carbon Border Adjustment Mechanism). Inception Impact Assessment. Ref. Ares(2020)1350037, 4 March 2020. <u>https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-EU-Green-Deal-carbon-border-adjustment-mechanism-en</u>.
- European Commission (2020b). EU Green Deal (Carbon Border Adjustment Mechanism). Public Consultation, 22 July 2020. <u>https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-EU-Green-Deal-carbon-border-adjustment-mechanism-/public-consultation_en</u>.
- European Commission (2019). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal, COM(2019)640, 11 December 2019. <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:640:FIN.</u>
- European Council (2020), European Council conclusions, 17-21 July 2020. https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf
- European Parliament (2021). A WTO-compatible EU Carbon Border Adjustment Mechanism, P9_TA(2021)0071, 10 March 2021. <u>https://www.europarl.europa.eu/doceo/document/TA-9-2021-0071_EN.html</u>.
- Evans, Stuart; Michael A. Mehling; Robert A. Ritz and Paul Sammon (2021). Border carbon Adjustments and Industrial Competitiveness in a European Green Deal, Climate Policy, Vol. 21, Issue 3, pp. 307-317. DOI: 10.1080/14693062.2020.1856637.
- IMF, 2021. Proposal for an International Carbon Price Floor Among Large Emitters, IMF STAFF CLIMATE NOTES 2021/001, June 2021. <u>https://www.imf.org/en/Publications/staff-climatenotes/Issues/2021/06/15/Proposal-for-an-International-Carbon-Price-Floor-Among-Large-Emitters-460468</u>
- Interinstitutional Agreement of 16 December 2020 between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, OJ L 4331 , 22 December 2020. <u>https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=uriserv%3AOJ.LI.2020.433.01.0028.01.ENG&toc=OJ%3AL%3A2020% 3A433I%3ATOC</u>
- Kortum, Samuel S., and David Weisbach (2017). The Design of Border Adjustments for Carbon Prices, National Tax Journal, Vol. 70, Issue 2, pp. 421-446.
- Marcu, Andrei, Michael A. Mehling, and Aaron Cosbey (2021a). Border Carbon Adjustments in the EU: A Policy Proposal, European Roundtable on Climate Change and Sustainable

Transition, Brussels. <u>https://ercst.org/border-carbon-adjustments-in-the-eu-a-policy-proposal</u>.

Marcu, Andrei, Michael A. Mehling, and Aaron Cosbey (2021b). Border Carbon Adjustments in the EU: Sectoral Deep Dive, European Roundtable on Climate Change and Sustainable Transition, Brussels.

https://secureservercdn.net/160.153.137.163/z7r.689.myftpupload.com/wpcontent/uploads/2021/03/20210317-CBAM-II_Report-I-Sectors.pdf

- Marcu, Andrei, Michael A. Mehling, and Aaron Cosbey (2020). Border Carbon Adjustments in the EU: Issues and Options, European Roundtable on Climate Change and Sustainable Transition, Brussels. <u>https://ercst.org/border-carbon-adjustments-in-the-eu-issues-and-options.</u>
- UNCTAD, 2021. A European Union Carbon Border Adjustment Mechanism: Implications for developing countries, July 2021. <u>https://unctad.org/system/files/official-document/osginf2021d2_en.pdf</u>
- von der Leyen, Ursula (2019). A Union that Strives for More: My Agenda for Europe. Political Guidelines for the Next European Commission, 16 July 2019. <u>https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-</u> <u>commission_en.pdf</u>.