

# Border Carbon Adjustments

## Priorities for international cooperation

Ieva Baršauskaitė, Alice Tipping<sup>1</sup>  
August 2023

### 1.0 Context

Border carbon adjustments (BCAs) are instruments that seek to impose on imports the same costs of carbon born by domestic producers of a product. They are measures born out of the necessity to reconcile the ambitious climate action of some jurisdictions, which are significantly ramping up carbon prices for their domestic industries, with the fact that not all countries are doing the same. The European Union (EU) has already introduced the first instrument of this kind, which will come into force in October 2023. Canada and the United Kingdom are considering the conclusions of public consultations that they have conducted on this matter.

BCA has become a point of tension among governments worldwide. There is a sense that it is a question of when, not if, BCA measures are challenged under the World Trade Organization's (WTO's) dispute settlement system. And yet, relying (once again) on the WTO's dispute settlement system to interpret the multilateral trading rules that have not been written for this context and that have not been significantly updated for the last three decades is risky.<sup>2</sup> Ultimately, while disputes can result in useful guidance for governments and can be used strategically to establish points of legal principle, at the broader strategic level, they are

---

<sup>1</sup> The authors would like to thank Aaron Cosbey (International Institute for Sustainable Development) for providing ongoing guidance and support in the work leading to this policy brief. We would also like to thank Rashid S. Kaukab, Yasmin Ismail, and Claudia Contreras for the valuable comments and recommendations that they provided as peer reviewers. The report was produced with support from the European Climate Foundation. The report does not necessarily reflect the views of the peer reviewers and funder, nor should they be attributed to them.

<sup>2</sup> A key risk related to such a dispute is how, despite the actual content of any claims by the complaining parties, the ruling in such a dispute would be seen and understood by the broader public. A WTO ruling in favour of a (likely developed) country's ambitious climate policies, confirming its intention to unilaterally set and charge the carbon price on products produced in developing countries, can be easily seen as going against the objectives of development and the principle of Common but Differentiated Responsibilities and Respective Capabilities. The WTO ruling against such instrument (or some of its elements) can easily be employed to support the narrative of the multinational institution detached from the realities and needs of the global fight against climate change.



no substitute for meaningful international discussion on difficult new issues at the intersection of trade and climate change.

From the more political implications to more practical ones, a diversity of BCAs across the globe could also mean an increased uncertainty and additional administrative burden for the traders of covered sectors, many of which (like steel, aluminum, cement and fertilizers) are key pillars of some developing countries' heavy industry and export revenue streams. Increased cooperation on BCA holds the potential of not only relieving the tensions in international relations but also significantly facilitating trade for the sectors that are already highly trade exposed.

This policy brief looks into some of the pertinent design elements of BCA that might be fruitful subjects of international discussion about the best ways forward. It also considers the possible venues, formats, and shapes that such a discussion might take.<sup>3</sup>

## 2.0 Issues for International Cooperation

In most cases, BCA will need to closely mirror the carbon pricing system in place in that specific jurisdiction to make sure that its requirements are neither permitting carbon leakage, nor establishing excessive requirements for imported products that would not be equally applied to domestic production. Because carbon pricing systems take different forms, including both emission trading schemes and carbon taxes, as well as various hybrids, an attempt to harmonize every aspect of BCA would likely not be successful. However, at the level of principle and best practice, certain elements of any BCA could usefully be the subject of international discussion (and, potentially, cooperation), especially as the development of new instruments is underway.

### 2.1 Standards for Calculating Embedded Emissions

One of the most important BCA elements both for BCA-adopting jurisdictions and for the exporters to that market is the way that greenhouse gas (GHG) emissions embedded in BCA-covered products are calculated. The level of embedded emissions defines how much imports of these products pay at the border, and the way they are calculated determines how much exporters have to pay to comply with the measure.

The fairest way to go about it would be using emissions data that would be based on the actual carbon footprint of individual installations, which would provide clear incentives to the producers to reduce their carbon footprints. An alternative to the use of actual emissions data is replacing it with default assumptions about the embedded emissions in goods. These default levels might be based on average GHG intensity for that sector in the exporting country or in the importing country, or even on national average GHG intensity in the country of origin.

---

<sup>3</sup> This policy brief is part of a project that included IISD analysis and closed-door dialogues with delegates of governments that were either considering their own BCA measures or were potentially impacted by such measures. The ideas presented here include IISD's own analysis and input from governments, stakeholders and experts invited to be part of such exchanges. The companion policy brief to this one ([Border Carbon Adjustments: Pivotal design choices for policy-makers](#)) sets out in more detail the key aspects of policy design that matter for BCA.



Such systems would not favour producers that are cleaner than the benchmark and would not incentivize decarbonization efforts.

While the use of actual emissions data is highly preferable, the creation of a fully functional accounting and data collection and reporting system is costly, as is having that data certified by an accredited verifier. This challenge is made more difficult by the absence of an agreed international standard for calculating the carbon embedded in goods. There are several international standards for calculating carbon emissions at the facility level, but translating those to a goods-based standard has not yet been done and for some sectors is extremely challenging. The EU recently adopted a standard to be used under its Carbon Border Adjustment Mechanism (CBAM) regime.<sup>4</sup>

Ongoing discussions on possible development of BCAs in other jurisdictions raise the possibility that each of them might establish a different standard for the calculation of embedded emissions, meaning a significant additional burden on exporters (which the implementing jurisdictions might also be themselves!). International cooperation on use of common international standards, or at least the consideration of a system of equivalence for different methodologies would seem to be one of the highest priorities both for the governments developing BCA and for those that would need to comply with such new requirements. It seems obvious that such conversations would need to take place within, or at least with the close support of, international or regional standard-setting organizations, such as the International Organization for Standardization, and in close cooperation with the trade community, such as the Committee on Technical Barriers to Trade at the WTO.

## 2.2 Geographical Scope of Coverage

Another pressing conversation for the international community is the geographical scope of BCA coverage, and, in particular, the exemptions from it. BCAs are trade instruments driven by broader needs of climate change mitigation and are normally part of the package of climate policies adopted by a specific government. Their coverage would normally be extended to any other WTO member it is importing BCA-covered goods from.

However, a case could be made that BCA should reflect certain principles of trade and environmental law that recognize different capacities of developing countries both to adjust to other WTO members' trade regulations, as well as to take action in mitigating greenhouse gas emissions. The WTO's Special and Differential Treatment principle and the Common but Differentiated Responsibilities and Respective Capabilities principle established by the United Nations Framework Convention on Climate Change (UNFCCC) could both be used to support such a case. However, it is important to note that the coverage of such principles in practical terms might be different, and an important discussion would need to be had to better refine how they should be applied, including potentially defining a list or category of countries that would be exempted from BCA coverage or that could benefit from certain preferential

---

<sup>4</sup> The implementing legislation that embodies this standard can be found here: [https://taxation-customs.ec.europa.eu/document/download/1163ef5a-192c-4059-abf6-9762e1264b6a\\_en?filename=C\\_2023\\_5512\\_1\\_EN\\_ACT\\_part1\\_v6.pdf](https://taxation-customs.ec.europa.eu/document/download/1163ef5a-192c-4059-abf6-9762e1264b6a_en?filename=C_2023_5512_1_EN_ACT_part1_v6.pdf), with technical annexes found here: [https://taxation-customs.ec.europa.eu/document/download/97ae41e4-f785-40fd-b4df-f141ad69f522\\_en?filename=C\\_2023\\_5512\\_1\\_EN\\_annexe\\_acte\\_autonome\\_cp\\_part1\\_v7.pdf](https://taxation-customs.ec.europa.eu/document/download/97ae41e4-f785-40fd-b4df-f141ad69f522_en?filename=C_2023_5512_1_EN_annexe_acte_autonome_cp_part1_v7.pdf).



treatment. One such category of countries could be the least developed countries—a UN category that also has a special status at the WTO.

It is important to note that every exemption would create the potential pathway for the circumvention of existing measures and would weaken the environmental objectives of BCA by diverting production to the exempted jurisdiction. Hence, it will be important to discuss this aspect also.

This issue is at once political and economic, and its discussion should, by definition, include those countries affected by it. If multilateral organizations were in a position to discuss the best practices of BCA design with their full membership, it would make sense for the question of exemptions to be particularly high on the agenda.

### 2.3 Crediting for Foreign Policies

In most BCA design models, foreign carbon pricing policies would be credited for by adjusting the BCA price according to the price already paid in the country of origin. This would avoid double-charging the producer for the carbon content of its goods. While the details of any specific carbon pricing scheme would be complex to translate into a BCA credit—the credit would need to account for any free allocation of allowances, carbon tax breaks, use of offsets, and other complications—it is at least conceptually straightforward to design a BCA in which there is credit for an explicit carbon price paid.

However, the situation is much less straightforward when the policies are not carbon price-based, such as policies designed to tackle climate change by preserving forests as carbon sinks. The most fundamental question is whether such policies should be credited at all. On the one hand, it makes little sense for an adjustment to provide credit for something it is not adjusting for. That is, BCA as usually proposed does not apply a charge at the border to adjust for *domestic* non-price-based climate policies, so it makes little sense to apply a credit for such policies *abroad*. On the other hand, only crediting for explicit carbon prices seems to contravene the UNFCCC Paris Agreement principle of respect for sovereign choice about how countries will address climate change—a principle that has given us nationally determined contributions as a building block of international ambition.

Beyond that fundamental question are challenging questions about methodology. Which policies could be accounted for as climate policies, and who would decide? How might their price equivalence be established?

There is strong political pressure to find bilateral solutions for this issue, using, for example, ongoing trade negotiations to create leverage. Yet bilateral pathways might not be the fairest ones, often favouring those with more leverage in such negotiation. They can establish principles of equivalence between two partners that could be built out into a broader set of principles of equivalence for other parties but also risk cementing in the approaches of the first movers, forcing others to adapt in order to join the framework. Therefore, more inclusive discussions, preferably in multilateral forums, would seem a much better option.



## 2.4 Use of Revenues

An important question in BCA design relates to the use of revenues collected through the use of BCA. The WTO member collecting such revenue could simply keep it, directing it to general government revenue. However, it is difficult to justify such action, especially if such revenue would later be used to support its own domestic industry's decarbonization efforts—thereby financing innovation and increasing domestic competitiveness at the expense of exporters in foreign countries that have not yet had time or resources to decarbonize their activities.

The alternatives would mean that at least part of collected revenue would either be refunded to the countries of export, or used to support their exporters, or assigned for a specific purpose such as to support the decarbonization efforts in countries of export, either through bilateral cooperation or through a multilateral instrument such as the UNFCCC's Green Climate Fund.

While it is easy to imagine that such revenues could be used for technical assistance and capacity building and training programs that would enable exporters to comply with the obligations imposed by CBAM, an important question to be answered is whether such activities are equally needed everywhere and what criteria should be adopted when prioritizing the use of BCA revenues.

The issue of revenue use could form an important part of a broader conversation about the specific situations of developing countries and how it should be reflected in the design of BCA.

## 3.0 Getting From Here to There

There is, of course, a large distance to cover from identifying opportunities for cooperation to actually forging it, but some initial thinking about the latter can be useful already at this stage, in particular, regarding the objectives of cooperation, the participants needed in such a discussion and its venue, as well as the content, form, and shape of its outcomes. As always, the assessment of forums to advance international cooperation needs to face the trade-off between the depth of commitment possible and the inclusiveness and efficiency of the conversation. Smaller groups can move faster and achieve deeper cooperation but sacrifice inclusiveness, which for some issues is absolutely crucial. Wider groups, including truly multilateral discussion, take longer to agree on cooperative outcomes, and those outcomes have to balance a wider range of positions and perspectives, so they tend not to achieve the same depth of cooperation. Different international forums involve different memberships and different functions (treaty making, best-practice sharing, standard setting). Governments may want to choose different forums to forge cooperation on different aspects listed above or choose one central forum (drawing in external expertise) required to build cooperative approaches to BCA.

The first option (because discussions have already begun, albeit very tentatively) is the WTO. WTO discussions on BCA have witnessed some important shifts in recent years. From the perspective of concerned WTO members, the fears that debating BCA could somehow legitimize such instruments in the eyes of WTO law have shifted to the worries about much



more practical implications of the EU's instrument that is already in place, as well as the concerns about others to follow. From the perspective of governments that were at least partially considering an option of their own BCA, the existence of one example allows a closer examination of its elements and closer observation of its implementation challenges, and some in that position seem interested in exploring collaborative options if these are feasible. The important question now is whether and how the institution can accommodate such conversations.

The WTO's Committee on Trade and Environment (CTE) was not created as the forum for negotiations but rather as a body tasked with identifying and understanding "the relationship between trade and the environment in order to promote sustainable development" by the 1994 Ministerial Decision on Trade and Environment. Its BCA discussions have been highly focused on one specific instrument, the EU's CBAM.<sup>5</sup> The outcome document adopted by the ministers at the 12th WTO ministerial conference on June 17, 2022, (WT/MIN(22)/24) describes the CTE as "a standing forum dedicated to dialogue among Members on the relationship between trade measures and environmental measures" and the ongoing conversations about the revival of this body might indicate clearer pathways of strengthening its role with respect to measures like BCA.

The CTE's Special Session (CTE SS) is, in contrast, tasked with negotiating,<sup>6</sup> and has focused in the past on the elimination of tariffs and non-tariff barriers on environmental goods and services. This body, however, has not met since 2015 and does not seem to have had any substantial discussions since 2007.<sup>7</sup>

However, problems with multilateral discussion at the WTO have been brewing for some time. Fundamental disagreements about the direction that the organization is or should be taking and the topics that it needs to focus on have destined many newer initiatives to less-than-full membership formats. So far, the smaller format Trade and Environmental Sustainability Structured Discussions (TESSD) conversations have focused on the broader category of trade-related climate measures; however, its members might choose to dive deeper into this one particular type of trade-related climate measure or to better explore certain BCA elements to prepare a multilateral discussion.<sup>8</sup> It is, however, uncertain whether the problems experienced at the multilateral level would not be reproduced at such novel formats, which are still at the experimental stage and are only now testing the appetites and sensitivities of their members. One thing that was quite clear at the time of writing: substantial multilateral discussion on BCA was not happening at the WTO, or at any other multilateral economic

---

<sup>5</sup> The EU has been providing regular updates on its CBAM in the meetings of the Committee on Trade and Environment, such as the one of June 12, 2023: [https://www.wto.org/english/news\\_e/news23\\_e/envir\\_13jun23\\_e.htm](https://www.wto.org/english/news_e/news23_e/envir_13jun23_e.htm)

<sup>6</sup> These talks were launched as part of the Doha Development Agenda in 2001: [https://www.wto.org/english/tratop\\_e/envir\\_e/envir\\_negotiations\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/envir_negotiations_e.htm)

<sup>7</sup> Last report from the substantial CTE SS meeting dates November 1–2 2007 (TN/TE/R/21): <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/TN/TE/R21.pdf&Open=True>

<sup>8</sup> This initiative of over 70 WTO members has dedicated a specific working group to the topic of trade-related climate measures which looked into the ways its members developed such measures: see [https://www.wto.org/english/tratop\\_e/tesd\\_e/tesd\\_e.htm](https://www.wto.org/english/tratop_e/tesd_e/tesd_e.htm)



body like the United Nations Conference on Trade and Development (UNCTAD), despite several of the WTO members calling for such a discussion.<sup>9</sup>

It is also possible that the international cooperation pathways on BCA might not lead to the WTO at all. A second set of options for forums for cooperation includes groups of governments. A noticeable amount of effort has already been put into creating a Carbon Club at the G7, though it is not clear how politically sustainable that effort will ultimately be.<sup>10</sup> The G20 could be another forum, as could Asia-Pacific Economic Cooperation (APEC) or the Organisation for Economic Co-operation and Development (OECD). While the G7 includes only developed countries, G20, APEC, and, to some extent, the OECD include developing countries as well, although the diversity of each group's membership varies widely.

A third set of options, where conversations are also already underway, are bilateral, such as the bilateral EU–U.S. discussions on trade measures to address carbon content and overcapacity in steel and aluminum<sup>11</sup> or EU–India conversations in the context of their free trade agreement negotiations at the first meeting of the newly set up EU–India Trade and Technology Council.<sup>12</sup> The recent Singapore–Australia Green Economy Agreement includes provisions on the support for development of international carbon markets and support for the climate actions by regional partners.<sup>13</sup> While these formats have, in principle, the potential to develop cooperative outcomes quite quickly that can pave the way for broader cooperation, they clearly cannot include the range of trading partners who would be affected by those outcomes, and it is not clear how well those trading partners' interests could be reflected.

As noted above, it is also possible to conceive of several parallel efforts at international discussion. Discussions on product standards, for example, would necessarily be very different from discussions on credit for carbon pricing, and it may be that the two streams of effort would most appropriately be housed in different forums involving different stakeholders. That kind of division of labour would, of course, complicate the larger process of agreement on best practice.

---

<sup>9</sup> This was stated in China's communication "Further elaboration on dedicated multilateral discussions on the trade aspects and implications of certain environmental measures" in JOB/TE/81 of June 12: <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/Jobs/TE/81.pdf&Open=True>.

A need for the multilateral discussion on environmental measures was also called for in the African Group's communication "Principles guiding the development and implementation of trade-related environmental measures" in WT/GC/W/894 of July 13, 2023: <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/GC/W894.pdf&Open=True>.

<sup>10</sup> The Climate Club was established in December 2022 during Germany's G7 Presidency and declares itself to be focusing on encouraging "nations with bold climate goals to join forces" and addressing "coordination and implementation challenges arising from other instruments and initiatives, such as the EU's new carbon border adjustment mechanism and Green Deal industrial plan, and the US Inflation Reduction Act": [https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/739385/EPRS\\_ATA\(2023\)739385\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/739385/EPRS_ATA(2023)739385_EN.pdf)

<sup>11</sup> The White House, 2021.

<sup>12</sup> As reported, for example, by Dhoot & Lakshman, 2023.

<sup>13</sup> This agreement was signed on October 18, 2022: <https://www.dfat.gov.au/geo/singapore/singapore-australia-green-economy-agreement>



## 4.0 Conclusions

There are several aspects of the design of BCA that would seem to be good candidates for international discussion and, potentially, for cooperative approaches. These include standards for embedded carbon emissions, whether and how some countries might be excluded from BCA, whether and how foreign climate change policies should be credited in the price paid under BCA, and how revenues from BCA should be used.

There are also a number of different forums where international conversations about BCA, including some of these topics, are taking place, including at the multilateral, regional, and bilateral levels. None of these conversations has yet resulted in an internationally cooperative outcome or even a consensus that such an outcome is necessary. Bilateral discussions are, if history is any guide, likely to move most quickly and may produce results that are well-informed by the objectives and realities of the involved partners and less informed by the broader set of concerns that would typically attach to multilateral discussions. But there is as yet no such set of broader discussions.

If there is indeed potential value in international discussion on principles and best practice in the elaboration and implementation of BCA, then there is some urgency to finding a way for those discussions to take place. Climate and trade policy are in a state of dynamic flux, and there is a risk that discussions of policy options will be overtaken by decisions that preclude important policy paths.

## References

- Dhoot, V., & Lakshman, S. (2023). India, E.U. discuss E.U. carbon border tax in Brussels. *The Hindu*. <https://www.thehindu.com/news/national/india-eu-discuss-eu-carbon-border-tax-in-brussels/article66861583.ece>
- The White House. (2021). *Fact sheet: The United States and European Union to negotiate world's first carbon-based sectoral arrangement on steel and aluminum trade*. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/31/fact-sheet-the-united-states-and-european-union-to-negotiate-worlds-first-carbon-based-sectoral-arrangement-on-steel-and-aluminum-trade/>



© 2023 The International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development

This publication is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

## INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT

The International Institute for Sustainable Development (IISD) is an award-winning independent think tank working to accelerate solutions for a stable climate, sustainable resource management, and fair economies. Our work inspires better decisions and sparks meaningful action to help people and the planet thrive. We shine a light on what can be achieved when governments, businesses, non-profits, and communities come together. IISD's staff of more than 200 people, plus over 150 associates and consultants, come from across the globe and from many disciplines. With offices in Winnipeg, Geneva, Ottawa, and Toronto, our work affects lives in nearly 100 countries.

IISD is a registered charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Province of Manitoba and project funding from governments inside and outside Canada, United Nations agencies, foundations, the private sector, and individuals.

### Head Office

111 Lombard Avenue, Suite 325  
Winnipeg, Manitoba  
Canada R3B 0T4

**Tel:** +1 (204) 958-7700

**Website:** [iisd.org](https://iisd.org)

**Twitter:** [@IISD\\_news](https://twitter.com/IISD_news)



**[iisd.org](https://iisd.org)**