

# 21-23 Can EU Carbon Border Adjustment Measures Propel WTO Climate Talks?

Gary Clyde Hufbauer, Jisun Kim, and Jeffrey J. Schott

November 2021

## INTRODUCTION

Acting forcefully to address the issue of climate change, the European Commission announced at the end of 2019 the European Green Deal with the goal of achieving carbon neutrality by 2050. Soon after, the Commission accelerated its interim goal of reducing greenhouse gas emissions (GHG) by 2030 from a 40 percent reduction to a 55 percent reduction compared with 1990 levels. To meet this ambitious commitment, the European Union's "Fit for 55" climate policy package has proposed, among other things, major reforms in the European Emissions Trading System (ETS), which are likely to sharply increase the cost paid by European firms for their GHG emissions. Recognizing that increased carbon prices would put European firms at a disadvantage in competing with imports from countries that produce without incurring these costs, the Commission tabled plans on July 14, 2021 to introduce a [Carbon Border Adjustment Mechanism](#) (CBAM) requiring that the most carbon-intensive EU imports either incur comparable carbon charges as EU firms or pay the equivalent of a carbon-based tariff.<sup>1</sup>

The CBAM aims to deter carbon leakage, which could arise if firms shift carbon-intensive production out of Europe to facilities in countries that do not tax GHG emissions (or tax at a low rate) and then export the goods to Europe. European production and output would suffer and global climate efforts to reduce GHG emissions would be undercut. The loftier goal is to encourage other countries to follow the European example and strengthen their own national decarbonization policies, which in turn would exempt their goods from CBAM charges.

**Gary Clyde Hufbauer**, nonresident senior fellow at the Peterson Institute for International Economics, was the Institute's Reginald Jones Senior Fellow from 1992 to January 2018.

**Jisun Kim** is senior principal researcher at the POSCO Research Institute. She was research analyst at the Peterson Institute for International Economics from 2006 to 2010.

**Jeffrey J. Schott** is senior fellow at the Peterson Institute for International Economics.

---

<sup>1</sup> See Proposal for Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism.

European officials hope that imposing the CBAM on imports will help sustain political support for stricter climate policies within Europe by firms that face sharply higher carbon costs. The European Union's stringent emission policies already have pushed the [price of ETS certificates](#) to around €60 per metric ton. (Appendix A summarizes the mechanics of CBAM implementation.) Initially, the EU CBAM will have a limited short-term impact on trade that will differ somewhat across sectors and countries. Over time, however, the CBAM is likely to impose a heavy burden on trading partners as its coverage expands to a broader range of goods and services, and the price of CBAM certificates escalates in response to the combined impact of growing demand, cutbacks in the supply of certificates, and gradual elimination of free allowances of certificates to domestic firms.

Countries most affected by the CBAM include Russia, China, Turkey, the United Kingdom, Ukraine, South Korea, and India. Some are likely to contest the policy, claiming that the CBAM is a unilateral measure that violates World Trade Organization (WTO) rules and bolsters protectionism while hampering rather than encouraging efforts in other countries to tackle climate change. One concern is that the CBAM will simply encourage foreign firms to export from their "cleanest" plants to the European Union while selling "dirty" products to their own domestic users or third countries. Another concern is that the CBAM gives credit for market-based carbon prices paid in foreign countries but not for comparable carbon abatement costs imposed via regulatory measures. WTO litigation could take years to play out; meanwhile new carbon-inspired border restrictions will spread, exacerbating global trade frictions.

The International Monetary Fund (IMF) has recommended a global carbon price floor as an alternative to unilateral CBAMs. WTO Director-General Ngozi Okonjo-Iweala has [floated](#) a similar proposal. Given both the resistance to imposing carbon taxes in the United States and other countries and the extreme spread of carbon taxes among countries that have imposed such fees (ranging from under \$4 per metric ton to over \$60 per metric ton), this and similar proposals, while desirable, are not politically realistic in the near term. A better and more feasible approach would be adoption of a CBAM moratorium while negotiations are conducted to promote carbon abatement policies that comply with the rules-based global trading system.

## OVERVIEW OF THE EUROPEAN UNION'S ETS AND CBAM SYSTEMS

For several decades, the European Union has taken the lead in addressing climate change. In 2020, it raised its 2030 goal for GHG emissions reduction from 40 to 55 percent, relative to 1990 levels, and set a goal for carbon neutrality by 2050. To deliver these commitments, the Commission released ambitious policies, with emphasis on the EU ETS.

The EU ETS has been a cornerstone of EU climate policies since it was introduced in 2005. It is currently in Phase IV (2021–30), with participation by the EU-27 plus Iceland, Liechtenstein, and Norway. It covers about 40 percent of the European Union's GHG emissions.

Although each successive phase has tightened the EU ETS, its effectiveness has been questioned, because of generous offsets provided to domestic firms such as free allocation of allowances to major sectors and compensation for higher electricity costs. In response, the Commission has sought to strengthen

**The CBAM aims to deter carbon leakage, which could arise if firms shift carbon-intensive production out of Europe to facilities in countries that do not tax GHG emissions (or tax at a low rate) and then export the goods to Europe.**

the ETS and reduce free allowances. Phase IV changes in the ETS raise fresh concerns about carbon leakage because of escalating ETS prices, leading the Commission to seek the CBAM as an answer to protect domestic industries.

The European Commission reportedly considered several options before settling on the CBAM. They included a carbon tax on selected products (both imports and domestic goods), a new carbon customs duty on imports, and extension of the EU ETS to imports.<sup>2</sup> After careful review, it proposed the CBAM, which requires authorized importers to declare and surrender CBAM certificates corresponding to the emissions embedded in imported goods once a year. Table 1 summarizes the main features of the proposal.

Although the proposal indicates that the ultimate objective is broad product coverage, the CBAM initially applies to imported goods in only five sectors that were judged to face significant risks of carbon leakage: cement, electricity, fertilizers, iron and steel, and aluminum, all listed in Annex I of the proposal. Natural gas and oil were not included in the initial list, although both are responsible for significant emissions. Their absence probably reflects the fact that the European Union does not produce much fossil fuel and that applying an ETS to these imports risked unleashing a backlash from consumers similar to the “yellow vest” movement in France. Agricultural products and livestock were also excluded from the initial list, although they, too, are responsible for large volumes of carbon and methane emissions. Their exclusion probably reflects concerns about the intense political reaction from trading partners (such as the United States and Brazil) as well as the European Union’s own vulnerability as an exporter of food and meat.

Importers of covered goods must submit a CBAM declaration and surrender CBAM certificates by May 31 of each year to cover the embedded emissions in goods imported during the preceding year. The number of CBAM certificates would be reduced to offset the carbon price paid in the country of origin and free allowances granted to like products under the EU ETS. The proposal states that a third country or territory covered by the EU ETS, or its own ETS that is fully linked to the EU ETS by a bilateral agreement, can be exempted from CBAM obligations.<sup>3</sup> This provision allows little room for diplomatic negotiation. Alternative carbon emission controls, such as through regulatory measures, are not credited against CBAM obligations.

Although the proposed CBAM is established separately from the EU ETS, it is closely linked to it, to preserve CBAM effectiveness in deterring carbon leakage. The CBAM would be an alternative to carbon leakage measures such as the free allowances currently granted under the EU ETS, which are designed to preserve the competitiveness of EU firms. Alongside phasing in the CBAM, the Commission proposed phasing out free allowances under the EU ETS, linearly to zero over a 10-year period from 2026 through 2035.

**The CBAM would be an alternative to carbon leakage measures such as the free allowances currently granted under the EU ETS....**

2 See [the inception impact assessment](#) by the European Commission released in July 2020.

3 The leaked version of the proposal included another condition for exemption: a “country or territory which applies a domestic GHG emission trading system which the Commission has determined to be compatible and equivalent to and as effective as the EU ETS.”

Table 1  
**Key features of the EU Carbon Border Adjustment Mechanism (CBAM)**

Feature	Description	
Entry into force	January 1, 2023 (transition period for 3 years)	
Covered goods	Imported goods in sectors including iron and steel, aluminum, fertilizers, electricity, and cement (based on combined nomenclature ('CN') codes listed in Annex I of the proposal)	
Declaration	Who	Importer authorized by competent authority designated by each member state
	What	<ul style="list-style-type: none"> <li>Total quantity of each type of goods imported during the calendar year preceding the declaration</li> <li>Total embedded emissions expressed in tons of CO<sub>2</sub>e emissions per megawatt-hour of electricity or per ton of each type of goods (to be verified by accredited verifier)</li> <li>Total number of CBAM certificates corresponding to the total embedded emissions to be surrendered</li> </ul>
	When	By May 31 of each year
Embedded emissions	Direct emissions released during the production of goods (Goods other than electricity determined based on actual emissions in accordance with the methods set out in Annex III. If data is not available, default value to be used; for electricity, default values to be used as a standard approach. Further detailed rules to be determined by the implementing act)	
Certificate	Definition	A certificate in electronic format corresponding to one ton of embedded emissions in goods
	Sales	Competent authority to sell certificates to authorized declarants
	Price	Average closing prices of EU ETS allowances calculated on a weekly basis
	Surrender	Submit to the competent authority the number of certificates that corresponds to the embedded emissions declared
	Reduction	<ul style="list-style-type: none"> <li>Carbon price paid in the country of origin reduces the number of CBAM certificates to be surrendered</li> <li>Also, a reduction for EU ETS allowances allocated free of charge to like domestic product</li> </ul>
Penalty	€100 per each certificate not surrendered	
Exclusion	Third countries or territories fully integrated into or linked to the EU ETS through future agreements	
Transitional period (January 2023 to December 2025)	Submit a report each quarter containing information on total quantity of each type of good, actual total embedded emissions (direct and indirect), carbon price for the embedded emissions in the imported goods incurred in country of origin	

Source: Authors' summary of the [Proposal for Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism](#).

The proposed CBAM would enter into force January 1, 2023, with a three-year transition period until December 2025. During the transition period, importers would be required to submit detailed information about the carbon content of their goods and any carbon price paid in a country of origin for embedded emissions in imports. Starting in January 2026, importers would be required to surrender CBAM certificates.

The 291-page proposal, including 44 pages of legal text, spells out key features of the CBAM. But many aspects remain unclear and will be determined by future decisions by the EU Council and the European Parliament in the course of approving and ratifying the CBAM policy. This process could delay the projected start date of the CBAM.

### WHO WILL BE HARD HIT?

The initial list of covered goods is narrow, focused on carbon-intensive industries. According to EU-27 import data for all CBAM products in 2020, Russia is the largest provider, followed by China, Turkey, the United Kingdom, Ukraine, and South Korea (table 2). Of the five sectors covered by the CBAM, iron and steel will be the most affected, accounting for almost two-thirds of EU imports of CBAM products (table 3).<sup>4</sup>

The five sectors to be covered by the CBAM are also the main carbon leakage industries under the EU ETS (along with airlines) that are granted free allowances;<sup>5</sup> the proposed CBAM would take free allowances into account. As a result, the impact of the CBAM would be limited in the short run: EU imports of CBAM products from 10 major countries accounted for only about 3 percent of total EU goods imports from those countries (table 2). Imports of CBAM goods from the United States account for only 0.6 percent of total EU imports from the United States.

In the long run, however, the CBAM would impose a heavy burden on trading partners. When free allowances are phased out and tighter emissions caps are imposed under the EU ETS, the price of CBAM certificates (which is linked to the ETS) should rise sharply.<sup>6</sup> In addition, covered goods under the CBAM are likely to expand to EU imports of manufactures and transportation services, and indirect emissions from the use of electricity will probably be included in the calculations. Moreover, technical and administrative burdens resulting from measuring, reporting, and verifying embedded emissions will be significant.

**Of the five sectors covered by the CBAM, iron and steel will be the most affected, accounting for almost two-thirds of EU imports of CBAM products....**

4 Estimated based on the value of EU imports of all CBAM products from the 10 largest sources of each product.

5 The Commission reports [the list of carbon-leakage sectors](#) entitled to 100 percent of free allowances under the EU ETS Phase IV. As Robert Lawrence has noted, the marginal incentive impact of the ETS system is not affected by free allowances if those allowances can be sold by the receiving firm to other firms. In that event, the receiving firm can pocket the value of the free allowances by reducing its own carbon emissions.

6 The price of EUA (European Union Allowance) futures for March 2022 was €57.50 on August 10, 2021. ICIS estimates that carbon prices on the EU ETS will hit €90 a ton by 2030 (Frédéric Simon, "Analyst: EU Carbon Price on Track to Reach €90 by 2030," *Euractiv*, July 19, 2021).

Table 2  
**Top 10 sources of EU imports of CBAM goods, by source country, 2020**

Source	Total EU goods imports (millions of dollars)	CBAM goods	
		Total EU imports of CBAM goods (millions of dollars)	Percent of total EU goods imports
Russia	116,558	8,576	7.4
China	471,218	5,635	1.2
Turkey	76,619	5,401	7.0
United Kingdom	205,541	5,401	2.6
Ukraine	20,178	3,183	15.8
South Korea	54,115	2,931	5.4
India	40,521	2,780	6.9
Serbia	13,160	1,434	10.9
United States	248,976	1,394	0.6
United Arab Emirates	10,610	1,082	10.2
<b>Total</b>	<b>1,257,496</b>	<b>37,817</b>	<b>3.0</b>

Note: Exchange rate applied is as of December 31, 2020 (€1=\$1.2271).

Source: Data from Eurostat database (accessed September 9, 2021) and the list of goods in Annex I of the proposal.

The CBAM provoked immediate responses from major trading partners. Dmitry Peskov, a spokesperson for Russian President Vladimir Putin, said that the prospect of the CBAM is extremely unpleasant.<sup>7</sup> Liu Youbin, a spokesperson for the Chinese Ministry of Ecology and Environment, criticized the CBAM as a unilateral measure to bring climate change issues into the trade realm and asserted that it would violate WTO principles.<sup>8</sup> Australian Minister for Energy and Emissions Reduction Angus Taylor claimed that the European Union is forcing its internal standards and domestic carbon tax on the rest of the world, discriminating against countries like Australia.<sup>9</sup>

7 Leslie Hook, Max Seddon, and Nastassia Astrasheuskaya, "EU Plan for World's First Carbon Border Tax Provokes Trading Partners," *Financial Times*, July 17, 2021.

8 Reuters, "China Says EU's Planned Carbon Border Tax Violates Trade Principles" July 26, 2021.

9 Angus Taylor "Keeping Our Export Markets Free, Open and Tax Free," August 4, 2021.

Table 3  
**Top 10 sources of EU imports of CBAM goods, by product type, 2020 (millions of dollars)**

Source	EU imports of iron and steel		EU imports of aluminum		EU imports of fertilizers		EU imports of electricity		EU imports of cement	
	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source
Russia	4,863	Russia	2,161	Russia	1,311	Serbia	507	Turkey	189	
China	4,117	China	1,432	Morocco	542	Bosnia and Herzegovina	258	Ukraine	39	
Turkey	3,889	Turkey	1,169	Egypt	492	Russia	241	Belarus	34	
United Kingdom	3,821	United Kingdom	1,124	Algeria	350	Ukraine	236	Bosnia and Herzegovina	19	
South Korea	2,714	Mozambique	984	United Kingdom	240	United Kingdom	204	Morocco	12	
Ukraine	2,704	United Arab Emirates	968	Belarus	238	North Macedonia	134	Saudi Arabia	12	
India	2,501	Bahrain	552	Trinidad & Tobago	183	Belarus	106	United Kingdom	12	
Taiwan	1,030	Egypt	396	Ukraine	180	Albania	62	Tunisia	11	
United States	983	United States	364	Chile	170	Turkey	55	Colombia	10	
Serbia	678	South Africa	351	Israel	127	Montenegro	31	Egypt	10	
<b>Subtotal</b>	<b>27,300</b>	<b>Subtotal</b>	<b>9,501</b>	<b>Subtotal</b>	<b>3,833</b>	<b>Subtotal</b>	<b>1,834</b>	<b>Subtotal</b>	<b>348</b>	
<b>Total extra-EU-27</b>	<b>34,490</b>	<b>Total extra-EU-27</b>	<b>18,105</b>	<b>Total extra-EU-27</b>	<b>4,624</b>	<b>Total extra-EU-27</b>	<b>3,055</b>	<b>Total extra-EU-27</b>	<b>434</b>	
<b>Total intra-EU-27</b>	<b>116,101</b>	<b>Total intra-EU-27</b>	<b>27,370</b>	<b>Total intra-EU-27</b>	<b>3,125</b>	<b>Total intra-EU-27</b>	<b>13,191</b>	<b>Total intra-EU-27</b>	<b>1,781</b>	

CBAM = Carbon Border Adjustment Mechanism

Note: Exchange rate applied is as of December 31, 2020 (€1= \$1.2271).

Source: Data from Eurostat database (accessed September 9, 2021) and the list of goods in Annex I of the proposal.



Ironically, the European industries initially covered by the CBAM are also uneasy with the Commission's proposals. Opposing the phaseout of free allowances, AEGIS Europe, an industrial alliance, urged that free allowances and indirect cost compensation under the EU ETS be maintained in full even beyond 2026 and that additional adjustments be made for the ETS burden on exports.<sup>10</sup> EUROFER, the European Steel Association, made much the same argument, claiming that the phaseout of free allowances in favor of an untested CBAM may hinder, rather than incentivize, low-carbon investment.<sup>11</sup>

## ISSUES AND CHALLENGES AHEAD

Major countries immediately affected by the CBAM—Russia, China, Turkey, the United Kingdom, Ukraine, South Korea, and India—will likely contest the policy in the WTO. They may also retaliate against EU exports while litigation drags on. The 10 major countries that are likely to be most affected by the CBAM are also among the largest destinations for EU exports, accounting for almost 60 percent of extra-EU-27 exports of goods (table 4). If these countries decide to retaliate, EU exporters of a wide range of goods could face penalty tariffs.

Whether the CBAM conforms to WTO rules will be debated without resolution while the CBAM is phased in. The Commission claims that the CBAM was designed to comply with the WTO and other international obligations, but many observers are doubtful. Disputes over the CBAM seem inevitable, invoking core WTO provisions, namely Article I (most-favored-nation treatment), Article II (tariff schedules), and Article III (national treatment) of the General Agreement on Tariffs and Trade (GATT).<sup>12</sup> Some CBAM features—such as exemption of specific countries, allowances for carbon prices paid in the country of origin, and calculation of embedded emissions based on non-product-related process and production methods (NPR PPMs)—could be inconsistent with GATT Article I, which prohibits discrimination between like imports from different countries.

Although the CBAM is crafted not to discriminate between imported products and similar domestic ones, the system mirrors the EU ETS; it could still therefore be found inconsistent with GATT Article III, because the CBAM is based on NPR PPMs, which are not allowed under current like-product jurisprudence. Moreover, technical and practical differences exist between the CBAM and the EU ETS (e.g., allowances under the EU ETS are tradable, but CBAM certificates are not). Therefore, the mechanism may discriminate de facto.

Even if the CBAM violates these rules, the European Union could seek justification under GATT Article XX (general exceptions), claiming that the system is essential to tackle climate change. It could argue that the CBAM falls within the scope of one or more of the Article XX exceptions, such as GATT Article XX(b) (“necessary to protect human, animal or plant life or health”) or GATT Article XX(g)

**The 10 major countries that are likely to be most affected by the CBAM are also among the largest destinations for EU exports.... If these countries decide to retaliate, EU exporters of a wide range of goods could face penalty tariffs.**

10 AEGIS, “CBAM EC Proposal: EU Industries Oppose the Automatic Phase-Out of Free Allowances, and Call for Export Adjustments and Better Enforcement Provisions,” [Press Release](#), July 16, 2021. However, the Commission does not include export rebates to compensate EU producers for ETS costs incurred in producing exported goods.

11 EUROFER, “A Fine Balance: Fit for 55 Must Help Decarbonisation of EU Steel and Prevent Carbon Leakage Effectively,” [Press Release](#), July 15, 2021.

12 An extensive body of literature reviews and analyzes the intersection between the CBAM and WTO rules; see, for example, Hufbauer, Charnovitz, and Kim (2009) and Bacchus (2021).



(“relating to the conservation of exhaustible natural resources”). Even if the CBAM falls within the exceptions, the EU case could be vulnerable, however, because the CBAM would still need to conform to the chapeau to Article XX and not be “a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail” or “a disguised restriction on international trade.”<sup>13</sup>

Table 4  
**EU exports to countries most affected by the CBAM, 2020**  
(millions of dollars)

Destination	Total EU goods exports	EU exports of CBAM products					
		Total CBAM products	Iron and steel	Aluminum	Fertilizers	Electricity	Cement
Russia	96,946	1,608	1,421	128	49	9	1
China	248,957	3,862	3,083	560	219	0	0
Turkey	85,764	3,770	3,137	459	150	22	2
United Kingdom	340,757	9,660	5,900	2,175	528	703	356
Ukraine	28,397	1,242	525	102	385	228	3
South Korea	55,623	928	746	163	20	0	0
India	39,462	1,059	915	111	32	0	0
Serbia	17,948	1,550	584	266	122	548	29
United States	433,741	6,941	5,218	1,369	189	0	164
United Arab Emirates	31,884	722	656	53	12	0	2
<b>Total</b>	<b>1,379,479</b>	<b>31,342</b>	<b>22,184</b>	<b>5,385</b>	<b>1,705</b>	<b>1,511</b>	<b>556</b>
<b>Total extra-EU-27 exports</b>	<b>2,371,096</b>	<b>60,864</b>	<b>43,789</b>	<b>9,139</b>	<b>3,741</b>	<b>3,208</b>	<b>987</b>

CBAM = Carbon Border Adjustment Mechanism

Note: Exchange rate applied is as of December 31, 2020 (€1=\$1.2271).

Source: Data from Eurostat database (accessed September 9, 2021) and the list of goods in Annex I of the proposal.

13 UNCTAD (2021) concludes that although the CBAM could help avoid carbon leakage, its impact on climate change would be limited and it would increase trade costs on developing countries.

In a recent article, James Bacchus, a former chair of the WTO's Appellate Body, made a detailed assessment of the WTO compatibility of the CBAM. He argued that the CBAM may be inconsistent with WTO core rules and difficult to be exempted under GATT Article XX because it could be seen as “arbitrary or unjustifiable discrimination” or a “disguised restriction on international trade” (Bacchus 2021). In addition, technical aspects such as the methodology for calculating, reporting, and verifying embedded emissions and other reporting requirements could be challenged under the WTO Agreement on Technical Barriers to Trade.

The CBAM may also conflict with the call under the [United Nations Framework Convention on Climate Change](#) (UNFCCC) for “common but differentiated responsibilities and respective capabilities (CBDR-RC).” The UNFCCC and the Paris Accord suggest differing levels of effort to tackle climate change by member countries. In contrast, the CBAM takes the EU ETS as the common benchmark for all countries exporting to Europe. By implication, any country can be faulted for not implementing climate policies as stringent as those of the EU ETS. For this reason alone, the CBAM will surely face challenges from developing countries.<sup>14</sup>

Other thorny and practical issues are difficulties in measuring, reporting, and verifying (MRV) the carbon content embedded in each product. There is no internationally agreed MRV method for calculating carbon footprints, and it would be administratively costly to create a common method. But each national calculation will be prone to political influence for protectionist purposes.

Criticisms over the CBAM have led some countries to consider emulating the EU policy and imposing border measures similar to those of the CBAM. In July 2021, US Senator Chris Coons (D-DE) and Representative Scott Peters (D-CA) introduced legislation to establish a border adjustment measure on US carbon-intensive imports. A revised version of their draft bill is now under consideration in the House as part of the pending \$3.5 trillion budget reconciliation bill.<sup>15</sup> The objective of the Coons-Peters bill is similar to that of the EU CBAM, but it differs from the CBAM in many aspects. The EU CBAM is closely linked to the EU ETS; the US bill attempts to create a level playing field for US companies that incur regulatory costs in complying with GHG emission limits by levying equivalent fees on imports in trade-exposed sectors.<sup>16</sup>

Experts have expressed their skepticism over such fees in the absence of country-wide emissions charges, such as a carbon tax or ETS. The Biden administration has not commented on the Coons-Peters bill, but in a recent interview with *Time* magazine, John Kerry, Special Presidential Envoy on Climate, emphasized the importance of multilateral efforts to tackle climate change. Kerry noted that “it’s premature to be discussing whether or not you ought to unilaterally go off and do a CBAM.”<sup>17</sup>

**Criticisms over the CBAM have led some countries to consider emulating the EU policy and imposing border measures similar to those of the CBAM.**

14 In April 2021, ministers of the BASIC countries (Brazil, South Africa, India, China) jointly released a [statement](#) expressing concerns that the CBAM might be discriminatory and inconsistent with the principles of the UNFCCC.

15 See [The “Fair, Affordable, Innovative, and Resilient Transition and Competition Act](#), July 19, 2021.

16 The covered sectors are industrial facilities that produce products such as iron, steel, cement, aluminum, and any product for which more than half its composition consists of other covered products.

17 Justin Warland, “[John Kerry on Border Carbon Tax: The US Doesn’t Want to Push Others Away](#),” *Time*, July 26, 2021.

## LOOKING FORWARD

Release of the European Commission's CBAM proposal is only a first step in the legislative procedure. Both the EU Parliament and the EU Council (heads of member states) will need to approve the proposal before it can take effect. In deliberations within Europe and with trading partners, the proposal will face enormous challenges. These procedures will take more than a year, during that time the proposal will likely go through major revisions.

Two alternative proposals to CBAMs have been proposed to address carbon leakage. In a recent episode of the Peterson Institute for International Economics' [Trade Winds virtual event series](#), Kristalina Georgieva, the managing director of the IMF, suggested a global carbon price floor with graduated pricing to accommodate different levels of development as an alternative to the CBAM.<sup>18</sup> The IMF proposal seems unlikely to attract support, as setting a carbon price floor would confront major political opposition in the United States and elsewhere while still not resolving the problem of price equivalence of emission allowances and regulatory mandates.

Another idea is the "Climate Club" suggested by Nobel Laureate William Nordhaus. Under this proposal, a club of countries with similar climate policies would undertake harmonized emissions reductions and set an international carbon price. Nonparticipants could be penalized with uniform percentage tariffs when their products enter club countries (Nordhaus 2015). This proposal requires setting an international carbon price and minimum carbon abatement standards, thus running into similar problems as the IMF proposal. It would be difficult to obtain buy-in by major emitters—notably, China, Brazil, and India—for either approach if the European Union or the United States imposes CBAMs on their exports.

Although the IMF and Climate Club plans are too rigid to bridge the yawning gaps in climate policies, both ideas suggest a constructive path for international negotiations. They essentially advocate a mutual recognition agreement (MRA) that sets minimum standards for decarbonization. In so doing, however, they cross a political red line by requiring a common carbon price across countries, which both rich and poor countries find objectionable, for different reasons.

But a common carbon price may not be needed to advance the outcomes committed to in the Paris Agreement. Instead, countries could advance their climate commitments by developing guidelines for carbon abatement policies that would be deemed equivalent and thus not trade distorting. Such a pact would require detailed examination of the policies, laws, and regulations that each major emitter is implementing to meet its climate commitments, which would be subject to international monitoring and enforcement. The WTO might perform these tasks.

Negotiators would agree that a set of policies in each country, if faithfully implemented and enforced, would be equivalent. Doing so would obviate the need for import restrictions that discriminate against some countries that

**...the IMF and Climate Club plans...essentially advocate a mutual recognition agreement that sets minimum standards for decarbonization.**

<sup>18</sup> In June 2021, the IMF released a paper that proposes an international carbon price floor. It would be negotiated by a small number of large emitting countries, with negotiations focusing on the minimum carbon price that each must put on its CO<sub>2</sub> emissions (Parry, Black, and Roaf 2021).

subscribe to the agreement. Exports from smaller developing countries would be spared carbon duties, according them a modicum of special and differential treatment in setting the pace of their carbon abatement reforms.

Negotiating an MRA on carbon abatement policies would likely take several years, even if limited to the top 10 carbon-emitting countries. The EU CBAM, as currently constructed, would not impose significant border levies until 2026; current US CBAM proposals envisage charges starting in 2024. Suspending the implementation of the CBAMs for up to five years would allow time for MRA negotiations. The option would still be open for unilateral border measures if good faith efforts to negotiate a carbon abatement pact fail. The UNFCCC process was too big to accommodate detailed, country-specific implementation plans; a plurilateral pact led by the main stakeholders responsible for the global commons—the United States, the European Union, and China—might succeed.

Meanwhile, it seems certain that more countries will pursue forms of carbon pricing to transit to a low-carbon economy—and that they will be accompanied by fears of carbon leakage. The moment is at hand for major carbon-emitting countries to act cooperatively instead of unilaterally and launch new plurilateral trade negotiations to advance both the fight against climate change and reform of the rules-based global trading system.

## REFERENCES

- Bacchus, James. 2021. *Legal Issues with the European Carbon Border Adjustment Mechanism*. Cato Briefing Paper 125. Washington: Cato Institute. Available at <https://www.cato.org/sites/cato.org/files/2021-08/briefing-paper-125.pdf>.
- Hufbauer, Gary Clyde, Steve Charnovitz, and Jisun Kim. 2009. *Global Warming and the World Trading System*. Washington: Peterson Institute for International Economics.
- Nordhaus, William. 2015. Climate Clubs: Overcoming Free-Riding in International Climate Policy. *American Economic Review* 105, no. 4: 1339–70. Available at <https://www.aeaweb.org/articles?id=10.1257/aer.15000001>.
- Parry, Ian, Simon Black, and James Roaf. 2021. *Proposal for an International Carbon Price Floor among Large Emitters*. IMF Staff Climate Note 2021/001. Washington: International Monetary Fund.
- UNCTAD (United Nations Conference on Trade and Development). 2021. *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*. Geneva.

**The moment is at hand for major carbon-emitting countries to act cooperatively instead of unilaterally....**

## APPENDIX A

### AN EXAMPLE FOR CALCULATING CBAM CERTIFICATES

EU company A plans to import galvanized sheets, which are covered by the CBAM, from South Korea. Korea has had an Emissions Trading System (ETS) in place since 2015 and the steel sector is covered by the Korean ETS. Company A needs to follow these steps:

- Prior to importing goods, company A must apply to the EU competent authority for permission to import those goods and be granted authorization (become an 'authorized declarant').
- Company A will be assigned a unique CBAM account number and be given access to its account in the national registry—a standardized electronic database containing information such as name and contact details, CBAM account number, details of the purchase, and specifics on the surrender of CBAM certificates.
- Company A can buy CBAM certificates from time to time through the national registry. The certificate price will be based on the weekly average price of allowances under the EU ETS. Company A must keep certificates equal to at least 80 percent of the embedded emissions on its account in the national registry at the end of each quarter.
- By May 31 of each year, company A must submit a declaration for the preceding calendar year to the competent authority through its account in the national registry. The declaration should contain information such as the total quantity of each type of goods imported, total embedded emissions expressed in tons of CO<sub>2</sub> equivalent per ton of each good, total number of CBAM certificates corresponding to total embedded emissions, minus a reduction corresponding to the carbon price paid in Korea and free allowances under the EU ETS. The requisite CBAM certificates will be surrendered through company A's account in the national registry.

Methodologies for the calculation of reductions and other detailed procedures will be determined by later implementing acts. In the meantime, the total cost for the CBAM certificates on imports from Korea which company A is responsible to pay may be roughly calculated by the following formula:

Total cost for the CBAM certificates to be surrendered = (embedded emissions per ton of imported Korean steel sheet) minus (free allowances given per ton of domestic produced sheet under the EU ETS) times (total quantity of imported Korean steel sheets) times (price of EU ETS allowance) minus (carbon price paid for imported Korean sheets under the Korean ETS).



---

© 2021 Peterson Institute for International Economics. All rights reserved.

This publication has been subjected to a prepublication peer review intended to ensure analytical quality. The views expressed are those of the authors. This publication is part of the overall program of the Peterson Institute for International Economics, as endorsed by its Board of Directors, but it does not necessarily reflect the views of individual members of the Board or of the Institute's staff or management.

The Peterson Institute for International Economics is a private nonpartisan, nonprofit institution for rigorous, intellectually open, and indepth study and discussion of international economic policy. Its purpose is to identify and analyze important issues to make globalization beneficial and sustainable for the people of the United States and the world, and then to develop and communicate practical new approaches for dealing with them. Its work is funded by a highly diverse group of philanthropic foundations, private corporations, and interested individuals, as well as income on its capital fund. About 35 percent of the Institute's resources in its latest fiscal year were provided by contributors from outside the United States.

A list of all financial supporters is posted at  
<https://piie.com/sites/default/files/supporters.pdf>.