





# INCLUSIVE CARBON PRICING: PATHWAYS TO MULTILATERAL COOPERATION

June 2023

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### **Abstract**

arbon pricing is an essential tool in the threat addressing of climate change and leveraging investment directed for sustainable energy. But it also poses challenges from an international trade perspective, particularly when paired with carbon border adjustment mechanisms (CBAMs). Several G20 members are already developing policy tools of this kind without coordination.

The G20 has acknowledged the urgency to act to ensure the Paris Agreement targets are achieved through energy transition, and has expressed its willingness to enhance cooperation in

the field of carbon pricing. This policy brief examines how decarbonisation can be achieved through plurilateral and multilateral cooperation in the field of carbon pricing.

The G20 and other relevant multilateral institutions could promote a set of common and inclusive principles for carbon pricing. This could help simplify the design of new schemes and reduce frictions if CBAMs are established. Rulemaking in this area could be combined with capacity-building initiatives and support for developing countries, according to the relevant principles of the United Nations Framework Convention on Climate Change.

## The Challenge

n its Sixth Assessment Report (2022), the Intergovernmental Panel on Climate Change (IPCC) warned that global temperatures will rise over the 1.5°C level within two decades and that only drastic cuts in carbon emissions could prevent the dire consequences such a rise in temperatures will have on life on Earth.¹ As the IPCC report clarified, the parties of the Paris Agreement do not seem on track to achieve the treaty's targets.

What policies can states adopt to accelerate the greening their economies and reduce carbon emissions? A promising path is the use of carbon pricing in the form of emission trading schemes or carbon taxes.2 In a nutshell, carbon pricing instruments set a price on carbon as a means to reduce CO2 emissions and drive investment into cleaner options. Policies of this type are deployed by several countries and recognised by the Kyoto Protocol and the Paris Agreement. Additionally, several international organisations have expressed their support for stepping up this approach in the form of a global carbon price.3 Regardless of possible initiatives at the plurilateral and multilateral levels, all parties to the Paris Agreement need to raise the level of their climate policies and address

the unprecedented challenge posed by climate change.

Another interesting approach to climate action is the one that revolves around trade policies, which appear more and more interlinked with climate policies.4 This seems a natural consequence of the fact that climate change and international trade are also deeply intertwined: trade liberalisation and the subsequent increase in trade flows and industrial outputs can have both positive (e.g., circulation of greener technologies) and negative (increased production and therefore emissions) impacts on the climate.5 At the 2023 World Economic Forum Annual Meeting, a new Coalition of Trade Ministers on Climate was launched with the aim of putting climate action at the heart of trade policies. This includes several G20 members such as Australia, Canada, the European Union (EU), Japan, South Korea, the UK, and the US.6 Other examples of this growing 'climate & trade' approach are trade agreements or preferential trade treatments that subordinate enhanced liberalisation to respect international climate law or other specific green commitments. As a reference, in 630 trade agreements signed between 1947 and 2016, it is possible to identify 308 provisions on the environment.7

THE CHALLENGE

Carbon border adjustment mechanisms (CBAMs) are also policy tools that combine climate and trade elements with the intention of amplifying (and safeguarding) the effects of other climate policies, like carbon pricing mechanisms. By imposing the same carbon price paid by domestic producers on goods imported from jurisdictions that have less ambitious climate policies, CBAMs aim to achieve two results. First, they prevent carbon leakage, i.e., the shift in emissions to foreign jurisdictions with less stringent climate polices. Second, CBAMs make climate action less burdensome for domestic industries, taking the form of a 'competitiveness provision'.8 It should be noted that this rationale is at times criticised due to the perceived lack of empirical evidence on carbon leakage.9 At the same time, they encourage developing countries to increase the ambition of their climate policies, as 'climate inaction' becomes costly for their export competitiveness. They also motivate companies to make their manufacturing processes less carbonintensive, helping them achieve an advantage over competitors.

The EU CBAM is a case in point. It created momentum for both carbon

pricing and border adjustment tools. For instance, Türkiye decided to commit to the Paris goals under the influence of the EU CBAM;<sup>10</sup> and Canada<sup>11</sup> and Japan<sup>12</sup> started to consider the development of their own CBAMs in cooperation with the EU. Other countries that do not yet have carbon pricing schemes are looking at suitable models to have their businesses pay the carbon tax at home rather than to the EU. This opens the possibility for the G20 to promote a set of common and inclusive principles for carbon pricing to simplify the design of new schemes. With its emissions trading system (ETS) and CBAM, the EU offers only one possible blueprint. In April 2022, the World Bank mapped 68 different carbon pricing systems, 13 which take the form of either taxation (carbon tax) or market instrument ('cap and trade' systems or ETS). On top of that, there are also indirect ways of pricing carbon-such as fuel taxes or the removal of fossil fuel subsidiesthat increase the complexity of carbon pricing ecosystems.

Conversely, CBAMs can also be of different types. Consider the potential designs examined by the EU for its CBAM:<sup>14</sup>

- i) Carbon taxes paid by importers, based, for example, on the domestic carbon price and the carbon intensity value of the product. These measures may be scrutinised under Articles II and III:2 of the General Agreement on Tariffs and Trade (GATT).<sup>15</sup>
- ii) Import certificates that mirror the allowances exchanged in the domestic ETS system. This is the policy option the EU chose in the end.<sup>16</sup>
- iii) Excise duties on the consumption of imports based on the internal carbon price.

While different, all these models are in line with the notion of border adjustment mechanisms that are enshrined in the World Trade Organization (WTO) framework, i.e., 'fiscal measures which put into effect, in whole or in part, the destination principle'.<sup>17</sup>

While CBAMSs are promising tools when it comes to encouraging climate action, they also present some challenges. First , they may be perceived as a unilateral imposition of climate policies that may be ill-received by trade partners and generate trade tensions.18 India, the chair of the G20 in 2023, has announced its intention to file a complaint with the WTO about the EU CBAM.19 The issue of their compatibility with WTO law is a keystone of the debate over CBAMs and it has been driving the EU CBAM legislative process. Second, they may strain one of the core principles of international climate law, which is the principle of differentiation ('common but differentiated responsibilities and respective capabilities' or CBDR-RC).20 Both legal orders somewhat address this tension between climate action and trade restrictions.21 In any case, solving this apparent contrast may encourage more countries to use carbon pricing and CBAM tools.

### The G20's Role



20 economies account for approximately 75 percent of both global greenhouse emissions international trade. and therefore decisive action at the G20 level is pivotal to achieving the goals of the Paris Agreement. In the Venice Communiqué of 2021, the G20 membership already expressed its willingness to cooperate in the field of carbon pricing.<sup>22</sup> Most of them already have a carbon tax or an ETS in place23 and, therefore, have developed more capacity in this field. In addition, the membership of big developing countries, like Brazil, India, and Indonesia, could voice concerns from the global south during the development of a regional carbon pricing policy and pioneer its expansion, opening up new opportunities. The involvement of these countries could facilitate the development of regional carbon pricing frameworks due to their economic and political networks with non-G20 developing countries. For instance, Indonesia could cooperate with the rest of the Association of Southeast Asian Nations to build a regional carbon pricing mechanism, following the auspices of the UNFCCC Regional Dialogue on Carbon Pricing.<sup>24</sup>

In the framework of the EU CBAM, many concerns have already been raised about the need to understand the vulnerabilities of developing and least developed countries. CBAMs have the potential to generate negative externalities for the economies of these countries, raising questions about climate justice and extraterritoriality. To mitigate such negative effects, researchers point to the possibility of granting CBAM exemptions, although this threatens to compromise the effectiveness of the policy.25 Other options include redistributing revenue generated by the carbon levy, assisting vulnerable countries through financial and technical support for the decarbonisation of their industries, and the development of carbon pricing instruments.26 Enhanced coordination of different carbon pricing systems can increase the combined effects of all these initiatives via the reduction of the fear of carbon leakage and free-riding and the exchange of best practices. Proper coordination will allow G20 countries to raise the ambition of their climate policies since their most relevant trade partners will also do the same. Last year, the G7, under the presidency of Germany, established a climate club

THE G20'S ROLE

with the aim of supporting cooperation in the field of progressive climate policy. The initial focus of the club is the decarbonisation of industry through an 'open, cooperative and international' approach.<sup>27</sup> However, such climate club runs the risk of remaining too elitist if highly-developed countries do not step

up their support to developing countries in setting up their carbon pricing initiatives.<sup>28</sup> The G20 is the ideal forum to study and consider the articulation of cooperation in the carbon pricing field since its decisions will affect a major share of the world economy.

## Recommendations to the G20



existing aking carbon pricing systems into consideration, core principles for international cooperation in this field need to be identified. These principles could constitute the basis for the development of effective carbon pricing schemes in countries that do not yet implement any. Such schemes should also facilitate the flow of goods when border adjustments are present. The G20 members could promote them in other international bodies and support developing countries in capacitybuilding and industrial transition. G20 members with more experience in carbon pricing could help other members in recalibrating their existing policies. Non-G20 countries need to receive support to prepare them for the eventual adoption of carbon pricing tools. We recommend that the G20 acknowledge the following principles.

#### Transparency, accountability, and data-driven policymaking

CBAMs may be contentious due to the lack of conclusive empirical evidence on carbon leakage and the issue needs to be further explored.<sup>29</sup> Therefore, G20 countries could task international organisations and research networks with the assessment of

this phenomenon and commit to the transparent disclosure of emissions and economic data. Governments could design policies based on this data and publish a sustainability impact report before adoption.<sup>30</sup> In these reports, the impact on developing countries needs to be considered.

## If the effectiveness of a carbon pricing system is strengthened by a CBAM, the latter shall be WTO-compatible

CBAMs need to pass the nondiscrimination test of the Most Favoured Nation (Article I GATT) and national treatment principles (Art. III GATT) to minimise the risk of trade conflict that may be spurred by this type of measure.<sup>31</sup> Designing a WTO-compatible CBAM is possible<sup>32</sup> and countries should not have prejudices against the adoption of such measures. This is especially true for G20 countries which already use carbon pricing tools and therefore will not be excessively affected by CBAMs set up by their trade partners. CBAMs need to recognise all forms of carbon pricing (explicit and implicit) to reduce negative effects on trade flows and respect national sovereignty. Mutual recognition will be made easier by the coordinating effort of the G20.

## Developing and vulnerable countries should not be affected negatively by CBAMs and need to be supported using the revenues from CBAMs

The negative effects of CBAMs on developing countries could be reduced by granting interim exemptions (without compromising the effectiveness of the policy) and/or by cooperation initiatives. CBAMs should not shift the economic and social burden of climate policies from developed countries to vulnerable ones.33 At the same time, they cannot violate the CBDR-RC principle by unilaterally imposing emissions reduction commitments without respecting 'national policy space for sustained, inclusive and sustainable economic growth'.34 Developing countries need to be supported by providing resources and capacity-building to develop or enhance their own carbon pricing tools and then claim a deduction in their CBAM obligations. These resources could come from the revenues raised by CBAMs, which can be transformed into climate finance tools.35

## Moving towards a multilateral or plurilateral carbon pricing system

If CBAMs are WTO-compatible and open to cooperation, they will create less tensions. G20 partners may consider, in the future, the establishment of a 'global carbon price' or at least a plurilateral tool. This path is recommended by international organisations and answers to the need for effective, multilateral, action.36 and inclusive climate Paradoxically, if carbon pricing is more diffused, CBAMs are also less needed to encourage climate action. A multilateral carbon pricing system will be more effective, both from an environmental and economic perspective. Compliance costs of international trade would be reduced, and political frictions caused by unilateral actions avoided. G20 members could promote such initiatives at the UNFCCC or the WTO, or even among themselves.

Attribution: Pierfrancesco Mattiolo, Giulia Cretti, and Amira Bilqis, "Inclusive Carbon Pricing: Pathways to Multilateral Cooperation," *T20 Policy Brief*, June 2023.

#### **Endnotes**

- 1 Intergovernmental Panel on Climate Change (IPCC), 'Climate Change 2022: Mitigation of Climate Change. Summary for Policymakers', IPCC Assessment Report, 2022, 10–12, https://www.ipcc.ch/report/ar6/wg3/.
- Nicholas Stern, The Economics of Climate Change. The Stern Review (Cambridge: Cambridge University Press, 2007), XXII–XXIV, https://doi.org/10.1017/CBO9780511817434.
- Ian W.H. Parry et al., 'Carbon Pricing: What Role for Border Carbon Adjustments?', IMF Staff Climate Note (International Monetary Fund, 2021), 2; World Bank, State and Trends of Carbon Pricing 2021, State and Trends of Carbon Pricing (World Bank, 2021), 36–37, Doi: 10.1596/978-1-4648- 1728-1; OECD, 'Climate Policy Leadership in an Interconnected World: What Role for Border Carbon Adjustments?', 2020, paras 157– 161, https://doi.org/10.1787/8008e7f4-en.
- World Trade Organization, 'World Trade Report 2022 Climate Change and International Trade', WTO World Trade Report, 2022, https://www.wto.org/english/res\_e/publications\_e/wtr22\_e.htm.
- Genovaitė Liobikienė and Mindaugas Butkus, 'Scale, Composition, and Technique Effects through Which the Economic Growth, Foreign Direct Investment, Urbanization, and Trade Affect Greenhouse Gas Emissions', *Renewable Energy* 132 (March 2019): 1310, https://doi.org/10.1016/j.renene.2018.09.032.
- 6 Coalition of Trade Ministers on Climate, 'Coalition Launch Statement', Website, 2022, https://www.tradeministersonclimate.org.
- Jean-Frédéric Morin, Andreas Dür, and Lisa Lechner, 'Mapping the Trade and Environment Nexus: Insights from a New Data Set', Global Environmental Politics 18, no.
  1 (1 February 2018): 122, https://doi.org/10.1162/GLEP\_a\_00447.
- Joost Pauwelyn, 'Carbon Leakage Measures and Border Tax Adjustments Under WTO Law', 2012, 1–2, https://doi.org/10.2139/ssrn.2026879.
- 9 Florian Misch and Philippe Wingender, 'Revisiting Carbon Leakage', IMF Working Papers (International Monetary Fund, 2021), 3–4.
- Zia Weise, 'EU's Looming Carbon Tax Nudged Turkey toward Paris Climate Accord, Envoy Says', *Politico*, 6 November 2021, https://www.politico.eu/article/eu-carbon-border-adjustment-mechanism-turkey-paris-accord-climate-change/.

- Department of Finance of Canada, 'Exploring Border Carbon Adjustments for Canada', Consulting with Canadians. Consultation on Border Carbon Adjustments (blog), 5 August 2021, https://www.canada.ca/en/department-finance/programs/consultations/2021/border-carbon-adjustments/exploring-border-carbon-adjustments-canada.html.
- 12 European Union and Government of Japan, 'Towards a Green Alliance', Joint communiqué, EU-Japan Summit (European Union, Government of Japan, 27 May 2021), https://www.consilium.europa.eu/media/49932/eu-japan-green-alliance-may-2021.pdf.
- 13 World Bank, *State and Trends of Carbon Pricing 2022* (Washington, DC: World Bank, 2022), 15, https://doi.org/10.1596/978-1-4648-1895-0.
- European Commission, 'Impact Assessment Report Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism', Commission Staff Working Document, 2021, para. 5.2.2-5.2.7.
- Pauwelyn, 'Carbon Leakage Measures and Border Tax Adjustments Under WTO Law',24.
- 16 European Commission, 'CBAM Impact Assessment Report', para. 6.2, 6.4.
- 17 'Report of the Working Party on Border Tax Adjustments' (GATT, 20 November 1970), para. 4, https://www.wto.org/gatt\_docs/English/SULPDF/90840088.pdf.
- Jan Cernicky, Ricardo Meléndez-Ortiz, and Bernice Lee, 'Avoiding a Carbon Trade War: G20 Dialogue and Coordination and the European Carbon Border Adjustment Mechanism (CBAM)', *T20 Italy 2021 Policy Briefs*, 2021, https://www.t20italy.org/wp-content/uploads/2021/09/TF2-12.pdf.
- Manoj Kumar and Neha Arora, 'India Plans to Challenge EU Carbon Tax at WTO', Reuters, 16 May 2023, sec. India, https://www.reuters.com/world/india/india-plans-challenge-eu-carbon-tax-wto-sources-2023-05-16/.
- 20 UNFCCC, 'Adoption of the Paris Agreement (Signed 12 December 2015, in Force 4 November 2016)', Pub. L. No. Decision 1/CP.21 un Doc FCCC /CP/2015/10/Add.1, § Annex, Decision 1/CP.21 un Doc FCCC /CP/2015/10/Add.1, Annex (2015) Articles 2 and 4.
- 21 The UNFCCC states in Article 3(5) that 'measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade' and Article XX GATT provides for an exception for measures 'necessary to protect human, animal or plant life or health' or 'relating to the conservation of exhaustible natural resources' as long

- as they do not 'constitute a means of arbitrary or unjustifiable discrimination between countries [...] or a disguised restriction on international trade'.
- 22 Italian G20 Presidency, 'Third Finance Ministers and Central Bank Governors Meeting', Communiqué (Venice: G20, 10-07 2021), https://www.mef.gov.it/ inevidenza/2021/00045/12.Communique-Third-G20-FMCBG-meeting-9-10-July-2021. pdf.
- 23 World Bank, State and Trends of Carbon Pricing 2022, 15.
- 24 UNFCCC, 'ASEAN Countries Meet for the Regional Dialogue on Carbon Pricing', 2020, https://unfccc.int/about-us/regional-collaboration-centres/rcc-bangkok/28-to-29-september-asean-countries-meet-for-the-regional-dialogue-on-carbon-pricing.
- Sinan Ülgen, 'A Political Economy Perspective on the EU's Carbon Border Tax', *Carnegie Europe* (blog), 9 May 2023, https://carnegieeurope.eu/2023/05/09/political-economy-perspective-on-eu-s-carbon-border-tax-pub-89706.
- 26 Louise van Schaik, Pieter Pauw, and Giulia Cretti, 'The CBAM Effect: The World's Response to the EU's Climate Stick', Cligendael Alert (The Hague: Cligendael Institute, 24 May 2022), https://www.clingendael.org/publication/cbam-effect-worlds-responseeus-climate-stick.
- 27 German Federal Ministry for Economic Affairs and Climate Action, 'G7 Establishes Climate Club', G7 Joint Press Release (German Presidency of the G7, 12 December 2022), https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/12/20221212-g7establishes-climate-club.html.
- S.K. Mohanty et al., 'Greening Global Trade: Enhanced Synergies between Climate and Trade Policies for Decarbonization', Policy brief, T20 Indonesia, 2022, https://www.t20indonesia.org/wp-content/uploads/2022/09/TF1\_Greening-Global-Trade-Enhanced-Synergies-between-Climate-and-Trade-Policies-for-Decarbonization-3.pdf.
- 29 World Bank Group, 'Carbon Leakage: Theory, Evidence and Policy Design', PMR Technical Note (World Bank, 20 October 2015), 14–18, http://hdl.handle. net/10986/22785; Misch and Wingender, 'Revisiting Carbon Leakage'.
- 30 Hussein Abaza, Ronald Bisset, and Barry Sadler, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, 1st ed (Geneva, Switzerland: Economics and Trade Branch, Division of Technology, Industry, and Economics, United Nations Environment Programme, 2004); OECD, *Guidance on Sustainability Impact Assessment*, 2010, https://doi.org/10.1787/9789264086913-en.
- 31 Cernicky, Meléndez-Ortiz, and Lee, 'Avoiding a Carbon Trade War'.

- 32 Pauwelyn, 'Carbon Leakage Measures and Border Tax Adjustments Under WTO Law'.
- 33 Christoph Böhringer, Jared C. Carbone, and Thomas F. Rutherford, 'Embodied Carbon Tariffs', *The Scandinavian Journal of Economics* 120, no. 1 (2018): 207–8, https://doi.org/10.1111/sjoe.12211.
- 34 UN General Assembly, 'Transforming Our World: The 2030 Agenda for Sustainable Development', UNGA Resolution, 25 September 2015, para. 21.
- 35 UNCTAD, 'A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries', 14 July 2021, 24, https://unctad.org/system/files/officialdocument/osginf2021d2\_en.pdf.
- Parry et al., 'IMF Report'; Ian Parry, Simon Black, and James Roaf, 'Proposal for an International Carbon Price Floor Among Large Emitters', IMF Staff Climate Note (International Monetary Fund, 18 June 2021), https://www.imf.org/-/media/Files/Publications/Staff-Climate-Notes/2021/English/CLNEA2021001.ashx; World Bank, State and Trends of Carbon Pricing 2021, 37–38; OECD, 'Climate Policy Leadership in an Interconnected World', para. 162.





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