## Global Dialogue on Border Carbon Adjustments

The case of Brazil

**IISD REPORT** 





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#### Global Dialogue on Border Carbon Adjustments: The case of Brazil

July 2024 Written by CINDES – Centro de Estudos de Integração e Desenvolvimento Photo: iStock

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## **1.0 Introduction**

The European Union's (EU's) pioneering Carbon Border Adjustment Mechanism (CBAM) is not an accident of policy. Several other countries are considering adopting border carbon adjustment, and more will inevitably do so.

With societies increasingly demanding climate change mitigation actions from their governments, any country or jurisdiction that responds by implementing carbon pricing will have to grapple with deploying a level playing field to their emissions-intensive, heavily traded sectors—steel, aluminum, chemicals, plastics, cement, fertilizers, etc.

Where the policy response involves protection like a border carbon adjustment (BCA), as it has in the EU, there are three sorts of risks for developing countries:

- First, regimes could be established without care to harmonize requirements, with exporters having to report and certify carbon emissions to different standards in multiple export markets.
- Second, such regimes may not consider the circumstances of developing country exporters, who may lack access to finance for low-carbon capital investments, who may never have been required to establish greenhouse gas (GHG) accounting regimes, and who may be situated in countries with low capacity to support their low-carbon transitions.
- Third, such regimes may be deliberately crafted to shut out exports from developing countries and other exporters.

With the leadership of the International Institute for Sustainable Development and the support of the Laudes Foundation, this project aims to lower each of those risks by crafting an internationally agreed list of best practices in this novel area of policy making.

This initiative aims to build a global dialogue on BCAs, drawing in stakeholder and investor perspectives to influence the shape of government policy toward effective and equitable climate mitigation. This process begins with national dialogues in five countries, including Canada and the United Kingdom (countries in the process of adopting their own BCA mechanisms) and Brazil, Vietnam, and Trinidad and Tobago (countries potentially affected by the effects of BCAs on their exports).

In Brazil, the dialogues were coordinated by Centro de Estudos de Integração e Desenvolvimento (CINDES) and benefited from cooperation with the National Confederation of Industry (CNI). Brazil was the first country to conclude the national dialogue, and this report gathers the main findings of the initiative.

This report is organized into seven sections. Section 2 sets out the scene, discussing the context, the relevance of the topic, and the organization of the dialogues in Brazil. Section 3 assesses the expected impacts of the EU's CBAM in Brazil and the risks of BCA diffusion to other jurisdictions, using data to illustrate the findings. Section 4 summarizes the main reactions of stakeholders to the topic of the EU's CBAM. Section 5 details the stances undertaken by stakeholders participating in the dialogues regarding the main components of



CBAM. It is followed by a small sixth section summarizing the views of the financial sector on the topic. Section 7 presents some final thoughts about the debate in Brazil and stakeholders' views on what the following steps should be.

## 2.0 Context

#### 2.1 What Is a BCA?

A BCA is an attempt to make imported goods bear the same carbon costs that domestic goods must bear. It is usually aimed at energy-intensive, trade-exposed (EITE) sectors such as steel, aluminum, cement, fertilizers, plastics, and chemicals. Within those sectors, the focus is upstream on basic and semi-processed materials. Those domestically produced goods, being energy-intensive, will feel the pinch of any carbon pricing, but since they are trade-exposed, their producers will find it difficult to pass along any carbon costs to consumers since international competitors may not face similar costs.

That prospect risks carbon leakage, which can happen through the relocation of firms to other jurisdictions, through the loss of market share to foreign producers, or through the diversion of greenfield investment to other jurisdictions. Evidence is mixed on the existence of carbon leakage, but it is widely agreed that the risk of leakage will increase as carbon prices become more meaningful.

There is not a single type of BCA; rather, the final result and impacts will depend strongly on choices made about policy options during the elaboration process. Some of the basic choices include the following:

- Will it assess a levy on imports only, or will it also rebate carbon costs to exports?
- What goods/sectors will it cover? How far up and down will the value chain extend in covered sectors?
- How will embodied emissions be estimated at the border? Actual data? Assumed defaults? If the latter, can the defaults be challenged?
- What GHG emissions will be covered? Possibilities include direct (scope 1) emissions, emissions from purchased electricity (scope 2), or various types of scope 3 emissions (e.g., from purchased input goods or from the transport of goods).
- What price will be put on embodied emissions?
- Will it exempt states from coverage based on national-level criteria like climate ambition or development status?
- Will the BCA charge be lowered to account for a carbon price paid in the country of export? What about non-price-based climate policies?
- What will be done with the revenues? Will any be transferred to the affected countries or producers?

The underlying climate policy instrument will determine many of these policy choices. For example, if the instrument (a carbon tax or an emissions trading system [ETS] regulation) only covers direct (scope 1) emissions, then the likely choice for a BCA would be to cover the same emissions.

In the abstract, it is impossible to say whether BCAs are effective, fair, and legal; this can only be done in the context of a specific BCA. The answers will depend fundamentally on how the BCA in question finally manifests due to the abovementioned choices.

The implication is that BCAs have the potential to be an instrument in line with national and international legal obligations that focus just on environmental protection. Still, it also can potentially be a protectionist instrument focused on unfairly and illegally disadvantaging foreign producers.

BCAs present fundamental challenges for countries considering its use as a policy tool and for those facing the prospect of such a tool being used by their trading partners.

For countries like Brazil that are facing the prospect of BCAs in their trading partners, the challenges include, as a starting point, how best to support their exporters in understanding and complying with BCA provisions with the least possible impairment of competitiveness.

At a higher level, the challenges include how to influence the policy and design choices made by their trading partners—that is, how to ensure that their realities and concerns are considered. As part of that challenge, a key issue is how to help ensure that if there are multiple BCA regimes, their various institutions, measurements, and reporting protocols are not divergent, needlessly forcing exporters to conform to different requirements in regimes aimed at the same objectives. Another aspect of that challenge is the question of what norms to use in assessing and critiquing BCA regimes and proposals. Trade law offers one benchmark by which some aspects of a BCA regime can be judged, but it is not particularly helpful in answering many relevant design questions.

The critical starting-point questions to answer in each country, as part of an effort to address the possibility that trading partners will adopt BCAs, are:

- What are the country's sectoral vulnerabilities to foreign BCAs? What are the potential impacts?
- What options and channels exist to influence the adoption or design of foreign BCAs?
- What principles or best-practice standards could be used as benchmarks to judge the design choices made by foreign designers in elaborating a BCA regime?

## 2.2 Why Have BCAs Become a Relevant Topic in the International Agenda?

BCAs become a hot topic in trade and environment policy circles. The proximate reason is the coming into law of the EU's CBAM in May 2023 and its enforcement in October 2023. Starting in January 2026, CBAM will impose charges on upstream goods in the iron and steel, aluminum, cement, and fertilizer sectors (as well as on electricity imports), forcing them to purchase emissions allowances as if they had been produced under the EU ETS.

But the underlying reasons are more fundamental. As the science around climate change becomes more unequivocal, the impacts of climate change are increasingly felt, the cost of low-carbon technologies comes down, and governments are under increasing pressure to act. As countries ramp up their climate ambition, some will impose costs on producers in EITE sectors. If they do, they will be forced to consider how to protect those sectors from leakage: the increase in GHG emissions in other jurisdictions in response to climate policies in an implementing jurisdiction. With no plan to address leakage, policy-makers risk the political fallout from fostering deindustrialization rather than decarbonization. BCAs are one of only a few tools dedicated to this end, so it will be increasingly considered.

The result is a flurry of interest in BCAs:

- Canada and the United Kingdom, both countries with carbon pricing regimes, have completed formal public consultations on what BCA might look like in their countries (Department of Finance, 2021; United Kingdom, 2023a), and the United Kingdom has announced that it will implement a BCA as of 2027 (United Kingdom, 2023b).
- Japan's 2020 Green Growth Strategy called for the consideration of BCAs, though there has been no public consideration since that time (Ministry of Economy, Trade and Industry, 2020).
- In Australia, as part of the country's keystone climate regulation reform, the Safeguard Mechanism, the government is undertaking a review of policy options to address carbon leakage, explicitly including BCAs (Department of Climate Change, Energy, the Environment and Water, n.d., 2023).<sup>1</sup>
- The United States has repeatedly announced its intention to put a BCA regime in place, starting with President Biden's presidential campaign and continuing with announcements in the U.S. Trade Representative's 2021 *Annual Report*. Several failed legislative attempts at carbon pricing and BCAs have gone by the board since then, but a recent bill by Senator Cassidy is seeking bipartisan support by proposing border carbon charges *without* a domestic carbon price.<sup>2</sup>

More broadly, BCAs are part of a larger trend to consider the carbon content of traded goods, reflected in guidelines for green government procurement, deforestation-free products rules, private sector low-carbon requirements for upstream value chains, and proposals such as the U.S.–EU Global Arrangement on Sustainable Steel and Aluminum and various versions of a climate club.<sup>3</sup>

In short, we are seeing increasing interest in tools like BCAs as a part of the inevitable policy response to worsening climate change. The upshot is that we will surely see more such tools in use in the coming years, more traded goods, and more sectors covered. While the current trends weigh heavily toward use by high-income countries, that may change; many emerging developing countries have strong industrial sectors and plans for climate ambition of their own.

<sup>&</sup>lt;sup>1</sup> See <u>https://www.dcceew.gov.au/sites/default/files/documents/safeguard-mechanism-reforms-factsheet-2023.pdf</u>

<sup>&</sup>lt;sup>2</sup> See: <u>https://www.congress.gov/bill/118th-congress/senate-bill/3198/text</u>

<sup>&</sup>lt;sup>3</sup> A climate club is a coalition of countries intending to adopt stringent climate change mitigation policies. William Nordhaus proposed that countries willing to adopt these policies should create a club, introduce carbon pricing among member states, and impose fees on imported goods from countries that are not part of the club nor adopt similar carbon pricing mechanisms (Nordhaus, 2015).

#### 2.3 Brazil's In-Country Process and its Objectives

In Brazil, the dialogue process was structured based on two workshops, which gathered the main stakeholders of the "BCA issue." For each workshop, CINDES prepared documents and materials that were previously distributed to those who could confirm their attendance. After each workshop, CINDES prepared a report synthesizing the debates and conclusive remarks and recommendations. At the end of the second workshop, the participants were asked to fill out a short feedback questionnaire to assess the dialogues' main impacts and identify possible next steps or follow-up actions. The first workshop was held in a hybrid format, while the second was in-person.

The two workshops were organized through a partnership between CINDES and CNI, who shared the coordination of tasks for the event, including identifying the stakeholders to invite and issuing invitations, among other responsibilities.

CNI provided the venues and infrastructure for the workshops, while CINDES contributed to the list of invitees and the technical content for the meeting. The first event was held in a hybrid format, with in-person and virtual participation from interested parties.

The project's first workshop took place on the afternoon of September 21, 2023, at the headquarters of CNI in Brasília, with significant participation from federal government agencies and representatives of business associations in the steel, aluminum, chemical, glass, and oil sectors, even though some of these sectors are not currently covered by the scope of the EU's CBAM.

The absence of invited representatives from the financial and workers' confederations is an indicator that CBAM has not yet received attention on their policy agendas, which is unsurprising for those following Brazil's economic and political landscape and discussions about trade policy. Labour unions generally do not get involved in the debate related to trade policy except to support businesses' demands for protection. In a similar vein, the private financial sector's interest in trade policy arises when trade matters are perceived as a source of risks or opportunities for their clients. In Brazil, concerns related to CBAM/BCAs do not seem to have reached that level yet.

The second meeting, held in São Paulo on November 23, 2023, at CNI local offices, involved only non-governmental stakeholders (business organizations and companies from industrial sectors potentially affected by BCAs, think tanks, and representatives of the academia). Its objective was to formulate proposals and recommendations so that mechanisms such as the EU CBAM consider the interests of the main actors involved and/ or those impacted by the mechanism.

### 3.0 The Expected Impacts of EU's CBAM in Brazil and the Risks of BCA Diffusion to its Jurisdictions

To Brazil, the primary concern raised by CBAM relates to its systemic impacts on the international trade regime. Its unilateral nature and the prospects of its diffusion to various national jurisdictions, each with its own models and technical standards, can bring about diversions and distortions in global trade, with adverse effects on economic growth and consumer welfare.

#### 3.1 The Relevance of the EU Market for CBAM-Affected Products

Considering the products within the scope of the EU's CBAM—the only BCA for which rules have already been disclosed—it is estimated that just over USD 3 billion of Brazilian exports in 2022 would be affected by the mechanism. The share of Brazilian exports covered by CBAM in the country's GDP is only 0.15%, indicating that as long as the mechanism is limited to the European bloc's market, its effects on the Brazilian economy will be limited.<sup>4</sup>

Exports of products included in CBAM accounted for an average of 5.8% of Brazil's total exports to the world over the past 3 years (2020–2022). The European Union accounted for approximately 10% of the total Brazilian exports of these products to the world, with the average value exported to the EU during this period equivalent to 0.6% of Brazil's total exports.

Products in the iron and steel sector account for almost all the Brazilian exports affected by the European mechanism: 92% of the value of exports of the product group, with aluminum coming in second at 3% of the total, always considering the average of the previous 3 years. Therefore, the analysis of the impacts of CBAM, in its current configuration, in Brazil should focus on this subset of products.

The EU is not a significant destination for Brazilian exports of those products, as shown in Table 1. For iron and steel products, the European bloc represents 10.7% of the total products exports in Chapter 72—cast iron, iron, and steel—by far, the most relevant in export value and 6.3% for products in Chapter 73 (works of cast iron, iron, or steel).

Cement exports are negligible in terms of value, with Brazilian trade being more intense with neighbouring countries. In the case of hydrogen, a product in Chapter 28 (inorganic chemicals products), exports are still incipient. However, there is a significant investment movement in the country, most of which is aimed at the European market and is being developed to meet the regulations imposed by the bloc. Finally, in the case of fertilizers, Brazil is a net importer of the product, which is essential for the country's large agricultural production.

<sup>&</sup>lt;sup>4</sup> All the figures relating to Brazilian exports are official data, extracted from <u>http://comexstat.mdic.gov.br/pt/home</u>

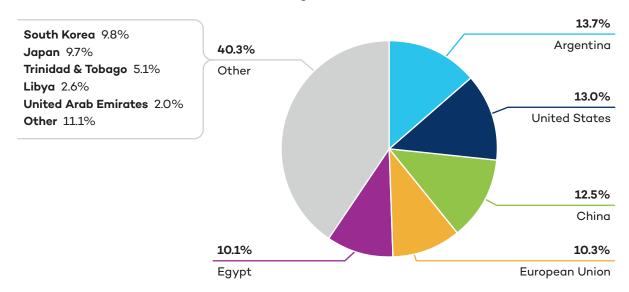
Chapter	Description	Value, free on board (USD)	EU's participation in the total exports
25	Salt, sulphur, earth and stones, plaster, lime, and cement	70,656,884.33	42.87%
26	Ores, slag, and ashes	298,486,685.67	10.34%
28	Inorganic chemical products	10,952,163.00	25.12%
31	Fertilizers	913,739.67	0.44%
72	Cast iron, iron, and steel	1.130,279,958.33	10.68%
73	Works of cast iron, iron, or steel	70,541,212.67	6.28%
76	Aluminum and its works	54,127,963.33	5.22%

Table 1. Brazilian exports of CBAM products – EU (average 2020–2022)<sup>5</sup>

Source: Comex Stat, 2023.

Figures 1 to 4 show the geographical distribution of the Brazilian exports of these products, aggregated by the Harmonized System (HS) chapters, but considering only the ones affected by the CBAM.

Figure 1. Chapter 26 products exports distribution (average participation 2020-2022)

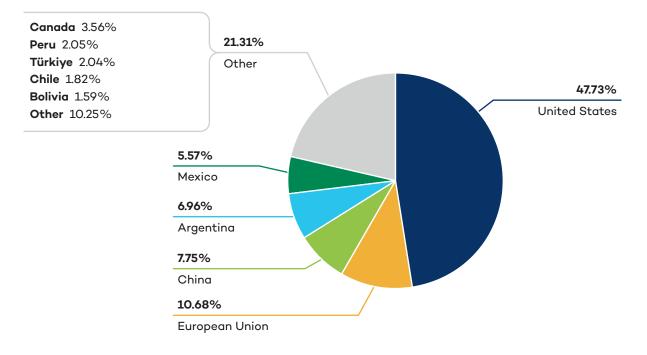


#### Ores, slags, and ashes

Source: Comex Stat, 2023.

<sup>&</sup>lt;sup>5</sup> The numbers refer to the exports of goods within the chapters that are under the scope of the EU CBAM.

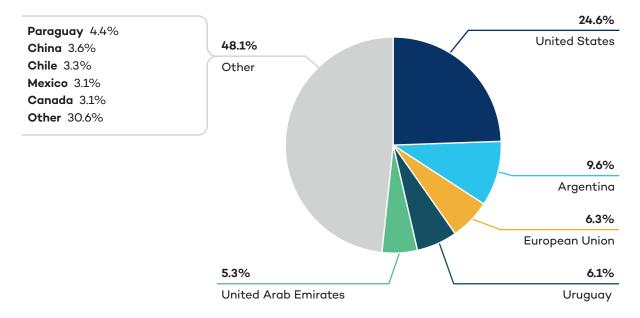
#### Figure 2. Chapter 72 products exports distribution (average participation 2020–2022)



Cast Iron, iron, and steel

Source: Comex Stat, 2023.

#### Figure 3. Chapter 73 product export distribution (average participation 2020-2022)



#### Works of cast iron, iron or steel

Source: Comex Stat, 2023.

#### Aluminum and its works 29.4% **Mexico** 3.7% Japan 22.3% Paraguay 3.3% Colombia 3.3% Other Switzerland 2.7% Uruguay 2.2% **Other** 7.1% 5.2% **European Union** 7.7% Chile 19.2% Argentina 16.1% **United States**

#### Figure 4. Chapter 76 products exports distribution (average participation 2020–2022)

Source: Comex Stat, 2023.

Although the EU is not a relevant destination for Brazilian exports of the main products affected by CBAM, if the trend of imposing BCAs spreads to other markets like the United States and Japan, the threats to Brazilian exports could become more significant. The graphs above show that the United States absorbs nearly 50% of Brazilian Chapter 72 exports and 25% of Chapter 73 exports. For aluminum, the greater risk is that Japan may impose a BCA, as the country accounts for 30% of Brazilian foreign sales of the product. Among other countries considering the adoption of BCAs, only Canada appears as one of the top 10 destinations for Brazil's steel exports, but even it has low participation (around 3% of Chapters 72 and 73 exports). The United Kingdom and Australia are not even among the relevant destinations for Brazil's exports of BCA-targeted goods.

#### 3.2 Brazil's Relevance as a Supplier to the European Market and Its Main Competitors

Except for iron agglomerates and concentrates (Chapter 26 of the HS), of which Brazil is the second-largest global exporter, Brazil is not a primary originator of global imports of the set of products under CBAM, as shown in Table 2. The main iron and steel sector suppliers are China, EU countries, Japan, South Korea, and the United States. Brazil's main competitors in aluminum are China, Europe, Canada, the United States, and India.

Table 2. The world's main exporters of CBAM-affected products in the iron, steel, andaluminum sectors

	26 – Ores, slag, and ashes	72 – Cast iron, iron, and steel	73 – Works of cast iron, iron, or steel	76 – Aluminum and its works
1st	South Africa	China	China	China
2nd	Brazil	European Union	European Union	European Union
3rd	Canada	Japan	United States	Canada
4th	Ukraine	Germany	South Korea	United States
5th	European Union	South Korea	Japan	India
		Brazil (15th)	Brazil (19th)	Brazil (24th)

Source: World Integrated Trade Solution, 2023.

As seen in Table 3, the list of Brazil's main competitors in the EU market is somewhat different from what is observed worldwide. Regarding iron and steel products, Brazil has Russia, China, Türkiye, Canada, and the United Kingdom among its main competitors. Brazil's main competitors in the European market in aluminum are Norway, China, Türkiye, and Russia, although Brazil is an insignificant supplier to the EU.

Table 3. EU's main suppliers of the CBAM-affected products in the iron, steel, and aluminum sectors

	26 – Ores, slag, and ashes	72 – Cast iron, iron, and steel	73 – Works of cast iron, iron, or steel	76 – Aluminum and its works
1st	Canada	Russia	China	Norway
2nd	Russia	Türkiye	Türkiye	China
3rd	Ukraine	India	United Kingdom	Türkiye
4th	Brazil	Ukraine	Other Asian nations	Russia
5th	Russia	South Korea	Switzerland	Iceland
		Brazil (9th)	Brazil (26th)	Brazil (41st)

Source: World Integrated Trade Solution, 2023.

The World Bank's Relative CBAM Exposure Index is designed to identify countries with high exposure to the EU CBAM using carbon emission intensity and exports of products subject to the mechanism. According to the methodology adopted by the World Bank Index, "assuming a carbon price of \$100 per metric ton, the index measures the additional cost of CBAM certificates for exporters compared to the average EU producer, adjusted for the proportion of

exports to the EU market. It recognizes cost changes in the EU market, where EU producers bear emissions costs, allowing relatively clean exporters to gain competitiveness despite the obligation to purchase certificates" (World Bank 2023).

Table 4 gathers information on Brazil's Relative CBAM Exposure Index and its main competitors in the EU market for iron and steel products. Compared to its competitors, Brazil is less vulnerable than China, Russia, and Türkiye in terms of the Relative CBAM Exposure Index, which is influenced by both GHG emission intensity and the importance of the EU market for each country's exports. Türkiye has a lower emission intensity than Brazil but is more dependent on the European bloc for its exports. Canada has a similar emission intensity to Brazil, but the European market is even less relevant there compared to Brazil. The United Kingdom has a negative relative exposure index, which means the country may benefit from CBAM, as its emission intensity for iron and steel products is lower than that observed in EU countries.

	EU's participation in the total exports of the sector (%)	Emissions intensity GHG (kg/USD)	Relative exposition to CBAM
Brazil	12.3	0.37	0.00262
EU	-	0.16	-
China	8.8	0.52	0.00313
Russia	29.3	0.61	0.01320
Türkiye	43.2	0.27	0.00457
Canada	1.5	0.38	0.00034
United Kingdom	66.4	0.13	-0.0024

Table 4. Relative exposition to the CBAM index for the iron and steel sector: Brazil andits main competitors in the EU

Source: World Bank, 2023.

Note: Data on the EU's share of Brazil's total exports are slightly different from those presented by Comex Stat, as they refer to 2019 and are taken from the World Bank's World Integrated Trade Solution database.

A similar exercise was carried out for the aluminum sector (see Table 5<sup>6</sup>). In this sector, Brazil's vulnerability vis-à-vis its competitors in the European market is relatively low due to the limited share of the bloc in Brazilian exports. However, the GHG emission intensity in Brazil's aluminum production is significantly higher than that of its main competitors. Norway, the main supplier to the EU, will not be affected by CBAM, as it is a member of the European Free Trade Association (EFTA) and therefore has an ETS linked to the EU's,

<sup>&</sup>lt;sup>6</sup> The results of the exercises presented in Tables 4 and 5 should be taken with caution since they are based on emission data from 2014. Additionally, the data source is GTAP 10, which provides emissions data aggregated by sectors, which may not exactly match the products incorporated in CBAM.

making it exempt from the mechanism's scope. China and Russia are more exposed to CBAM due to the higher share of their exports going to the EU, although they have lower emission intensity indices than Brazil. Finally, Türkiye has an emission intensity similar to that of EU countries and is, therefore, less vulnerable.

Table 5. Relative exposition to the CBAM index for the aluminum sector: Brazil and itsmain competitors in the EU

	EU's participation in the total exports of the sector (%)	Emissions intensity GEE (kg/USD)	Relative exposition to CBAM
Brazil	2.5	0.67	0.00151
EU	-	0.07	-
Norway	93.7	0.43	-
China	13.2	0.28	0.00284
Türkiye	61.6	0.08	0.00078
Russia	40.0	0.13	0.00271
United Kingdom	66.4	0.13	-0.0024

Source: World Bank, 2023.

Note: The data on the EU's share of Brazil's total exports are slightly different from those presented by Comex Stat, as they refer to 2019 and are taken from the World Bank's World Integrated Trade Solution database.

In general, the brief analysis conducted here suggests that while the European CBAM is not expected to have significant economic impacts on Brazil, its potential spread to markets in other developed countries could lead to a loss of competitiveness for some sectors of the Brazilian industry in relevant export markets (namely the United States for steel and Japan for aluminum). Therefore, it is important to assess the design of the mechanism adopted by the EU and seek to influence the different designs CBAM may take in other jurisdictions.

### 4.0 Reactions and Responses by the Main Stakeholders

The Brazilian government—and some business organizations in the country, including the CNI and five other sectoral associations—have sought to influence the design of the mechanism by responding to public consultations opened by the EU in various stages of regulation development, as well as those opened by the governments of the United Kingdom and Canada.

#### 4.1 Response by the Brazilian Government

The Brazilian government has expressed its concerns about the distortive nature of CBAM regulations within the World Trade Organization and other multilateral forums. The main arguments presented by Brazilian representatives relate to concerns that CBAM may violate the principles of non-discrimination laid out in the General Agreement on Tariffs and Trade, as the measure introduces differential treatment between nations (mainly EU member states, EFTA countries, and countries outside the bloc).

Among the points raised by the Brazilian government's statements, the following stand out:

- The mechanism, which will integrate the EU ETS, should be effectively "equivalent" to the one imposed on domestic production. The analysis of alleged equivalence should consider various aspects: scope, emissions calculation method, certificate pricing, operator transferability, certificate validity period, compliance administrative burden, verification rigour, and penalties, among others.
- All products covered by CBAM should be, in fact, equivalent to those subject to the ETS when produced in the EU.
- The emissions certification process by operators should be simple and efficient, and there should be no systematic recourse to the default value that constitutes de facto discrimination against imported goods in cases where the operator does not provide the necessary information to quantify their emissions.

There is also the argument of a possible violation of the principle of common but differentiated responsibilities in international environmental law, which determines that nations will have different roles in combating climate change depending on their individual conditions.

#### 4.2 Responses by the Business Sector

CNI has played a leading role in fostering awareness within the Brazilian business sector of the challenges and implications that could derive from the CBAM initiative for the country's exports. It has also sought to influence the design of the mechanism by responding to public consultations opened by the EU and other countries considering the adoption of BCAs.

The statements made by CNI regarding the European CBAM incorporate both general issues and various specific concerns, including some at the sectoral level. There is some overlap between the issues raised by the government and those presented by CNI, although the latter has significantly advanced in the detail of its concerns.

## Box 1. CNI's submission to the European Commission on July 11, 2023: Brief summary

**Comparability of the Calculation of Embodied Emissions for CBAM-Covered Products and Similar EU Products:** To improve consistency and comparability of data between CBAM-covered products and similar EU products concerning direct and indirect embodied emissions, it is important to clarify the similarities and differences between the monitoring reporting, and verification (MRV) methodologies under the EU ETS and CBAM.

**Comparability of Administrative Burdens and Compliance Costs between CBAM-Covered Products and Similar EU Products:** To ensure transparency and comparability between imported products covered by CBAM and similar EU products, it is necessary to clarify the similarities and differences in administrative burdens and compliance costs for imported products subject to CBAM and EU products subject to ETS.

**Comparability of Carbon Costs Incurred under CBAM and EU ETS:** To ensure transparency and comparability between costs incurred under CBAM and those already incurred in the EU for the production and sale of products under EU ETS, the EU should disclose compensation provided for indirect costs for products listed in Annex I of the CBAM Regulation, preferably at the 8-digit HS code level.

**Role of International Standards:** The implementation regulation should recognize the importance of internationally recognized and widely used frameworks for measuring and managing GHG emissions, such as the GHG Protocol, ISO standards, and national MRV systems. The EU should accept as equivalent all relevant international standards for calculating embodied emissions, even if these methodologies differ from those prescribed in Article 4 of the draft implementation regulation.

**Role of National Accreditation Bodies in Third Countries:** It is important that the EU accept entities accredited by other countries and clarify procedures for cooperation with national accreditation bodies in third countries for verifying embodied emissions. This option can eliminate unnecessary and duplicate costs, time, and resources.

**Use of Default Values:** The EU should clarify when default values will be made available for each tariff code and country and whether they can be reported in the CBAM report in accordance with the structure of Annex I of the draft implementation regulation.

**Indirect Emissions:** During the transition period, the calculation of indirect emissions should be open to different methodologies to ensure equivalent coverage and the accuracy of data on emissions in third countries.

**Carbon Capture:** The restrictions required by CBAM in point B.8.2 of Annex III of the draft implementation regulation may hinder the accounting of CO<sub>2</sub> removals using carbon capture, storage, and utilization technologies in hard-to-abate industries considering long-term implementation of these technologies.

**Requirements for Laboratory Analyses:** The CBAM Regulation does not allow results of in-house chemical analyses to be used to determine emissions quantification parameters, such as carbon content. The regulation requires independence, recommends ISO 17025 accreditation for all parameters, and defines a high-frequency sampling plan in accordance with point B.5.4 (Requirements for Laboratory Analyses) of Annex III of the draft implementation regulation. These requirements are extremely restrictive compared to the current MRV methodologies practiced by the Brazilian industry.

Source: CNI, 2023.

The statements provided by the other sectoral business organizations (representing the steel, aluminum, glass, and energy sectors) are in line, although less comprehensive and detailed, with those presented by CNI.

In addition to providing input during two phases of public consultations on the European CBAM, CNI contributed positions to public consultations regarding the potential adoption of BCAs by the governments of Canada and the United Kingdom. In these cases, the industry representation's stance was more generic, focusing on issues related to principles that should be adhered to by such mechanisms.

#### Box 2. CNI recommendations for the design of new BCAs

CNI believes that the adoption of any mechanism by countries to prevent carbon leakage should take into account the following principles. They should

- be preceded by transparent and open debates throughout all stages of development so that all stakeholders, including affected trading partners, can comment and express their views, including about the implementation and operation of the measure;
- be discussed in international organizations such as the World Trade Organization (WTO) and Organisation for Economic Co-operation and Development as an effort to avoid unilateral implementation and promote a collective solution; be informed by exhaustive technical analysis assessing the impacts of certain measures not only on the environment but also on potential economic outcomes; and be compatible with WTO rules and the Paris Agreement;
- respect the principles agreed upon in the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC), including the principles of equity (Article 2.2 of the UNFCCC) and common but differentiated responsibilities (Article 3.1 of the UNFCCC);
- not constitute means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade, in accordance with Article 3.5 of the UNFCCC;

- not aim to protect domestic companies over foreign companies;
- not restrict imports or discriminate against goods based on processes and production methods;
- · consider the natural resources and energy mix of foreign countries;
- consider the possibility of providing specific administrative and capacitybuilding support to governments, civil society organizations, and producers in third countries;
- ensure that the emission-reduction efforts and policies of other countries and foreign companies are taken into account when establishing any mechanism, even if these efforts are not related to carbon pricing; and
- avoid the risk of trade diversion of certain carbon-intensive products to third countries.

Besides the Brazilian government and industry business associations, there were only a few pieces of feedback provided by individual academics, which were very much in line with the profile of the statements presented in response to the EU's public consultations on CBAM aspects.

# 5.0 The Dialogues in Brazil: Stakeholders' main concerns and stances

As mentioned in Section 2.3, the dialogues in Brazil were organized in two workshops. Five government representatives from different policy-making areas and stakeholders from the business sector and civil society organizations participated in the first one. Government authorities were invited to present their views and the official stances of Brazil related to the BCA issue. The second workshop was held in São Paulo, with the aim of deepening the discussion among non-government stakeholders on the specificities of BCAs. Government authorities did not participate in this event.

#### 5.1 The First Dialogue: Main statements from stakeholders

While maintaining a certain level of generality, government representatives shared some criticisms of the European CBAM discriminatory aspects, such as the short transition and adaptation period granted to exporting countries and the choice not to consider scope 2 emissions in the steel sector. This consideration would benefit the Brazilian industry, which relies heavily on renewable energy sources. There were also broader criticisms of the methodology adopted by the European Commission for calculating GHG emissions.

Concerns were also raised about the risk that the phasing out of free emission allowances—as CBAM is gradually introduced while public support for energy consumption by European industry continues—could lead to subsidies for domestic producers in the EU. It was also argued that the mechanism does not feature compensations for the non-carbon-price-based "climate efforts" made by exporting countries.

Despite these points of concern and criticism toward the CBAM, during the workshop, government representatives emphasized the acknowledgement that this mechanism is part of an international trade trend that is here to stay and will evolve through expanding its coverage and adopting other mechanisms that link trade to the environmental and climate agenda. This perception led government representatives to three general considerations (not exclusively related to the introduction of CBAM):

- The first relates to the systemic risks stemming from unilateral initiatives like CBAM: risks for global trade, multilateral rules, and Brazilian interests, such as fragmentation and distortion of the "map" of comparative advantages due to these initiatives.
- The second concern relates to the need to bring the discussion of these topics to forums, such as the bi-regional negotiations with the EU and the upcoming G20 meeting in Rio de Janeiro in 2024, to reach negotiated and "constructive" solutions.
- The third consideration relates to the fact that BCAs present a new and enduring challenge to the traditional stance of Brazilian trade diplomacy, which has been to reject the association between the two agendas (i.e., trade and environment), often perceived as a protectionist strategy by developed countries. In this sense, Brazil must move beyond a purely defensive stance in the trade and climate agenda and,

more generally, in discussions about the green transition. This entails seizing external opportunities associated with the positive outcomes of the new government's climate policy and Brazil's comparative advantages in renewable energy sectors, among others.

At the project's first workshop, the CNI representatives emphasized the need for Brazilian companies to prepare and adapt so they can face an international scenario in which decarbonization issues will impact the trade agenda in the coming years. CNI agrees with the government condemning the instrument but considers that the Brazilian authorities should contribute to alerting companies that this is an irreversible trend and that they need to adapt.

In this regard, their representatives pointed out that Brazil is not doing its "homework" in carbon pricing policy: the ETS has yet to be implemented, and the country lacks a data monitoring system for emissions. On the domestic front, CNI will develop a manual with detailed information about the CBAM mechanism to distribute to companies.

Furthermore, according to CNI's perspective, it would be necessary to consider that it is still possible to influence the design of the European CBAM, as several issues related to implementing the mechanism have not yet been defined. The country would need to discuss proposals to reduce the adaptation costs so that its companies can comply with the mechanism.

Among other business representatives, the only notable intervention at the first workshop was a question addressed to the government about Brazil's potential adoption of a CBAM. The question was raised by a representative from the steel industry, but according to information obtained from the CNI, the chemical sector also supports Brazil's adoption of CBAM.

Finally, among the representatives of civil society organizations and academia in the first dialogue, the only intervention—made by a think tank representative focused on the climate agenda—was to advocate that mechanisms like CBAM strengthen their climate ambition, including scope 3 emissions. This proposal goes against those presented by the government and business sectors, which is not surprising given the priorities of the specific think tank.

## 5.2 The Second Dialogue: Key design elements of BCAs, principles and best practices, and implementation issues

One objective of the second workshop was to discuss the foreseeable impacts of BCA and likely adaptative measures to be adopted by companies in emission-intensive sectors in Brazil as a response to the mechanism.

As for the expected impacts, the main concerns mentioned by participants were the diversion of exports to markets that do not impose BCAs and the loss of competitiveness due to increased costs as a result of the CBAM charge and compliance-related costs. Representatives of the chemical sector pointed out the likelihood of gaining competitiveness, as production in Brazil has lower emissions than its competitors in the world market.

As for the adjustments required to adapt to the new regulation, the emphasis was on engaging with the Brazilian government for negotiations with countries that adopt BCAs, implementing measures to enable emission MRV practices in line with the requirements of importing

countries, and sectoral coordination to influence the definition of standards in international organizations. Surprisingly, the option related to investments in clean technologies was only marginally referred to.

These issues were explicitly addressed by the second workshop through three questions presented to the participants:

- Which critical elements in the design of BCAs are the most relevant for exporters in your sector?
- Which principles and best practices would you like to see incorporated in the BCAs?
- How should BCAs be implemented?

The participants identified the scope of emissions and the method for calculating the incorporated emissions as the main critical elements in the design of BCAs. A second block of options was well behind the first two but also received the attention of the participants: the administrative costs due to the need to comply with the BCAs and the destination of the revenues collected by BCAs.

Beyond the ranking of the main critical elements in the design of BCAs, the discussions on this issue, as well as on principles and best practices, focused on the following themes:

- Emissions scope: One of the participants' main concerns regarding the design of BCAs is the scope of emissions covered by the mechanism. Brazil has one of the cleanest electricity matrices in the world. If only direct emissions are considered, as happens with the EU CBAM, then the energy-intensive sectors lose one of their main comparative advantages. This is the case in the iron, steel, and aluminum sectors in Brazil. Even though these sectors are the most affected by the absence of scopes 2 and 3 in the EU CBAM, there was a consensus that the three scopes should be incorporated into the BCA design if the purpose of the implementing jurisdiction is to reduce GHG emissions.
- Calculation of embedded emissions: According to participants, the calculation methodology should be science-based. BCAs should seek standardization and interoperability among different methodologies and certification schemes. No technology, including carbon capture, utilization, and storage, should be excluded. Implementing jurisdictions should seek to coordinate or harmonize their BCA requirements, taking into account several existing initiatives in carbon clubs, as well as other international sectoral forums. It is essential to avoid fragmentation.
- Coverage of trade flows: The question of whether the BCA's design should foresee granting some sort of rebate of the carbon price paid by domestic producers at the point of export was very controversial. Although this could make sense from the point of view of export competitiveness, it would make the BCA an unequivocal trade measure with the risk of being incompatible with the WTO. This would transform BCA into an anti-environmental measure, promoting exports and fostering the triangulation of carbon. As the EU's products are more carbon-intensive than many of its competitors from other countries, granting rebates for exports would mean an incentive to European producers to seek other markets that do not impose BCAs

without having to pay the carbon price. This would represent a carbon leakage. EU's products could end by competing with domestic products in some jurisdictions that adopt carbon pricing but not a BCA.

- Geographic scope and exemptions: This issue was considered very controversial. Developing countries would be disproportionally affected by BCAs. The absence of special treatment for developing and least developed countries would violate the "common but differentiated responsibilities" principle. While recognizing that the imposition of BCAs' costs on developing countries' exports is unfair, participants shared their concerns that an exemption would represent a violation of WTO rules and a risk of carbon leakage. The participants' recommendation to deal with this issue is that developed countries implementing BCAs use the collected revenues to finance technological adaptation in developing countries.
- **Credit for domestic policies:** Although participants agreed that it would be fair that BCAs' design guarantees credit for the non-carbon-price-based costs that exporters already face in complying with domestic climate change policies, they also acknowledged how difficult it would be to implement this kind of provision. Furthermore, this mechanism would benefit developed countries, which tend to have more stringent regulations regarding climate change.
- Role of the WTO and multilateral organizations: Participants suggested that WTO members agree to commit to notifying all domestic policies involving subsidies to the decarbonization process. Multilateral organizations should seek to develop methodologies to quantify the costs incurred by companies to comply with domestic regulations related to decarbonization.
- Use of collected revenues: Participants' main concern regarding the collection of revenues is related to the destination of these resources. If revenues are used to finance technology adaptation in domestic industries in countries applying BCAs, it will increase the competitiveness gap vis-à-vis exporting companies from other jurisdictions. As mentioned, the main recommendation is that developed countries that implement BCAs use the collected revenues to finance technological adaptation in countries negatively affected by BCAs.
- Administrative costs: Compliance with CBAM regulations implies administrative costs that increase importation prices, jeopardizing the competitive position of exporting countries. Implementing jurisdictions should seek to streamline administrative procedures to avoid unnecessary bureaucratic costs. They should guarantee that the bureaucratic burden involved in BCAs is comparable with those demanded by national ETS regulations.

As for the implementation of BCAs, the main recommendation is that it should be preceded by public consultations and transparent debates at all stages. Trade partners affected by the mechanism should have the opportunity to present their concerns and points of view regarding the new regulations.

BCA design should be discussed in multilateral forums, such as the WTO and Organisation for Economic Co-operation and Development, to avoid unilateralism and fragmentation. These discussions should be informed by deep technical analysis to assess the impacts of new

regulations on the environment, as well as on the economy of affected parties. BCAs should not constitute any means of arbitrary discrimination or any disguised barrier to trade.

During the transition period, no penalties should be applicable to soften the adjustment costs in the production chains affected by BCAs.

Finally, implementing jurisdictions should offer capacity building to developing countries' government authorities, companies, and civil society organizations to cope with new regulations.

# 6.0 The Financial Sector Role: A work in process...

Although invited, financial sector representatives did not participate in the workshops. BCAs do not seem to have entered the radar of the Brazilian banks, even in the case of Banco Nacional de Desenvolvimento Econômico e Social (BNDES), the main federal development balk, according to its representative at the first workshop.

The BNDES representative noted that while the bank considers environmental aspects in financing companies, it does not have an explicitly defined climate policy. The ongoing development of a sustainability taxonomy within the federal government could lead the bank to adopt criteria and metrics (including emissions calculations) that solidify its climate policy.

The role of the financial sector in supporting decarbonization was an issue proposed for debate in the second workshop. Yet the question did not generate much discussion, and the only recommendation presented was very generic, referring to BNDES setting new financial instruments to support lowering emissions in the production processes.

In an effort to fill the information gap as far as the role of the financial sector is concerned, CINDES has interviewed a former minister of finance and former president of BNDES, Joaquim Levy.<sup>7</sup> The main extracts of this interview are presented in Box 3.

#### Box 3. Interview with Joaquim Levy: Summary notes

The first challenge Brazilian companies must face is appropriately calculating carbon emissions. The financial sector in Brazil is already seeking to contribute to this end, commissioning technical studies to help their clients improve their environmental, social, and governance initiatives and comply with emission MRV practices.

Brazil recently passed new federal legislation that adopts sustainability reporting rules, following International Financial Reporting Standards S1 and S2 (International Financial Reporting Standards, 2023). Comissão de Valores Mobiliários (Brazil's equivalent to the U.S. Securities and Exchange Commission) issued Resolution 193, making it compulsory for public companies to follow these standards. They are starting with voluntary disclosure of sustainable aspects by companies, with greater transparency, standardization, and comparability. Levy believes this will help Brazilian companies be better prepared to comply with emission MRV practices.

<sup>&</sup>lt;sup>7</sup> Joaquim Levy is currently the Director of Economic Strategy and Relations with the Market at Banco Safra. He is a former minister of finance and president of BNDES (National Development Bank). He is a columnist at *Valor Econômico*, Brazil's most prestigious daily economic journal. His articles are often dedicated to climate change, carbon markets, and environmental issues.

Any technological adaptations will demand investment. The main question is whether companies will invest in clean technology without subsidies from the Brazilian government. The huge subsidies incorporated into green industrial policies in the United States and the EU created an unlevel playing field for Brazilian companies. Brazil has severe constraints in government spending capacity, and although it is possible that BNDES will provide some low-cost credit, resources will be limited.

The financial sector will finance the decarbonization transition through capital markets. But it is not clear which will be the most likely technological route to decarbonization in the iron-steel and aluminum sectors—the most impacted by BCAs in Brazil. While the scenario remains unclear, the main actions are related to improving the accountability of environmental, social, and governance initiatives. At the end of the day, financing the decarbonization of production chains in Brazil will depend on the assessment of their competitiveness and regulations in international markets.

The impacts of BCAs on the Brazilian steel sector are a matter of concern. This sector is already facing the challenges of the existing overcapacity in the world market. Overcapacity is stimulating the adoption of trade barriers, particularly the increase of import tariff rates in the United States. The steel sector in Brazil is complaining about the diversion of Chinese steel from other countries to the Brazilian market. BCA is an additional risk factor for this sector in Brazil.

## 7.0 BCAs as a Public Issue in Brazil: A limited debate

As the process of BCA dialogues in Brazil has shown, BCAs and their implications for Brazil's exports could hardly be referred to as a "hot topic" in the trade and foreign policy debate. This situation is owed to two different factors, one related to general features of the Brazilian tradition in trade and foreign policy, and one associated with the specific characteristics of the BCA as a trade-related mechanism.

The first factor is made explicit in the reactions of federal government policy-makers, some of whom participated in the project's first workshop. These reactions were essentially defensive, pointing to the supposedly illegal or unfair characteristics of BCAs. While government representatives repeatedly recognized that the mechanism is irreversible and signals a change in the era of trade policy, the federal government representatives' defensive stance does not help to progress toward a pragmatic perspective of preparing and adapting companies to an unavoidable reality, as has been recommended by the CNI representatives. This broad factor is also evidenced by the fact that the trade policy agenda in Brazil sees very limited debate in civil society organizations beyond business sector associations.

The trade agenda, in general, and specifically regarding the BCA theme, seems to be distant from the concerns of actors like the private financial sector and labour unions. Industrial workers' unions only engage through their leadership when supporting business demands for protection.

In the case of civil society organizations, very few think tanks include trade in their agenda. Among think tanks and non-governmental organizations focused on the climate and environmental agenda, there is a prevailing anti-trade bias (in the name of environmental protection), and there are few—if any—resources allocated to the trade, environment, and climate agenda. In academia, the topic mobilizes a few trade and international law experts, but it does not generate significant interest.

This configuration of positions predates the discussion of the CBAM in Brazil and is reflected in any trade-related debate. The government and the industrial sector usually take a defensive stance, while other sectors and organizations show limited interest. Discussions on the negotiations of the Free Trade Area of the Americas at the beginning of the century and the Mercosur–EU agreement were exceptions, as they were able to mobilize non-governmental organizations more widely and, to a lesser extent, labour unions.

A second factor explaining the lack of interest of many different stakeholders in the "BCA debate" is that the mechanism—at least the EU's, the only one in force currently—is likely to have highly concentrated impacts in just one sector and limited effects on overall exports. In addition, debating BCA is quite complex, requiring a considerable degree of "technical" content.

In such a context, the BCA dialogues in Brazil were able to gather different stakeholders, including some who were still far from the debate, and offer technical information on the mechanism that is useful in helping the different stakeholders identify the specific challenges that BCAs pose to their organizations.

Concerning possible next steps, the participants in the second workshop pointed out the need to conduct studies to quantify the costs for Brazilian exporters of adopting the BCAs. It was also suggested that efforts should be made to establish contact with organizations from other developing countries to create joint initiatives to face the challenges introduced by this mechanism.

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