



Wilfried
Martens Centre
for European Studies

Navigating the Carbon Border Adjustment Mechanism:

The Dangers of Non-Compliance and Circumvention

Jarosław Pietras



Credits

Wilfried Martens Centre for European Studies
Rue du Commerce 20
Brussels, BE - 1000

The Wilfried Martens Centre for European Studies is the political foundation and think tank of the European People's Party (EPP), dedicated to the promotion of Christian Democrat, conservative and like-minded political values.

For more information please visit:

www.martenscentre.eu

Editor: Dimitar Lilkov, Senior Research Officer, Martens Centre

External editing: Communicative English bvba

Layout and cover design: Gëzim Lezha,
Visual Communications Officer, Martens Centre

Typesetting: Victoria Agency

Printed in Belgium by Puntgaaf, Kortrijk.

This publication receives funding from the European Parliament.
© 2022 Wilfried Martens Centre for European Studies

The European Parliament and the Wilfried Martens Centre for European Studies assume no responsibility for facts or opinions expressed in this publication or their subsequent use. Sole responsibility lies with the author of this publication.

Table of Contents

| | |
|--|----|
| About the Martens Centre | 04 |
| About the author | 06 |
| Abbreviations | 08 |
| Introduction | 10 |
| The uniqueness of the CBAM in the world of trade | 14 |
| The danger of non-compliance | 20 |
| The danger of circumvention | 24 |
| Geopolitics | 28 |
| Trade-offs | 34 |
| Non-compliance versus circumvention | 35 |
| Climate versus trade | 36 |
| Unilateral versus collaborative | 37 |
| Simplicity versus complexity | 38 |
| Plainness versus intrusiveness | 40 |
| Environment versus revenue | 41 |
| Recommendations | 42 |
| Moderate expectations | 43 |
| Curtail the multiplicity of aims | 44 |
| Maintain environmental integrity | 45 |
| Use other forums to promote climate action | 45 |
| Embrace the problem of least-developed countries | 47 |
| Conclusion | 50 |
| Bibliography | 52 |

About the Martens Centre



The Wilfried Martens Centre for European Studies, established in 2007, is the political foundation and think tank of the European People's Party (EPP). The Martens Centre embodies a pan-European mindset, promoting Christian Democrat, conservative and like-minded political values. It serves as a framework for national political foundations linked to member parties of the EPP. It currently has 31 member foundations and two permanent guest foundations in 24 EU and non-EU countries. The Martens Centre takes part in the preparation of EPP programmes and policy documents. It organises seminars and training on EU policies and on the process of European integration.

The Martens Centre also contributes to formulating EU and national public policies. It produces research studies and books, electronic newsletters, policy briefs and the twice-yearly journal *European View*. Its research activities are divided into six clusters: party structures and EU institutions, economic and social policies, EU foreign policy, environment and energy, values and religion, and new societal challenges. Through its papers, conferences, author's dinners and website, the Martens Centre offers a platform for discussion among experts, politicians, policymakers and the European public.

About the author



Dr Jarosław Pietras has been a visiting fellow at the Wilfried Martens Centre for European Studies since November 2021. In 1986 he obtained a Ph.D. in economics from the University of Warsaw.

From 1990 to 2006 he worked for the Polish government as secretary of state in the Ministry of Finance, secretary of state for Europe and head of the Office of the Committee for European Integration. From 2008 to 2020 he was director general in the General Secretariat of the Council of the European Union in Brussels. His responsibilities included the areas of climate change, the environment, transport, telecommunications, energy, education, culture, audio-visual policy, youth and sport.

Dr Pietras is the author of a number of publications on sustainability and trade issues that are important for the EU. He has been adjunct professor at the University of Warsaw, a Fulbright Foundation scholar at Duke University in North Carolina, a member of the board of the Bruegel think tank and a practitioner fellow at the Sussex European Institute. He is currently a visiting professor at the College of Europe in Bruges.

Executive summary



The EU Carbon Border Adjustment Mechanism (CBAM) has to pass two major tests before it can come into effect. It has to withstand any challenges to its compatibility with the World Trade Organisation rules. It also has to prove that it can effectively address carbon leakage and ensure a level playing field for European companies. It should not be allowed to be circumvented. This depends on the design of the CBAM and on how it is implemented.

If the CBAM is structured to be an effective tool to prevent carbon leakage, it will have to cover a wide scope of emissions, which may negatively affect many trading partners. The endeavour to prevent circumvention may turn the CBAM into an administrative nightmare for companies and for the public institutions involved. Many more trade-offs would have to be taken into account in the design and implementation of the mechanism and these will be discussed in this paper. All of them require thorough consideration and policy choices that have been carefully thought through. The paper includes a number of policy recommendations. The CBAM is unique in the world of trade—if it is to succeed, expectations must be tempered. If the CBAM is indeed able to help to achieve climate objectives, many countries may go on to develop similar instruments of their own. However, the failure of the CBAM could have serious implications for the global trading system and EU climate policy.

Keywords Carbon leakage – Carbon price – CBAM – World Trade Organisation (WTO)

Abbreviations

CBAM – Carbon Border Adjustment Mechanism

ETS – Emission Trading System

GATT – General Agreement on Tariffs and Trade (incorporated into WTO)

GHGs – Greenhouse Gases

UNFCCC – UN Framework Convention on Climate Change

Introduction



The Carbon Border Adjustment Mechanism (CBAM)¹ is an instrument extending EU climate policies to imported goods, to be applied at the external border of the EU. The Union alone cannot develop more and more ambitious climate policies without addressing the increasing gap between the environment-related costs borne by European producers and the lower or non-existent price for carbon paid by non-EU companies that export their products to EU member states. Until recently the price paid per tonne of CO₂ emissions was relatively low in the EU. However, the price has increased since 2019 and now fluctuates between €60 and €100 per tonne. Current fluctuations of the CO₂ price are linked to uncertainties caused by the Covid pandemic, the economic reaction to it, the Russian invasion of Ukraine, and the energy crisis induced by the reduction of gas and oil exports from Russia. When the economic situation stabilises and improves, one may expect that an adjustment to these high energy costs might induce some changes to carbon-intensive production in Europe. However, the implementation of the legislative package Fit-for-55,² resulting in new and higher targets for emission reductions, may mean that, in the long run, the price for CO₂ emissions increases further, which would affect European carbon-emitting industries more critically. With higher production costs in Europe and with it being possible that consumers might prefer less expensive imported products that are not fully exposed to the cost of carbon, the competitive gap could grow, and the effectiveness of the EU's climate policies could diminish. It is therefore quite natural that the legislators are designing instruments to address this situation. The proposed CBAM is to be linked to the Emission Trading System (ETS) with the aim of subjecting imports to requirements similar to those applied to businesses operating in Europe. If this step is not taken, there is a risk of carbon leakage as highly emitting industries could move their production centres out of the EU.

The discussion concerning instruments which would address the problem of existing or possible carbon leakage has been going on for many years. In the EU in particular, there have been discussions concerning such a mechanism from the very beginning of the implementation of the ETS. Addressing carbon leakage has been demanded by businesses at every major step in the development of European and international climate policies: the Kyoto Protocol, the failed Copenhagen Conference of the Parties of the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. These debates

¹ European Commission, 'Proposal for a Regulation establishing a Carbon Border Adjustment Mechanism', COM (2021) 564 final (14 July 2021).

² European Commission, '*Fit for 55*: Delivering the EU's 2030 Climate Target on the Way to Climate Neutrality', COM (2021) 550 final (14 July 2021).



have helped to clarify the possible impact of carbon leakage, but preventing it had never been put into legislation until the European Green Deal was proposed. While there are no examples of working mechanisms on a country level similar to the CBAM, there has been intensive discussion among environmental and trade professionals on all the aspects of its implementation. Moreover, there is already a vast amount of literature on carbon border measures.³

The implementation of the CBAM is likely to face difficult and complex international reactions. The CBAM is well intentioned from an environmental point of view, but as it negatively affects exporting countries and companies, strong reactions are to be expected from them. Therefore, those designing and implementing the CBAM must exercise great care. Like Odysseus long ago, they have to navigate between two threatening obstacles. For Odysseus, it was Scylla and Charybdis, who could wreak havoc on his crew or completely sink his ship. The Scylla looming ahead for the CBAM is the risk of possible angry reactions from countries and companies that could initiate dispute-resolution procedures and lawsuits. The CBAM will affect predominantly large companies and exporters, which could muster enough resources to investigate even the slightest non-compliance with World Trade Organisation (WTO) requirements or the breach of any other international obligations. The Charybdis that those designing the CBAM must avoid is the risk that, once deployed, it will not achieve, or will only partially achieve the desired outcome in terms of having a positive impact on the climate, preventing carbon leakage, alleviating competitive pressures, aligning the carbon price appropriately and generating the revenue expected. The EU cannot risk having a mechanism which can be successfully challenged and rejected on the grounds of non-compliance with WTO rules. The CBAM should also be robust enough to be able to withstand any attempts to circumvent it, attempts which could result in large leaks of carbon.

³ Many extensive reviews of the relevant literature are available. See, for example, M. Keen, I. Parry and J. Roaf, *Border Carbon Adjustments: Rationale, Design and Impact*, International Monetary Fund Working Paper WP/21/239 (2021), and M. Condon and A. Ignaciuk, *Border Carbon Adjustment and International Trade: A Literature Review*, OECD Trade and Environment Working Papers 2013/06 (2013).



**The uniqueness
of the CBAM
in the world of
trade**



The CBAM is an environmental measure to be applied to goods crossing customs borders.⁴ It affects imports and therefore has to comply with the relevant trade rules. Its major task is to prevent the risk of carbon leakage and to help to achieve the EU's ambitious climate goals. The WTO assesses and permits border adjustments of the taxes or charges levied on 'like products', but the CBAM is very different from any tax border adjustment measure that has been applied so far. It functions to adjust not taxes on products but the costs of emissions of greenhouse gases (GHGs) imposed upon certain European installations.

Unlike other commercial policy instruments, the CBAM is not embedded in trade objectives but is based on a complex set of climate policy mechanisms, instruments and ambitions. It is linked to the EU's internal commitments and advocated by the environment and climate administration. It is more complicated than most trade instruments, and complex instruments are more difficult to manage than regular trade policy tools. Alongside the growing ambitions of EU climate policy and the rapid rise in the price of emission allowances, there is the problem that EU producers and their non-EU counterparts do not operate on the global markets on a level playing field.

Carbon leakage can occur when the price of carbon encourages the substitution of imported products manufactured using GHG-intensive processes for products produced domestically. Carbon leakage may also manifest itself in a relative or absolute decrease in the manufacture of these products in Europe. In the longer term it may take the form of the establishment of new production facilities abroad rather than at home, more intensive use of production facilities using carbon-intensive technologies located in carbon 'havens' or the relocation of existing production capacities to foreign countries.⁵ As European demand for products such as steel, aluminium, cement and fertilisers is still significant, what may change is not the physical level of consumption but the origin of supply. Assuming that CO₂ emissions from their production are lower per unit in the EU compared to the rest of the world, this could mean that the decline in these emissions in Europe could be more than offset by an increase in non-EU emissions.

⁴ S. Markkanen et al., *On the Borderline: The EU CBAM and Its Place in the World of Trade*, Cambridge Institute for Sustainability Leadership (Cambridge, 2021), 28.

⁵ Carbon leakage is quite a complex phenomenon. See, for example, B. Görlach and E. Zelljadt, *Forms and Channels of Carbon Leakage*, Climate Change 16, Ecologic Institute (Berlin, 2018). For the purpose of this paper, it is not necessary to analyse all of its features as carbon leakage is considered a reason for supporting the CBAM irrespective of its various forms.



The basic idea of the CBAM is to ensure that importers of products from industries covered by the ETS are also subject to the requirements of the EU climate policy. The point of reference for the CBAM is the ETS.⁶ This system operates on a ‘cap and trade’ principle.⁷ Operators of installations enlisted in the ETS have to buy (or receive) emission allowances, which are negotiable instruments. If an installation cuts emissions, it can either keep any unused allowances to cover its future needs or sell them to another installation that needs more allowances. Every year an ETS installation has to ‘surrender’ allowances equal to its emissions; otherwise, it has to pay penalties. Trading provides the flexibility to reduce emissions where it is least costly. The robust carbon price also encourages investment in innovative, low-carbon technologies and production methods. The ETS covers the following sectors: electricity and heat generation; various energy-intensive industries, including oil refining and the production of steel, iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals; and commercial aviation in the European Economic Area.⁸

The CBAM complements the EU’s ETS by applying a single set of corresponding rules (not identical but adapted) to imports of certain ETS products, such as iron and steel, aluminium, fertilisers, cement and electricity. The proposed regulation requires that every year importers submit a CBAM declaration containing information on both the total quantity of each type of good imported during the calendar year and the total emissions, expressed in tonnes of CO₂ per tonne of this product. On this basis, once a year the importer submits the appropriate number of CBAM certificates, which can be reduced by the amount of the carbon price paid in the country of origin. These certificates must be purchased from the designated CBAM authority. They are not negotiable instruments.

⁶ U. Will, *Climate Border Adjustments and WTO Law: Extending the EU Emissions Trading System to Imported Goods and Services* (Nijhoff: Brill, 2019).

⁷ The total amount of certain GHGs that can be emitted by the installations covered by the system is initially capped and then gradually reduced every year.

⁸ European Parliament and Council Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L275 (25 October 2003), 32, Annex I, ‘Categories of Activities to Which this Directive Applies’ (Amended).



The price of these certificates varies. It corresponds to the weekly average closing price of ETS allowances on the common auction platform, with auctions of CBAM certificates being conducted on a weekly basis. It applies to imports crossing the EU tariff border, which are also registered on a weekly basis. In sum, the CBAM *modus operandi* reflects, as far as possible, the operation of the ETS. It aims to compensate for the burden of EU climate legislation imposed on EU-based companies by charging the same levy on imported products. In this way it should discourage the transfer of production outside Europe due to ambitious European climate legislation.

The European Commission published its draft legislative proposal on the CBAM in July 2021.⁹ The Council adopted its own position in March 2022.¹⁰ The European Parliament (EP) worked on its position at its plenary session on 22 June 2022,¹¹ and negotiations between EU lawmakers are due to be concluded by the end of 2022. Differences in lawmakers' positions concern several important elements of the core draft provisions. All lawmakers unequivocally consider the CBAM to be a measure to prevent the risk of carbon leakage and not a trade policy instrument. They also assume that the CBAM must comply with international trade rules.

The Commission's proposal was modified only slightly by the Council, and some fairly important issues, such as revenue and the treatment of exports, were left to be discussed later. The EP's proposal is more ambitious than those of the Commission and the Council in terms of scope, timing and expected impact. The proposed changes broaden the scope, shorten the deadlines, and aim to increase the effect that the mechanism will have on both the climate and the economy. The EP wants the regulation to meet the Fit-for-55 objectives. The wording of the EP's proposal makes the link stronger between the CBAM and the ETS to ensure better protection of the environmental characteristics of the CBAM within the WTO.

⁹ European Commission, 'Proposal for a Regulation establishing a Carbon Border Adjustment Mechanism'.

¹⁰ European Parliament and Council draft Regulation establishing a Carbon Border Adjustment Mechanism: General approach, 7226/22 (15 March 2022).

¹¹ European Parliament, 'Amendments adopted by the European Parliament on 22 June 2022 on the proposal for a regulation of the European Parliament and of the Council establishing a Carbon Border Adjustment Mechanism (COM(2021)0564 – C9-0328/2021 – 2021/0214(COD))' (22 June 2022).



The changes introduced by the EP in terms of products and emissions coverage make the project and its implementation more complex technically as they add more elements (such as organic chemicals and indirect emissions) where the process of production is more diversified and the methodology for calculating emissions is less developed. More importantly, the inclusion of indirect emissions makes it more difficult for exporters to gather the verifiable evidence required. In the case of organic chemicals in particular, it can be especially complicated to determine the level of emissions associated with individual products. Widening the range of goods covered by the CBAM will also change the composition of the group of exporters affected by this mechanism. It will embrace some more advanced economies including the US. The same applies to the inclusion of indirect emissions.

The CBAM is a unique environmental mechanism which is being introduced for the first time into the European trade system. It affects the EU's external relations very strongly. It covers important sectors and represents a significant proportion of imports to the EU. It is bound to create negative reactions among those adversely affected. Despite careful drafting, the proposed regulation is in danger of being challenged as being incompatible with international trading rules.



**The danger of
non-compliance**



The issue of WTO compliance is essential for international acceptance of the CBAM as an environmental instrument having an impact on trade. It is not sufficient to satisfy the explicit requirements of the General Agreement on Tariffs and Trade (GATT) 94, Article XX¹² or any other legal basis used. A consistent legal, environmental and economic justification should be found to make the case defensible.¹³ Having a well-based amalgamation of all these types of arguments might be necessary to develop the general concept of introducing climate measures to the world of trade rules.¹⁴ Such a concept should be based not only on legal analysis, but also on an economic assessment of the impact of CO₂-reduction policies on EU businesses, the risk of carbon leakage and the impact of climate-related measures on relations with trading partners. Conformity with WTO requirements would incontestably require analysis of the effects of the application of the CBAM and, in particular, an understanding of the reactions of those EU trading partners who could be affected.

Even if the CBAM is sufficiently justified and legally defensible, the EU may nevertheless face challenges from its trading partners.¹⁵ These could be based on a meticulous analysis of the CBAM and particularly the modalities and effects of its implementation. As is clear from earlier cases, the major difficulty will be proving that the CBAM meets the requirements of the *chapeau* of article XX. This issue will be further exacerbated by the unclear and disputable evidence regarding the carbon leakage experienced by European economies. Differences between the ETS and the CBAM might lead to a discriminatory treatment of imported products, something which trading partners could study in detail. As the ETS relates to installations and the CBAM to products, some such differences are inevitable. The treatment of European exports and the fate of the 'free allowances' will obviously be considered by the EU's trading partners. Offering a different correction to the cost of exported European products could be treated as directly distorting trade and as violating WTO regulations, in particular, the Agreement on Subsidies and Countervailing Measures.

¹² WTO Secretariat, *WTO Analytical Index GATT 1994 – Article XX (Jurisprudence)*.

¹³ 'To gain international acceptance, the rationale for border carbon measures must be spelled out clearly and persuasively' (H. Horn and A. Sapir, 'Can Border Carbon Taxes Fit Into the Global Trade Regime?' *Bruegel Policy Brief* 2013/06 (2013)).

¹⁴ S. Monjon and P. Quirion, 'A Border Adjustment for the EU ETS: Reconciling WTO Rules and Capacity to Tackle Carbon Leakage', *Climate Policy* 11/5, 3/6.

¹⁵ In the view of founding judge and twice chairman of the WTO's Appellate Body, James Bacchus, 'the EU's proposed CBAM may turn out to be inconsistent with fundamental WTO rules' (J. Bacchus, *Legal Issues With the European Carbon Border Adjustment Mechanism*, CATO Briefing Papers no. 125 (9 August 2021), 6).



It could also be considered contrary to the EU's climate aims.¹⁶ It is possible that after the CBAM is imposed, the manufacture of the products covered will bounce back into the EU, resulting in 'reverse carbon leakage'. The environment-related argumentation behind the CBAM may turn out to be more fragile than is normally assumed and its credibility will hinge on the consistency of words and deeds. Retaliatory measures may be taken if in the dispute-settlement process the CBAM is proven to be incompatible with WTO principles and to be negatively affecting trade with the EU. This does not mean that the EU would need to discontinue the mechanism, but it might have to omit some of its elements to comply better with global trade law. Compliance with WTO rules will inevitably require that sacrifices be made in the overall design of the CBAM, including the expanded anti-circumvention measures. A simpler, less-demanding CBAM is more likely to pass WTO scrutiny. Including export support in the form of free allowances or other types of subsidies could tilt the international perception of the mechanism so that it is seen to be less concerned about climate and more about protectionism.¹⁷

¹⁶ A. Marcu et al., *Border Carbon Adjustment in the EU: Treatment of Exports in the CBAM*, European Roundtable on Climate Change and Sustainable Transition (2022).

¹⁷ 'The coexistence of free allowances and the CBAM is suboptimal in term of emissions and could also pose problems in terms of WTO compatibility, as it could be perceived as protectionist' (United Nations Conference on Trade and Development, *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries* (2021), 19).



The danger of circumvention



The CBAM faces the risk of circumvention, understood as actions deliberately taken to evade the most critical obligations and charges. This could take the form of fraudulent activity or the completely natural market reactions of companies changing their business strategies. Exports to the EU may be altered to avoid the required CBAM payments, or trading partners might change their production methods so as to reduce their costs for exports to Europe. Examples of how this could happen are many, and some of them are explicitly mentioned in the drafts by the Commission, the Council and particularly the EP. Preventing all forms of circumvention is a gargantuan task requiring the constant observation of trade flows, analysis, documentation, verification, a wide range of administrative measures and so on. Some of the steps considered to be circumvention could be taken by countries (for example, establishing a system of partial carbon pricing, whereby these payments could be deducted from those due in CBAM payments) or by companies (resource shuffling, redirecting exports, etc.). Tools to effectively prevent circumvention are not currently available.

The major difficulty in this area is to distinguish between the normal, permissible market reactions of economic operators and intentional breaches of obligations. It will not be easy to establish clear legal bases for some of the actions the EU could take to address even evidently fraudulent practices of avoiding paying for CBAM certificates. The CBAM's counter-circumvention procedure is based on the EU authorities receiving information or complaints. These could come from EU companies, governmental institutions or even non-governmental organisations. Then the Commission would have to initiate an investigation and weigh the evidence. The whole process could create many tensions with trading partners. It is obviously easier to monitor practices involving circumvention than it is to assess their scope and implications and provide sufficient evidence to initiate counteractions.

Many of the practices which lead to the avoidance of additional costs are legal. Taking measures against them may open lengthy arbitration procedures. The CBAM regulations do not contain many reliable instruments for combating circumvention. Additions to the CBAM appended during the legislative process could multiply ambiguities that might be used to avoid otherwise strict requirements. For example, in the area of regular trade mechanisms—for example, tariffs and quotas, antidumping duties and countervailing measures—circumvention is dealt with by applying rules of origin. In the case of the CBAM, applying standard non-preferential rules of origin may not be sufficient. In an ideal simple system, the CBAM



applies to all imported products equally, regardless of where or by whom they were produced. In practice this is more complicated because the draft CBAM regulation treats products more favourably if they originate from a country which is linked to the ETS.¹⁸ If these countries do not implement instruments exactly like the CBAM for their imports, this could create incentives to use highly carbon-intensive materials imported from elsewhere when producing goods in their own territories—and then, after sufficient processing, to export these goods to the EU customs area. The issue is further complicated by the expansion of international value chains and imports of goods which are not entirely produced and assembled in one country. The rules of origin permit the use of non-originating inputs in certain proportions without distinguishing whether they are carbon intensive or not. Moreover, if the CBAM were not to be applied to jurisdictions with high climate ambitions or in relation to the least developed countries, the problem would become much greater and would require the development of specific rules of carbon origin.

¹⁸ K. Holzer, 'The Pending EU CBAM: Quo Vadis Switzerland?', *Global Trade and Customs Journal* 16/11–12, 633-43.



Geopolitics



The CBAM will have a highly diverse impact on European trading partners. Most exporters of CBAM products to the EU are neighbouring countries, such as the UK, Norway, Switzerland, Russia, Ukraine, Serbia, Turkey and Algeria. Norway and Switzerland are linked to the ETS; therefore, the CBAM will not be applied to their exports. The UK's climate policy is similar to that of the EU. But if it does not reach a separate agreement with the EU, deliveries from the UK will be covered by CBAM requirements. Since UK exporters have to pay a national carbon price, they might be exempted from having to pay for CBAM certificates; however, they will have to follow all the requisite procedures.

Turkey, Ukraine and Serbia¹⁹ are not only geographically close to the EU but also linked by arrangements which reduce trade barriers significantly. The CBAM will mean that some of their exports will encounter trade barriers once again in the form of high CBAM costs. This might affect them disproportionately, because finding new markets could be difficult as some bulky products covered by the CBAM (such as cement) cannot be sold to remote locations. Having so many ties to the EU, these countries might be expected to follow Europe's environment and climate policies more closely. Algeria and certain other North African countries export only selected CBAM products: cement, fertilisers and electricity. Moreover, they are also covered by neighbourhood policy instruments which could help them to reduce the carbon intensity of production.

Russia represents a separate case. Many analysts hold that it could be the exporter country most affected by the CBAM.²⁰ However, at present sanctions are in place, and importers of Russian products are under pressure to limit purchases as much as possible. Thus, the immediate impact of the CBAM on Russia might have to be recalculated. How Russia might react to the new trade rules is currently less important. In the longer run, should moves be made to normalise trade relations with Russia, the issue of ensuring that its exports do not represent significant emissions of GHGs will arise once again.

¹⁹ S. Risteska et al., *The EU's Carbon Border Adjustment Mechanism: Challenges and Opportunities for the Western Balkan Countries*, Agora Energiewende/Enervis 250/02-1-2022/EN (January 2022).

²⁰ V. Sh. Urazgaliev, A. V. Novikov and G. A. Menshikova, 'The Global Trend Towards Decarbonization of the Economy: The Introduction of the Carbon Border Adjustment Mechanism in the EU and the Possible Consequences for Russia', SHS Web of Conferences 129, article no. 090221 (2021).



The geopolitical impact of the CBAM might be radically altered if the Commission's original draft regulation is expanded to include new products (hydrogen, organic chemicals and plastic) or indirect emissions (including the electricity, heat and steam used in manufacturing). The increased scope of the CBAM would affect some trading partners more severely. Under the draft proposal, exports from the US would not have been affected significantly. However, broadening the scope of coverage to include both the products listed above and indirect emissions would adversely affect American industries, and many more of them would have to cope with this instrument when exporting to Europe.²¹

China, India, Brazil and South Africa will probably react less strongly to the new regulations, even though they are large producers of the goods covered by the CBAM. They concentrate predominantly on their domestic markets and export a smaller share of their production to Europe. Being less dependent on exports, and exports to the EU in particular, they will more easily find markets outside the Union for their products.²² They also have the capacity to manufacture downstream products and are able to increase exports of more highly processed goods. This will probably make them less susceptible to the economic and environmental impact of the CBAM.

It should be noted that less than 20% of the worldwide production of products covered by the CBAM (e.g. iron and steel, aluminium, fertilisers and particularly cement) is traded internationally, and an even smaller fraction of this trade is destined for European markets. Most of the carbon-intensive goods produced by the large exporting countries are sold domestically. The CBAM will mostly affect European production and a small portion of the goods imported into the EU. To reach the remaining more than 80% of worldwide production of carbon-intensive goods which is consumed domestically, a much more decisive international approach would need to be agreed in a global context. It will not be achieved via reinforcement of the CBAM alone. But increasing the scope and coverage of the CBAM would make the export of these products to Europe more problematic. Expanding the coverage of the CBAM would mean that more

²¹ The value of US trade with the EU covered by the CBAM would increase 14 times to approximately €16 billion. The value of Chinese exports covered by the mechanism would increase by 4.5 times to around €20 billion.

²² This can be documented using the rates of export growth, which are higher for exports to places such as South-East Asia, Africa or Latin America. See F. Erixon, *Europe's Carbon Border Adjustment Mechanism: Time to Go Back to the Drawing Board*, ECIPE Policy Brief no. 14 (2021), 8–9.



countries are affected, and the impact on all of them could be significantly larger. It needs to be asked whether the added gain for the environment is worth the greater risk of collision with the trade rules.

It is in certain developing countries, and even in some of the least developed, that the impact of the CBAM will be the most varied.²³ Some of them might not be affected in any meaningful way. Their development path might depend on taking part in the green transition and bypassing certain stages of industrial development. This depends on the availability of technologies and finances to invest in carbon-efficient production. There is also a risk that installations that are obsolete environmentally but sound technologically could be transferred to these places by companies trying to manage the sunk costs of past investments. Such resettlements of second-hand carbon-inefficient capacity would represent a significant form of carbon leakage, one which would be very difficult to cope with. The high price of allowances under the ETS can create a perverse incentive to relocate some of Europe's production capacity, but the CBAM will reduce the possibility of importing from relocated installations. Among developing countries only a few are major producers within CBAM-affected sectors, but for these countries exports of these products deliver considerable revenue. Mozambique is one example. As the CBAM will be applied to these countries without any exception or any attenuation of the burden, their political reaction might be understandable.²⁴

Situations like this give rise to the question of climate justice. Many developing countries are not significant contributors to the CO₂ that has accumulated in the atmosphere over long periods of time. The CBAM is based on current emissions whereas historical responsibility is about long-term contributions. Bringing the situation of developing countries into line with that of the EU is difficult as even now they emit less CO₂ per capita. Finally, certain developing countries have made reductions to their emissions, which, taking into account their situation, has required a proportionally even bigger effort compared to the EU. Therefore, the CBAM disregards, at least to some extent, the principle of Common but Differentiated Responsibilities and Respective Capabilities, which is frequently referred to as an important principle of the UNFCCC. This exposes the CBAM to the criticism that it is yet another example of 'green protectionism', an indictment heard from time to time in trade debates.

²³ M. Leonard et al., 'The Geopolitics of the European Green Deal', Bruegel, Policy Contribution 04/2021 (2021).

²⁴ R. Berahab and U. Dadush, *What Will Be the Effect of the EU's Carbon Border Tax on Morocco, and How Should Morocco React?*, Policy Center for the New South, Policy Paper, PP-21/21 (October 2021), 9.



During the debates by EU legislators, it was proposed that developing countries be offered funds that would be equal to or greater than the money which the EU receives from CBAM certificates. In this way this money would be given back to them. Many least-developed countries might be unconvinced as it would not be easy for them to overcome the barriers created by the CBAM in the first place. Moreover, while during the UNFCCC negotiations \$100 billion was promised for climate finance, less has been delivered.²⁵ It might be difficult to convince these countries that after they are subject to the CBAM, the EU will provide resources in addition to what has already been promised.

²⁵ The total contribution of developed countries to climate finance to be used by developing countries is supposed to be \$100 billion every year. In 2016 and 2017 the amounts were \$58.6 billion and \$71.2 billion respectively and thus below the \$100 billion target (OECD, *Climate Finance Provided and Mobilised by Developed Countries in 2013-17* (OECD Publishing, 2019), 8). In 2019, the EU, its member states (including the UK) and the European Investment Bank were together the biggest contributors of public climate finance to developing countries, providing €23.2 billion.



Trade-offs



Odysseus had to journey through the narrow strait between Scylla and Charybdis. The CBAM will also have to be steered between the twin dangers of non-compliance with international obligations and the risk of circumvention. To pass through safely, the CBAM will need to be carefully manoeuvred around the risk that those who react negatively to the mechanism due to the magnitude of its impact will seek to justify their reactions on the basis of very small or even hypothetical inconsistencies with the WTO rules. On the other hand, those who are designing the CBAM have to be aware of its vulnerabilities and of the risk that it might not deliver the expected outcome.

Non-compliance versus circumvention

This is the most important trade-off, and a good deal of thought has to go into the choices that need to be made. The CBAM regulations have been crafted very carefully so as to comply with both the rules and the criteria for exceptions set forth in the WTO/GATT system. The European Commission has put a lot of effort into making the CBAM WTO-compatible. The whole trading system could be jeopardised if one of its most vocal supporters were to introduce an instrument that intentionally violated the well-established principles of international trade.²⁶ But even if the CBAM is at first glance legitimised and vindicated, there is still the risk that some parties might challenge it by means of the dispute-resolution mechanism. This sort of thing has happened before in the case of measures that were much more modest in their substance, coverage or value. The impact of the CBAM could be far more significant than in any of these earlier cases.²⁷ Moreover, the reactions of trading partners are bound to be much more stringent this time. It is clear that the EU considers the CBAM defensible, but its trading partners may see the matter differently. The fact that the dispute settlement system of the WTO is not fully operational because the Appellate Body is

²⁶ As Reinhard Quick has observed: 'It should be of concern to politicians that the quest to combat climate change is surrounded by protectionism and that the inhibition threshold to come forward with protectionist proposals has been considerably reduced. This is a dangerous development in times when the multilateral trading system is already doing quite badly' (R. Quick, "Border Tax Adjustment" in the Context of Emission Trading: Climate Protection or "Naked" Protectionism?', *Global Trade and Custom Journal* 3/5 (2008), 175).

²⁷ The WTO dispute most frequently referred to in the literature on environmental trade instruments, i.e. the Shrimp case, involved shipments of shrimps valued in the single tens of millions of US dollars whereas the trade affected by the CBAM falls in the \$20–\$60 billion range.



defunct will not make it easier for the EU. The EU and its member states agreed with a handful of WTO countries to overcome this impasse by creating an interim dispute-settlement mechanism²⁸ to make sure that disputes are resolved. However, if the issue is debated for many years without resolution it could cause collateral damage to the WTO and to the EU's reputation as a stout supporter of the open, predictable and rules-based trading system.²⁹ It would be helpful to intensify discussions within the WTO concerning trade rules and climate measures. Pushing for changes within existing trade rules, in the form, for instance, of a "climate waiver"³⁰ might create a better understanding of the ways in which climate actions and the global trading system can be reconciled.

The CBAM will first face the scrutiny of the WTO and should be designed to pass this. Once introduced and cleared of any legal obstacles, it should then be carefully examined for any loopholes or weaknesses that might lead to circumvention. Consequently the EU should concentrate first on ensuring the CBAM's acceptance by the WTO and later on tightening the counter-circumvention rules.

Climate versus trade

This concerns the trade-off between Europe's climate ambition in international negotiations within the UNFCCC and the EU's unequivocal support for the open trading system of the WTO.

The UNFCCC and WTO have more or less the same global membership, but the member countries are represented by different domestic constituencies. There has to be a trade-off between compliance with trade rules and climate objectives, as implementing legal instruments inevitably brings conflicts between them. Trade rules promote the least restricted flows of goods and services globally, in this way

²⁸ The EU was a proponent of the establishment of the Multi-Party Interim Appeal Arbitration Arrangement pursuant to Article 25 of the WTO Dispute Settlement Understanding with the Council taking the decision on this issue (European Council, Council Secretariat, *Multi-Party Interim Appeal Arbitration Arrangement Pursuant to Article 25 of the DSU*, WTO-61, 7112/20). This arrangement probably could be used for the purpose of any CBAM-related dispute if the Appellate Body continues to be not fully operational.

²⁹ R. Quick, 'Carbon Border Adjustment: A Dissenting View on Its Alleged GATT-Compatibility', *ZEUS* 4 (2020), 549–96.

³⁰ The arguments for and content of a possible "climate waiver" in the WTO are explained in J. Bacchus, *Trade Links. New Rules for a New World* (Cambridge: Cambridge University Press, 2022), 187–99.



contributing to global development and wealth. The exigency of climate objectives, on the other hand, requires that countries reduce production and the trade of goods contributing to GHGs and that they define global welfare in such a way that the environment and biodiversity are included. Implementing the CBAM might well result, at least temporarily, in an increase in production by energy-intensive and high-emission emitting sectors in Europe. If this were to happen, it would seriously undermine the credibility of the idea that the CBAM is motivated by climate-related concerns. The EU should move proactively to deal with this type of allegation in advance. Even if the CBAM is considered to be fully compatible with WTO rules, it will affect some members quite severely; and this could well make them disinclined to continue their adherence to the WTO system. Similarly, the CBAM aims to incentivise UNFCCC members to go beyond what they have agreed in the Paris Agreement. In their eyes it would diminish the importance of this forum as any outcome achieved here could be changed elsewhere. A balance has to be found to maintain the perception of the EU as, first, a staunch supporter of the rules-based trading system and, second, a collaborative partner in climate negotiations that accepts the national determination of commitments within the bottom-up process. The EU should make it clear that the forums through which the global climate ambition is to be addressed and through which global progress can be made are the UNFCCC and the Paris Agreement. The WTO should continue to be considered as protecting the benefits of free trade, and the CBAM should be compliant, as much as possible, in order to provide evidence that such climate measures can be consistent with world trading rules.

Political choices have to be made to minimise trade distortions and trade conflicts by inducing greater acceptance of environmental measures within the trade negotiating community. The EU should invest more in linking the open trading system and climate-related objectives.

Unilateral versus collaborative

The third trade-off is that between the EU's unilateral approach to implementing the CBAM and a collaborative approach through international meetings, creative debates and lengthy negotiations.

Until now measures aiming to reduce emissions in developed countries have not resulted in carbon leakage that has had a significant impact on their energy-intensive sectors or seriously affected their foreign



trade. The CBAM addresses the risk of carbon leakage but has the potential to distort trade relations. It could be perceived as a measure that is being superimposed on global arrangements for the climate and trade. The third trade-off requires a choice between going forward with painstaking multilateral UNFCCC and WTO negotiations and implementing the CBAM, disregarding possible criticism. The former would involve many international meetings, debates and negotiations. The latter is based on the assumption that the CBAM can become a model for others, who will follow the EU, the lone climate leader. However, it is not clear whether the CBAM can facilitate the development of an alternative in the form of a carbon club, which would require partnership with countries that have similar aims but not necessarily similar approaches. The idea of a carbon club is intellectually very attractive as a way of coming to terms with unequal responses to climate challenges.³¹ In reality, however, even within a group of the most ambitious countries, there are huge differences in approach, scale or the instruments used to cope with climate-related matters. The CBAM addresses one aspect of the issue. However, due to its structure it neglects the diverse measures taken in other jurisdictions. It should not go unnoticed that the Paris Agreement entails that most developing countries are permitted both to define their own path to decarbonisation and to continue carbon-intensive production, albeit on a smaller scale as they are less industrialised.

Political choices have to be made that aim for a collaborative approach, which will be more effective in the longer run. The EU has always been praised for engaging partners to achieve international results. Europe's soft power and ability to persuade should be used to achieve worldwide acceptance of the different forms of climate policies.

Simplicity versus complexity

There is an inevitable trade-off between keeping the design of the CBAM simple and the complexity of carbon policies. The CBAM is a complex tool that is strongly linked to the ETS. Because the ETS is complex, the CBAM cannot be simple even if it is designed well. It is a complicated instrument and its

³¹ S. Tagliapietra and G. B. Wolff, 'Conditions Are Ideal for a New Climate Club', *Energy Policy* 158 (November 2021), 112527/40.



implementation will result in the inflexibility of the EU position in international contacts.³² This could become very problematic in relations with WTO members and Paris Agreement signatories. Some flexibility is needed in contacting and cooperating with the many partners to gain international acceptance of an instrument that will have such a great impact. Global climate policies have to be calibrated not in accordance with carbon prices considered suitable for the EU itself but in accordance with the level of carbon costs appropriate for countries at different levels of development. This involves a trade-off between (1) the benefits of designing the CBAM to cover a broad range of products and types of emissions (direct and indirect) and (2) the geopolitical impact that such extensions are likely to have—for they could result in certain, even quite significant international partners of the EU becoming unforthcoming, and even reticent and unfriendly. The choice has to be made between incentivising other countries to uphold EU-like climate policies—which may provoke partners to express their opposition and to consolidate views on alternative approaches—and motivating them to take bolder actions, albeit of differing quality. The EU needs to seek collaboration with the largest number of countries possible, countries in which different conditions prevail and which view climate policies from different geopolitical perspectives. This includes going beyond current emissions as the reference for measures to be taken and addressing the responsibility for historically accumulated emissions.

Political choices need to be made to keep the CBAM unequivocally linked to the ETS and consistent with the EU's climate legislation and policies. Particular care should be taken to ensure that forecasts about the mechanism's environmental impact are realistic. Moreover, the CBAM must not be allowed to become too complicated. This would render it less effective and could impede the effectiveness of the EU's climate policies.

³² W. H. Maruyama, 'Climate Change and the WTO: Cap and Trade Versus Carbon Tax?', *Journal of World Trade* 45/4 (2011), 679–726.



Plainness versus intrusiveness

At issue here is a trade-off between the CBAM passing WTO scrutiny smoothly and the intrusiveness of tools aimed at preventing circumvention of the mechanism's obligations.

The CBAM should comply with the WTO rules down to their last detail and interpretation contained in WTO jurisprudence. Both the range of imports covered by this mechanism and the number of companies and countries affected mean that the CBAM will be subjected to the most detailed analytical, legal and factual examination. Priority should be given to ensuring that the mechanism is consistent with WTO rules. Concern about the climate is shared by all members of the WTO, who are all signatories to the Paris Agreement. However, all the particular features of the CBAM will be thoroughly studied, as will all of its possible practical implications. Reactions will be warranted if the mechanism's means should prove inconsistent with its ends. Moreover, it will no doubt be asked whether there is another method which could provide a similar outcome without distorting trade so greatly. WTO members will look not only at how the legal provisions have been formulated, but also at how they are implemented in practice. The CBAM should not be perceived as a bureaucratic nightmare with strict documentation requirements, stringent verification and complicated procedures. All requirements and formalities should be unequivocal. The fight against real or supposed circumvention could be considered by trading partners as being far from a cooperative approach. The choice to be made is clear. A strict approach to circumvention would place a heavy burden on countries and companies who are ready to follow an ambitious approach to the climate. In this way it would unleash a hugely negative reaction from many WTO members and would result in limited gains for the environment. It would complicate the procedures applied but do little to ensure that the CBAM is not bypassed. The mechanism of the CBAM is more complicated compared to the border adjustments applied by internal carbon taxes which have been considered in other jurisdictions. Like any carbon border adjustment instrument, the CBAM needs to be clear about how much carbon is emitted in the manufacture of a given unit of product. This will provide the basis for the taxes or charges, which need to be applied equally to domestic and foreign producers.

Political choices have to be made to focus on compatibility with the WTO rules in a holistic way. Adhering to the letter of the GATT provisions will not suffice. The formalities to be completed will make a difference.



Exporters will find complying with the CBAM a complicated matter. The administrative requirements should be as simple as possible and the measures to prevent circumvention as unobtrusive as possible.

Environment versus revenue

The final trade-off centres on the objective for establishing the CBAM. The claim that the mechanism is being introduced to help the EU's climate policy might be questioned if excessively large revenues are expected. The payments for the CBAM certificates will go directly into the EU budget. During debates on the Recovery and Resilience Facility, the CBAM was referred to as one of the possible sources of funds to repay loans taken out by the EU. It would not be surprising, then, if countries outside the EU concluded that the CBAM was being introduced because of the expected revenue, which is not destined to finance climate action. Significant EU income from selling CBAM certificates would only increase other countries negative attitudes to the CBAM. It has to be clear from very beginning: the CBAM is an environmental measure, not a cash machine. It aims to enhance an ambitious climate policy by making the ETS more effective. In no way and at no time should revenue be an objective. If climate action is really the aim, all of the revenue should be used to help to achieve this objective. Moreover, it is not foreign producers that will pay for CBAM certificates, but European users of imported products covered by the mechanism. Beyond this still, the CBAM may lead to increases in the prices of domestically produced energy-intensive products, since domestic producers will face less competition as the volume of imports falls. The CBAM could make the ETS system more effective, but it will have a strong impact on the prices of all the products covered. The aim of the ETS is to reduce emissions by affecting the level of production in carbon-emitting sectors. This can only be achieved by reducing the demand for such products. Therefore, in the longer run, the demand for imported goods from CO₂-intensive production should also decrease. And with this, income from the CBAM should fall as well.

Political choices need to be made to limit any expectation that the CBAM will generate significant revenue. Income is a by-product, not the primary end. Revenue should be used to support the main aim of the CBAM, both domestically and internationally.

Recommendations



Compliance with the WTO rules might well require sacrifices in the overall design of the CBAM and particularly in relation to its expanded anti-circumvention measures. A simpler and less demanding CBAM is more likely to pass WTO scrutiny. Such a mechanism might appear more prone to circumvention by clever suppliers. Therefore, this is a major trade-off, and it will have to be kept in mind.³³ All the trade-offs mentioned involve weighing the pros and cons of particular elements of the way the CBAM is designed. By weighing them, it is possible to make a number of recommendations aimed at helping to design and implement the CBAM in such a way that it will stand as an internationally recognised climate instrument.

Moderate expectations

Making the political choices that these trade-offs demand means tempering expectations. It is quite likely that trying to obtain a more substantial outcome might create dire consequences for trade and provoke the hostility of the EU's commercial partners. Once implemented, the CBAM's impact on trade will be considerable, whereas the environmental gains may be limited.³⁴ A measure with such a wide impact on so many countries and so many products should be as clear and simple as possible. There is no internationally agreed methodology for calculating the carbon content in products. There is no globally coordinated pricing of carbon. The CBAM addresses these problems unilaterally.³⁵ Moreover, the CBAM complicates this issue by adding the complexity of an ETS based on the emissions of installations and comparing it with the carbon content of imported products. It becomes additionally problematic because of its reliance on an oscillating and unpredictable carbon price. No doubt many stakeholders will be sympathetic to the goal of protecting the environment. But much of this sympathy may dissipate if it turns out that the CBAM strongly affects the economic interests of countries that have traditionally been Europe's friends.

³³ 'The case for border carbon measures thus sits between a rock and a hard place: the importance and urgency of the climate problem speaks in favour of swift action to limit emissions, but border carbon measures are likely to suffer from major drawbacks that could be extremely damaging to the world economy' (Horn and Sapir, 'Can Border Carbon Taxes Fit Into the Global Trade Regime?', 8).

³⁴ G. Zachmann and B. McWilliams, *A European Carbon Border Tax: Much Pain, Little Gain*, Policy Contribution 05/2020, Bruegel (March 2020), 1/19.

³⁵ Y. S. Sakuya, 'EU's Carbon Border Adjustment Mechanism: Will It Achieve Its Objective(s)?', *Journal of World Trade* 56/3 (2022), 18.



Curtail the multiplicity of aims

Many in the EU harbour highly elevated hopes for the CBAM, hopes associated with diverse aims. It is thought that, among other things, the mechanism will eliminate the risk of carbon leakage, accelerate reductions of GHGs, provide a level playing field for industries covered by the ETS, incentivise other countries to undertake similar efforts and help climate-vulnerable developing countries to set out on the path of decarbonisation. It is always tempting to attempt to achieve many goals with one tool. It is easier to explain costly policies to the EU's own public when others are engaged in similarly difficult endeavours. But a multifaceted mechanism of this kind may go beyond what the populations of the EU's trading partners are ready to accept.

All of the aims mentioned in the CBAM debates are incredibly important, but their range exposes the CBAM to conflicting desires. Trade partners may conclude that it is not motivated by environmental concerns but rather by a desire to make the EU the leader in protecting the climate.³⁶ Other CO₂-reduction measures or even carbon markets in other regions³⁷ might deliver similar outcomes with lower carbon prices that reflect local conditions. Using their own measures, other countries may achieve a similar speed of decarbonisation. Therefore, the CBAM could be perceived as a mechanism for incentivising not the reduction of GHG emissions globally but the adoption of the EU framework for decarbonisation.³⁸

The focus should be on effectiveness. This requires a clear design, limiting the scope and range of coverage, having tools that make it possible to control what is controllable, and being able to implement the CBAM consistently and predictably.

³⁶ A. Pirlot, 'Carbon Border Adjustment Measures: A Straightforward Multi-Purpose Climate Change Instrument?', *Journal of Environmental Law* (2021), 1–28.

³⁷ The price of \$50 per tonne of CO₂ increases the cost of production differently in different places. For example, for the production of steel, the increase is under 10% in the EU, 25%–30% in India and 12%–15% in China.

³⁸ The European model directly affects the market for products covered by the ETS. But it has also created a market for CO₂ allowances and a market for services to enable the trading of allowances and derivatives. All these markets have implications for the analysis of the impact the CBAM will have internationally, as well as implications for the issue of WTO compliance. See E. Vranes, 'Climate Change and the WTO: EU Emission Trading and the WTO Disciplines on Trade in Goods, Services and Investment Protection', *Journal of World Trade* 43/4 (2009).



Maintain environmental integrity

The CBAM is an environmental mechanism. It is on this basis that it will be able to comply with Article XX of the GATT. Measures which would undermine the clarity of the CBAM's main objective could be detrimental to the argument that the CBAM is there to protect the environment, even if the argument is otherwise consistent. Anything that could be treated as trade protectionism could endanger the CBAM's credibility. If after the CBAM is implemented, trade suffers and at the same time production in Europe bounces back, this will be taken as clear evidence of the protectionist character of this mechanism. Attempts to make a case that the CBAM is being introduced to protect the environment could be jeopardised if Europe's carbon-emitting installations were able to continue or even expand production. Similarly, offering generous support to exporters in the form of free allowances could be considered contrary to the declared aims of the CBAM and a disguised form of protectionism. Offering this support to only the most carbon-efficient EU installations would be no credible solution because the most carbon-efficient producers outside the Union would continue to be subject to the CBAM.

Use other forums to promote climate action

The intention to 'incentivise' that is clearly spelled out in the CBAM's regulations is aimed at the governments, administrations and policies of the exporting countries. The encouragement to apply carbon pricing goes beyond the Paris Agreement, and it forces countries outside the EU to adopt policies that go well above what they have voluntarily agreed to within the UNFCCC. Many countries have signed the Paris Agreement because it permits them to commit to the scope and path of emission reductions that they themselves have defined. Indeed, the EU and its member states have accepted such an approach. The CBAM aims to incentivise other countries to go more quickly than they had intended and promised to do. It means that with its unilateral measure the EU is trying to induce commitments that go beyond the Paris Agreement. Therefore, the willingness of the EU's partners to be ambitious during the UNFCCC



negotiations might be seriously affected.³⁹ This could also make it more difficult for the EU to set forth climate goals in this forum. If the partners realise that irrespective of the direct climate negotiations, there are other methods of achieving significant climate outcomes, they might be less inclined to take part in the UN forum.⁴⁰ There should be no expectation that the CBAM alone can motivate companies to engage in decarbonisation. Companies have to be helped by clear government policies on the climate. The efforts of exporting businesses alone would be a significant achievement even if their governments did not embark on such policies. These efforts should be recognised. However, to be fully carbon-efficient, private companies would require as a minimum a government-sponsored system for tracking, monitoring and verifying emissions. To provide the trustworthy documentation required by the CBAM, exporting firms should be supported by their own governments, which should ensure the accuracy of the documents confirming the efforts made to decarbonise.

A choice has to be made between the effectiveness of Europe's climate actions, trouble-free implementation of the CBAM and the willingness to incentivise others to embark on equally radical measures.

³⁹ The reaction of BASIC countries (Brazil, South Africa, India and China) to this issue is quite unambiguous: 'Ministers expressed grave concern regarding the proposal for introducing trade barriers such as unilateral carbon border adjustment, that are discriminatory and against the principles of Equity and [Common but Differentiated Responsibilities and Respective Capabilities]'. See Brazil, South Africa, India and China, 'The Joint Statement Issued at the Conclusion of the Thirtieth BASIC (Brazil, South Africa, India and China) Ministerial Meeting on Climate Change Hosted by India on 8 April 2021', 11.

⁴⁰ Reinhard Quick has observed: 'CBAMs are justified for reasons of climate protection, the EU has to adopt ambitious climate policies to reach the goal of the Paris Agreement and in doing so has to protect itself against the (allegedly) insufficient climate protection measures undertaken by other signatories. CBAMs therefore contain an embedded criticism of other countries' lack of climate protection efforts and hence a hidden criticism of the Paris Agreement's bottom-up approach to achieve its goals. If the EU is not satisfied with the actual state of the implementation of the Paris Agreement, it seems obvious to use the Paris forum to agree on the necessary changes' (Quick, 'Carbon Border Adjustment: A Dissenting View on Its Alleged GATT-Compatibility', 590.



Embrace the problem of least-developed countries

The CBAM will impact not only emerging economies but also many other more vulnerable developing countries. Even if the bulk of EU imports originate in just a few relatively advanced emerging economies, the impact on other countries might be significant. This is because their exports of products covered by the CBAM account for a significant portion of their total foreign trade.⁴¹ They generally have much less opportunity to redirect exports or to overhaul production capacity. Their exports cannot be exempted from CBAM charges as this would intensify the development of their carbon-intensive industries. Even if they were to establish internal carbon prices in order to be exempted from payments when exporting to the EU, these prices would probably be very low and only partially make up for CBAM costs. Therefore, these countries might conclude that the CBAM obliges them to follow the European model for emission reductions closely, including the setting of carbon prices. The main problem that the CBAM poses for least-developed countries is that it restricts their prospects for development. This issue could be overcome if these countries had access to new carbon-efficient technologies and the funds to finance new investments. Therefore, when applying the CBAM, the EU should find a way of refunding to the least-developed countries all CBAM-related payments. It could even allow these countries to collect the CBAM fees at their border. These amounts would later be deducted from any payments due in Europe. The EU should also try to offer financial assistance to modernise the production capacity of companies exporting or planning to export to Europe. Besides offering funds, the EU should find ways to reinforce the transfer of carbon-efficient technologies.

⁴¹ T. Gore et al., *What Can Least Developed Countries and Other Climate Vulnerable Countries Expect From the EU Carbon Border Adjustment Mechanism (CBAM)?*, Institute for European Environmental Policy (2021).



The above recommendations can be summarised as follows:

- Do not be over-ambitious. Perfection is always the enemy of good. The CBAM is the first complex border mechanism and is bound to encounter many obstacles. Adding complexity will not help.
- Do not try to achieve too many aims with one instrument. This would result in a situation where none of the goals was reached in a satisfactory manner.
- Hold to the mechanism's main objective: to protect the environment. Any inconsistency in the design or implementation of the CBAM will quickly come to light and be used by the mechanism's detractors.
- Climate ambitions and actions should be negotiated within the context of the Paris Agreement and the UNFCCC. Using trade tools and the WTO to change partners' positions on climate may contaminate trade talks and weaken willingness to make progress on direct climate negotiations.
- Make a serious effort to address the problems faced by the least-developed countries and by many other nations in the developing world which are not economically advanced. Traditionally they are allies of the EU and might feel abandoned. It is not a question of economic impact. It is a matter of principle.



Conclusions



What helped Odysseus to navigate through all the hazards he encountered in his 10-year journey was a clear desire to return home to Ithaca. He was assisted by goddesses who guided him through dangers, and he could also count on the solid support of his crew. To get past all of the dangers it faces, the CBAM has to be guided by its primary aim. This aim is to contribute to the effectiveness of the EU's internal climate policy by preventing carbon leakage. Multiplying the objectives would expose the CBAM to many more risks. The EU cannot go it alone with the CBAM. It needs the endorsement of other countries that have perhaps not identical but sufficiently compatible climate ambitions. The EU cannot allow the CBAM to undermine the WTO's open trading system. Adherence to trade rules has to be ensured. The CBAM cannot be introduced only to be dragged through long-lasting disputes with many of its trading partners. The mechanism is too important to European climate policies to be drawn into a legal abyss. Taking a unilateral approach could enrage even the EU's closest friends. Cooperative efforts are needed to reconcile the positive impact on the environment with the negative impact on trade relations⁴² and on the different groups of trading partners.

To pass the test of compatibility with WTO rules, the CBAM should be kept as simple as possible and univocally motivated by climate policy. EU exports should not be dealt with in any way that contradicts this objective. The CBAM should pass WTO scrutiny before addressing the issue of circumvention. The administrative requirements make the CBAM a complicated mechanism. Adding indirect emissions without a well-established internationally recognised methodology could turn the CBAM into a procedural nightmare. The EU needs to offer a helping hand particularly to the least-developed countries, which might consider the CBAM an instrument that limits their prospects for industrialisation. The EU cannot implement the CBAM in the international trading system and international climate arrangements without seeking acceptance of its rationale, format, *modus operandi* and impact. In international trading waters, the CBAM must be navigated with care.

⁴² A. Mattoo et al., *Reconciling Climate Change and Trade Policy*, Peterson Institute for International Economics, WP 09-15 (2009).

Bibliography



Assous, A. et al., *A Storm in a Teacup: Impacts and Geopolitical Risks of the European Carbon Border Adjustment Mechanism*, Sandbag, E3G, Energy Foundation (2021).

Bacchus, J., *Legal Issues With the European Carbon Border Adjustment Mechanism*, CATO Briefing Papers no. 125 (9 August 2021).

Bacchus, J., *Trade Links. New Rules for a New World* (Cambridge: Cambridge University Press, 2022).

Berahab, R. and Dadush, U., *What Will Be the Effect of the EU's Carbon Border Tax on Morocco, and How Should Morocco React?*, Policy Center for the New South, Policy paper, PP-21/21 (October 2021).

Bradley, R. et al., *Leveling the Carbon Playing Field: International Competition and US Climate Policy Design*, Peterson Institute for International Economics, World Resources Institute (Washington, DC, May 2008).

Branger, F. and Quirion, P., 'Would Border Carbon Adjustments Prevent Carbon Leakage and Heavy Industry Competitiveness Losses? Insights From a Meta-Analysis of Recent Economic Studies', *Ecological Economics* 99 (2014), 29–39.

Branger, F., Quirion, P. and Chevallier, J., 'Carbon Leakage and Competitiveness of Cement and Steel Industries under the EU ETS: Much Ado About Nothing', *The Energy Journal* 37/3 (July 2016), 109–35.

Brazil, South Africa, India and China, 'The Joint Statement Issued at the Conclusion of the Thirtieth BASIC (Brazil, South Africa, India and China) Ministerial Meeting on Climate Change Hosted by India on 8 April 2021', accessed at https://english.mee.gov.cn/News_service/news_release/202104/P020210420346484492808.pdf on 12 September 2022.

Condon, M. and Ignaciuk, A., *Border Carbon Adjustment and International Trade: A Literature Review*, OECD Trade and Environment Working Papers 2013/06 (2013).



De Cendra, J., 'Can Emissions Trading Schemes Be Coupled With Border Tax Adjustments? An Analysis vis-à-vis WTO Law', *RECIEL* 15/2 (July 2006), 131–45.

Dechezleprêtre, A. et al., 'Searching for Carbon Leaks in Multinational Companies', *Journal of Environmental Economics & Management* 112 (2022), 1–20.

Demaret, P. and Stewardson, R., 'Border Tax Adjustments Under GATT and EC Law, and General Implications for Environmental Taxes', *Journal of World Trade* 28 (1994), 5–66.

Dias, A., Seeuws, S. and Nosowicz, A., 'EU Border Carbon Adjustment and the WTO: Hand in Hand Towards Tackling Climate Change', *Global Trade and Customs Journal* 15/1 (2020), 15–23.

Doix, V., 'L'ajustement fiscal à la frontière, qualification et interactions avec le système commercial international', *Revue internationale de droit économique* 2020/3, 319–42.

Dröge, S., *Tackling Leakage in a World of Unequal Carbon Prices*, Climate Strategies (2009).

Erixon, F., *Europe's Carbon Border Adjustment Mechanism: Time to Go Back to the Drawing Board*, ECIPE Policy Brief no. 14 (2021).

European Commission, 'Fit for 55': *Delivering the EU's 2030 Climate Target on the Way to Climate Neutrality*, Communication, COM (2021) 550 final (14 July 2021), accessed at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0550&from=EN> on 12 September 2022.

European Commission, 'Proposal for a Regulation establishing a Carbon Border Adjustment Mechanism', COM (2021) 564 final (14 July 2021), accessed at https://eur-lex.europa.eu/resource.html?uri=cellar:a95a4441-e558-11eb-a1a5-01aa75ed71a1.0001.02/DOC_1&format=PDF on 12 September 2022.

European Council, Council Secretariat, 'Multi-Party Interim Appeal Arbitration Arrangement Pursuant to Article 25 of the DSU', WTO-61, 7112/20, accessed at <https://www.consilium.europa.eu/media/43334/st07112-en20.pdf> on 12 September 2022.



European Parliament, 'Amendments adopted on the proposal for a regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (COM(2021)0564 – C9-0328/2021 – 2021/0214(COD))' (22 June 2022), accessed at https://www.europarl.europa.eu/doceo/document/TA-9-2022-0248_EN.html on 12 September 2022

European Parliament and Council Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L275 (25 October 2003), 32.

European Parliament and Council draft Regulation establishing a carbon border adjustment mechanism: general approach, 7226/22 (15 March 2022), accessed at <https://data.consilium.europa.eu/doc/document/ST-7226-2022-INIT/en/pdf> on 12 September 2022

Ferguson, S. and Sanctuary, M., 'Why is Carbon Leakage for Energy Intensive Industry Hard to Find?', *Environ Econ Policy Stud* 21 (2019), 1–24.

Gore, T. et al., *What Can Least Developed Countries and Other Climate Vulnerable Countries Expect From the EU Carbon Border Adjustment Mechanism (CBAM)?*, Institute for European Environmental Policy (2021).

Görlach, B. and Zelljadt E., *Forms and Channels of Carbon Leakage*, Climate Change 26, Ecologic Institute (Berlin, 2018).

Green, A., 'Trade Rules and Climate Change Subsidies', *World Trade Review* 5/3 (2006), 377–414.

Holmes, P., Reilly, T. and Rollo, J., 'Border Carbon Adjustments and the Potential for Protectionism', *Climate Policy* 11 (2011), 883–900.

Holzer, K., *Proposal on Carbon Related Border Adjustment: Prospect for the WTO Compliance*, CCLR 1/2010 (2010).



Holzer, K., 'The Pending EU CBAM: Quo Vadis Switzerland?', *Global Trade and Customs Journal* 16/11–12 (2021), 633–43.

Horn, H. and Sapir, A., 'Can Border Carbon Taxes Fit Into the Global Trade Regime?', *Bruegel Policy Brief* 2013/06 (2013), 1–8.

Kaufmann, C. and Weber, R. H., 'Carbon-Related Border Tax Adjustment: Mitigating Climate Change or Restricting International Trade?', *World Trade Review* 10/4 (2011), 497–525.

Keen, M., Parry, I. and Roaf, J., *Border Carbon Adjustments: Rationale, Design and Impact*, International Monetary Fund Working Paper WP/21/239 (2021).

Kolev, G., 'Carbon Border Adjustment and Other Trade Policy Approaches for Climate Protection', *Intereconomics* 56/6 (2021), 310–16.

Lamy, P., Pons, G. and Leturcq, P., *GT6 – Towards a European Carbon Border Adjustment Mechanism: Three 'Ds' to Overcome the EU's First Mover Disadvantage*, Europe Jacques Delors, Policy paper (July 2021).

Leonard, M. et al., 'The Geopolitics of the European Green Deal', Bruegel, Policy Contribution 04/2021 (2021).

Lim, B. et al., 'Pitfalls of the EU's Carbon Border Adjustment Mechanism', *Energies* 14 (2021), 7303, doi:10.3390/en14217303.

Lockwood, B. and Whalley, J., *Carbon Motivated Border Tax Adjustments: Old Wine in Green Bottles?*, NBER Working Paper no. 14025 (May 2008).

Marcu, A. et al., *Border Carbon Adjustment in the EU: Treatment of Exports in the CBAM*, European Roundtable on Climate Change and Sustainable Transition (2022).

Marcu, A. et al., *Carbon Leakage: An Overview*, CEPS Special Report no. 79 (December 2013).



Marcu, A. et al., 'The EU Carbon Border Adjustment Mechanism (CBAM): Preliminary Analysis of the European Commission Proposal for a Regulation Establishing a Carbon Border Adjustment Mechanism, 14 July 2021 (COM (2021) 564 Final)', European Roundtable on Climate Change and Sustainable Transition (2021).

Marcu, A., Mehling, M. and Cosbey, A., 'Addressing "Crunch Issues" in the EU CBAM: A Review of the ENVI Committee Rapporteur's Draft Report', European Roundtable on Climate Change and Sustainable Transition (2022).

Marcu, A., Mehling, M. and Cosbey, A., *Border Carbon Adjustment in the EU: Sectoral Deep Dive*, European Roundtable on Climate Change and Sustainable Transition (2021).

Marcu, A., Mehling, M. and Cosbey, A., 'Guide to the European Carbon Border Adjustment Mechanism: Brief for Policy Makers', European Roundtable on Climate Change and Sustainable Transition (27 September 2021).

Markkanen, S. et al., *On the Borderline: The EU CBAM and Its Place in the World of Trade* (Cambridge, 2021).

Maruyama, W. H., 'Climate Change and the WTO: Cap and Trade Versus Carbon Tax?', *Journal of World Trade* 45/4 (2011), 679–726.

Mattoo, A. et al., *Reconciling Climate Change and Trade Policy*, Peterson Institute for International Economics, WP 09-15 (2009).

Monjon, S. and Quirion, P., 'A Border Adjustment for the EU ETS: Reconciling WTO Rules and Capacity to Tackle Carbon Leakage', *Climate Policy* 11/5 (August 2011), 1212–25.

OECD, *Climate Finance Provided and Mobilised by Developed Countries in 2013-17* (OECD Publishing, 2019), doi:10.1787/39faf4a7-en.



Parker, L. and Grimmert, J. J., *Climate Change: EU and Proposed U.S. Approaches to Carbon Leakage and WTO Implications*, CRS Report for Congress, R40914 (4 November 2009).

Pauwelyn, J., *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law*, Working Paper NIWP 07-02, Duke University (April 2007).

Pirlot, A., 'Carbon Border Adjustment Measures: A Straightforward Multi-Purpose Climate Change Instrument?', *Journal of Environmental Law* (2021), 1–28, doi:10.1093/jel/eqab028.

Potterfield, M. C., 'Border Adjustments for Carbon Taxes: PPMs, and the WTO', *University of Pennsylvania Journal of International Law* 41/1 (2019), 1/41.

Quick, R., "'Border Tax Adjustment" in the Context of Emission Trading: Climate Protection or "Naked" Protectionism?', *Global Trade and Custom Journal* 3/5 (2008), 163–75.

Quick, R., 'Border Tax Adjustment to Combat Carbon Leakage: A Myth', *Global Trade and Customs Journal* 4/11–12 (2009), 353–57.

Quick, R., 'Carbon Border Adjustment: A Dissenting View on Its Alleged GATT-Compatibility', *ZEUS* 4 (2020), 549–91, doi:10.57771/1435-439X-2020-4-549.

Risteska, S. et al., *The EU's Carbon Border Adjustment Mechanism: Challenges and Opportunities for the Western Balkan Countries*, Agora Energiewende/Enervis 250/02-I-2022/EN (January 2022).

Sakuya, Y. S., 'EU's Carbon Border Adjustment Mechanism: Will It Achieve Its Objective(s)?', *Journal of World Trade* 56/3 (2022), 383–404, doi:10.54648/trad2022015.

Sartor, O., Cosbey, A. and Shawkat, A., *Getting the Transition to CBAM Right: Finding Pragmatic Solutions to Key Implementation Questions*, Agora Industry, 249/01-I-2022/EN (January 2022).

Schippers, M. L. and de Wit, W., 'Proposal for a Carbon Border Adjustment Mechanism', *Global Trade and Customs Journal* 17/1 (2022), 10–18.



Simola, H., *CBAM! – Assessing Potential Costs of the EU Carbon Border Adjustment Mechanism for Emerging Economies*, BOFIT Policy Brief 10/2021 (2021).

Tagliapietra, S. and Wolff, G.B., ‘Conditions Are Ideal for a New Climate Club’, *Energy Policy* 158 (November 2021), doi:10.1016/j.enpol.2021.112527.

Trachtman, J. P., ‘WTO Law Constraints on Border Tax Adjustment and Tax Credit Mechanisms to Reduce the Competitive Effects of Carbon Taxes’, *National Tax Journal* 70/2 (2017), 469–94.

United Nations Conference on Trade and Development, *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*, UNCTAD/OSG/INF/2021/2 (2021).

Urazgaliev, V. Sh., Novikov, A. V. and Menshikova, G. A., ‘The Global Trend Towards Decarbonization of the Economy: The Introduction of the Carbon Border Adjustment Mechanism in the EU and the Possible Consequences for Russia’, SHS Web of Conferences 129, article no. 090221 (2021).

Vranes, E., ‘Climate Change and the WTO: EU Emission Trading and the WTO Disciplines on Trade in Goods, Services and Investment Protection’, *Journal of World Trade* 43/4 (2009), 707–35.

World Bank Group, *Preliminary Study on the Economic Impact that EU CBAM Could Potentially Impose on Foreign Exporters of Products to the EU Market. The Case of Thailand, India, and Vietnam* (May 2021).

Will, U., *Climate Border Adjustments and WTO Law: Extending the EU Emissions Trading System to Imported Goods and Services* (Nijhoff: Brill, 2019).

WTO Secretariat, *WTO Analytical Index GATT 1994 – Article XX (Jurisprudence)*, accessed at https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art20_jur.pdf on 12 September 2022.

Zachmann, G. and McWilliams, B., *A European Carbon Border Tax: Much Pain, Little Gain*, Policy Contribution 05/2020, Bruegel (March 2020).



Simola, H., *CBAM! – Assessing Potential Costs of the EU Carbon Border Adjustment Mechanism for Emerging Economies*, BOFIT Policy Brief 10/2021 (2021).

Tagliapietra, S. and Wolff, G. B., 'Conditions Are Ideal for a New Climate Club', *Energy Policy* 158 (November 2021), doi:10.1016/j.enpol.2021.112527.

Trachtman, J. P., 'WTO Law Constraints on Border Tax Adjustment and Tax Credit Mechanisms to Reduce the Competitive Effects of Carbon Taxes', *National Tax Journal* 70/2 (2017), 469–94.

United Nations Conference on Trade and Development, *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*, UNCTAD/OSG/INF/2021/2 (2021).

Urazgaliev, V. Sh., Novikov, A. V. and Menshikova, G. A., 'The Global Trend Towards Decarbonization of the Economy: The Introduction of the Carbon Border Adjustment Mechanism in the EU and the Possible Consequences for Russia', *SHS Web of Conferences* 129, article no. 090221 (2021).

Vranes, E., 'Climate Change and the WTO: EU Emission Trading and the WTO Disciplines on Trade in Goods, Services and Investment Protection', *Journal of World Trade* 43/4 (2009), 707–35.

World Bank Group, *Preliminary Study on the Economic Impact that EU CBAM Could Potentially Impose on Foreign Exporters of Products to the EU Market. The Case of Thailand, India, and Vietnam* (May 2021).

Will, U., *Climate Border Adjustments and WTO Law: Extending the EU Emissions Trading System to Imported Goods and Services* (Nijhoff: Brill, 2019).

WTO Secretariat, *WTO Analytical Index GATT 1994 – Article XX (Jurisprudence)*, accessed at https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art20_jur.pdf on 12 September 2022.

Zachmann, G. and McWilliams, B., *A European Carbon Border Tax: Much Pain, Little Gain*, Policy Contribution 05/2020, Bruegel (March 2020).







The EU Carbon Border Adjustment Mechanism (CBAM) has to pass two major tests before it can come into effect. It has to withstand any challenges to its compatibility with the World Trade Organisation rules. It also has to prove that it can effectively address carbon leakage and ensure a level playing field for European companies. It should not be allowed to be circumvented. This depends on the design of the CBAM and on how it is implemented.

If the CBAM is structured to be an effective tool to prevent carbon leakage, it will have to cover a wide scope of emissions, which may negatively affect many trading partners. The endeavour to prevent circumvention may turn the CBAM into an administrative nightmare for companies and for the public institutions involved. Many more trade-offs would have to be taken into account in the design and implementation of the mechanism and these will be discussed in this paper. All of them require thorough consideration and policy choices that have been carefully thought through. The paper includes a number of policy recommendations. The CBAM is unique in the world of trade—if it is to succeed, expectations must be tempered. If the CBAM is indeed able to help to achieve climate objectives, many countries may go on to develop similar instruments of their own. However, the failure of the CBAM could have serious implications for the global trading system and EU climate policy.



Wilfried
Martens Centre
for European Studies