Bridging the Divide:

Assessing the Viability of International Cooperation on Border Carbon Adjustments

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CLIMATE Strategies

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About the Project

This report is part of the Climate Strategies project 'Making the Trade System Work for Climate 2.0', which investigates how international trade policy can be amended to better support global climate targets – with a focus on Border Carbon Adjustment (BCA) and the potential of plurilateral agreements to increase climate-trade policy efficacy.

Find out more about the project and our latest events at **https://climatestrategies.org/projects/climate-trade-2-0/**

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List of Abbreviations

BCA	Border carbon adjustment
CBAM	Carbon Border Adjustment Mechanism
CBDR-RC	Common but differentiated responsibilities and respective capabilities
EEA	European Economic Area
EU	European Union
GASSA	Global Arrangement on Sustainable Steel and Aluminium
GATT	General Agreement on Tariffs and Trade
IEA	International Energy Agency
IFCMA	Inclusive Forum on Carbon Mitigation Approaches
IRA	Inflation Reduction Act
LDCs	Least Developed Countries
MRV	Monitoring, reporting and verification
OECD	Organisation for Economic Co-operation and Development
SIDS	Small Island Developing State
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
WTO	World Trade Organization

Executive Summary

Trade-Climate Cooperation at the Crossroads

The recent past has been witness to a plethora of multilateral, plurilateral and bilateral cooperative initiatives at the interface between international trade and climate change. This is an encouraging trend that indicates an increasing realization of the interconnected nature of international trade and climate change. While about a quarter of global carbon dioxide emissions are embedded in the international trade of goods and services, trade policy can also play a significant role in supporting countries in their efforts to decarbonize and adapt to the impacts of climate change.

However, these developments are taking place against a wider backdrop of an equally dramatic pivot towards nationalist retrenchment, spurred by populist domestic politics, growing geopolitical tensions, and widespread disenchantment with the unintended effects of globalization on national economies. Jurisdictions are increasingly taking recourse to protectionist trade and industrial policies. Many of the protectionist tendencies that underlie the current dynamic of economic retrenchment and fragmentation are mediated by industrial policy strategies that invoke climate ambition and deep decarbonization as both a justification and a central objective, the most contested among them all being border carbon adjustments (BCAs).

Border Carbon Adjustments and their Discontents

In a world characterized by unequal carbon constraints, jurisdictions with more stringent climate constraints often face the risk of carbon leakage. BCAs have long been deliberated upon as a concrete measure to help address this problem. Yet, BCAs could be adopted for a variety of other reasons as well, including protecting the international competitiveness of domestic industries, and inducing trade partners to ramp up their climate mitigation efforts.

BCAs have turned out to be the most controversial measure at the interface between trade and climate change. This is for various reasons which include their alleged "green protectionism" and their potential economic and social impacts on trade partners, particularly those from the Global South that are least responsible for the climate crisis, thereby raising complex, normative questions about climate justice and equity.

The EU's Carbon Border Adjustment Mechanism (CBAM) has brought these debates to the centre stage of the climate-trade policy discourse. However, the EU CBAM is unlikely to be the last or only BCA, with various jurisdictions contemplating similar measures as

they adopt increasingly ambitious climate mitigation policies and pursue other policy objectives, such as improved national security or industrial policy. This brings to the fore increased risks of uncoordinated proliferation of unilaterally implemented BCAs with divergent approaches, which in turn can translate into greater uncertainty, higher transaction and administrative costs, and detrimental effects on international trade and global efforts on tacking climate change and its overwhelming impacts.

About the Present Report

Against this backdrop, this report makes a case for international cooperation on or relating to BCAs and assesses the prospects for such cooperation. The report applies an analytical framework that examines both the "input legitimacy" and "output legitimacy" of international cooperative initiatives. We apply this analytical framework to three emerging models of cooperation relating to BCAs, namely the G7 Climate Club, the transatlantic talks on a Global Arrangement on Sustainable Steel and Aluminium (GASSA), and the Inclusive Forum on Carbon Mitigation Approaches (IFCMA) launched by the Organisation for Economic Co-operation and Development (OECD).

Rationales for International Cooperation on BCAs

International cooperation is not only one of the core principles underpinning the international legal order, including the international climate and trade regimes, but it can also help address some of the adverse impacts associated with BCAs, including the perception of "green protectionism" and risks of tit-for-tat trade retaliation.

International cooperation could further ensure that BCAs become part of broader diplomatic efforts on climate change, taking into account, among others, the interests and priorities of countries in the Global South that would be adversely affected by BCA implementation. Besides, international cooperation could reduce the risk of exacerbating the fragmentation in the global order through the emergence of multiple BCAs, each with their own objectives and requirements.

By targeting traded products, BCAs inherently have an external dimension. In the concrete design of BCAs, the spillover effects are largely determined by provisions on the geographic scope (i.e., the extent to which countries are exempted), the calculation of the adjustment (e.g., whether and what kind of mitigation policies in third countries are credited), the determination of embedded emissions (e.g., whether based on actual emissions or some kind of default values), and the use of revenues (e.g., whether BCA revenues are recycled back to the affected trading partners). Given that existing or proposed BCAs differ widely in how they deal with such external dimensions, it underscores the potential benefits of international cooperation, and highlights ways in which the external dimension of BCAs could promote or facilitate such cooperation.

Our Analytical Framework

In this report, we focus on two core features of international cooperation, namely its inclusiveness and institutional strength, both of which can be linked to an initiative's "input legitimacy" (i.e. the quality of the process through which decisions are made).

The rationale for international cooperation points to different goals that can be pursued with international cooperation on BCAs. In this report, we identify five possible goals, which provide us the prism through which we assess the "output legitimacy" of any initiative of international cooperation on BCAs (i.e., how effective is it in achieving certain goals). The five goals identified are:

(1) promoting transparency (i.e., sharing information on the design, implementation and effects of BCAs);

(2) developing objectives and principles for BCAs (i.e., identifying best practices that could guide future design and implementation);

(3) improving comparability by developing methodologies that allow for the comparison of different types of mitigation policies and their effects;

(4) promoting harmonization with a view to developing product or MRV standards; and

(5) broadly contributing to global climate ambition, by either strengthening domestic or third-country climate policies.

For each of the three initiatives under study, namely the G7 Climate Club, GASSA and IFCMA, we discuss the extent to which they can be considered inclusive, as well as their underlying institutional strength based on publicly available documents. In addition, we also assess the propensity of these initiatives to contribute to one or more of the five goals identified in this report.

G7 Climate Club

In 2021, the German G7 presidency called on G7 members to introduce a price on carbon and develop a system with a common BCA over time. However, it quickly became clear that a joint carbon price among the G7 members would not be feasible. After extensive negotiations among G7 members, a "Climate Club" was finally launched in December 2022, with an interim secretariat to be housed by the OECD and the International Energy Agency (IEA). The terms of reference of the initiative list three pillars of cooperation: (1) advancing ambitious and transparent climate change mitigation policies; (2) transforming industries; and (3) boosting international climate cooperation and partnerships.

We find that the G7 Climate Club fares reasonably well in terms of **inclusiveness**, as notwithstanding its origins it is in principle open to all countries. As for its **institutional strength**, the initiative is not aimed at setting standards, and its future is contingent upon the support of subsequent G7 presidencies.

As far as its contribution to the five goals of international cooperation on BCAs identified in this report is concerned, its performance is rather mixed. As the Climate Club does not cooperate on BCAs directly, it may at best contribute toward **increasing transparency** indirectly – through the progress made under the IFCMA, which aims to develop a comprehensive database of different policy approaches and accounting methodologies. This would then inform the Climate Club in case BCAs become a subject in future elaborations of its scope and mandate. As for **improving comparability**, members of the Climate Club signed up to engage in the advancement of comparable methodologies to measure, estimate and collect emissions data, for which again they will rely on the IFCMA. The Climate Club focuses on climate ambition, industrial decarbonization, and voluntary cooperation with developing countries, which can potentially **contribute to global climate actio**n, depending on political priorities by acting G7 presidency. Neither **developing shared objectives and principles for BCA**s nor **promoting harmonization** are within the terms of reference of the G7 Climate Club, however.

GASSA

The origins of the GASSA can be traced back to tariffs imposed by the US Trump Administration in 2018, which included tariffs of 25% on steel and 10% on aluminium. In response to these tariffs, the EU retaliated with tariffs on other products. The US tariffs were subsequently challenged at the World Trade Organization (WTO) by both the EU and China. In 2021, with a new US Administration in place, the US and the EU issued a joint statement on steel and aluminium, wherein the EU agreed to suspend its WTO challenge and remove its tariffs, while the US introduced a Tariff Rate Quota under which a limited amount of steel from the EU could enter the US market free of duties. The deal also marked the launch of negotiations on a Global Arrangement on Sustainable Steel and Aluminium, with an aim to conclude these negotiations within two years. Recently however, the negotiations have entered into a stalemate due to multiple differences in approaches, priorities and domestic political compulsions.

The GASSA aims to address two separate, but related issues, namely what is referred to as "non-market excess capacity", which is an implicit reference to China's subsidization of its steel industry, and the carbon intensity of steel and aluminium production.

In terms of **inclusiveness**, although GASSA is open to "like-minded economies", it is by design envisioned at excluding China, thereby raising questions about its true inclusivity. As far as **institutional strength** is concerned, it is too early to assess as the institutional structure has yet to be agreed.

In terms of its contribution to the five identified goals of international cooperation on BCAs, the GASSA performs rather poorly. It is unlikely to serve as a forum for sharing BCA design and implementation information, and hence unlikely to contribute to **increasing transparency of BCAs**. It is also unlikely to serve as a forum for **developing shared objectives and principles for BCAs**; or for **improving comparabilit**y of individual mitigation policies. Although the technical discussion on methodologies could potentially lead to shared understanding of low-carbon intensity standards in steel and aluminium sectors, **promoting harmonization** is going to be highly challenging. In terms of its potential to **contribute to global climate ambition**, the role of the GASSA is unclear.

IFCMA

In June 2022, the OECD formally launched its new initiative known as the Inclusive Forum on Carbon Mitigation Approaches. The overall objective of the forum is to help enhance the impact of emission reductions efforts globally, through "data and information sharing, evidence-based mutual learning and inclusive multilateral dialogue". Under the auspices of the IFCMA, technical work will be carried out to assess a diverse range of both price-based and non-price-based policy instruments that have been implemented by countries across the world, through the development and application of a consistent methodology. However, IFCMA does not have BCA as its focus.

In terms of **inclusiveness**, as it seeks to attract a range of participants that includes both OECD member countries and non-member countries, it fares reasonably well. However, it remains to be seen whether and to what extent OECD member countries determine the direction of the initiative. With respect to **institutional strength**, again it fares somewhat well, as it is hosted by a permanent body, namely the OECD. However, while the OECD generally has the ability to set standards and adopt legally binding decisions through the OECD Council, this is not necessarily the case for the IFCMA, which is explicitly not intended to act as a standard-setting body.

As far as its contribution to the five identified goals of international cooperation on BCAs is concerned, again the IFCMA fares reasonably well. Although the Forum is not focused on **increasing transparency around BCAs** as such, its remit – which includes taking stock of mitigation policy instruments (and policy packages) and their effects on emissions – is sufficiently broad to include a discussion of BCAs as part of mitigation policy packages. Its data work can also help jurisdictions to determine whether and to what extent to credit policy efforts in third countries when designing and implementing

BCAs, for instance through bilateral agreements. One of the main areas in which the IFCMA can make a truly meaningful contribution is **improving comparability**, specifically through the methodologies that it will employ to assess the effectiveness of different carbon mitigation approaches in tackling emissions, as well as through its work on carbon intensity metrics. Although standard-setting is explicitly not a part of the IFCMA's mandates, its technical work could lay the foundation for the development of harmonized standards, thereby indirectly **promoting harmonization**. Much depends on the extent to which the methodologies developed on mapping and assessing the effects of mitigation policies find support among the IFCMA membership. Although **developing shared objectives and principles for BCAs** is not directly within the scope of the IFCMA, it can potentially contribute toward this goal indirectly through facilitating an "inclusive multilateral dialogue", which among other things could possibly deliberate on best practices pertaining to BCAs. As for **contributing to global climate ambition**, the IFCMA could help indirectly by laying the groundwork for determining what the most optimal and effective policies are for tackling climate change, and shedding light on what role, if any, BCAs can play in policy packages. Although the work of the IFCMA seeks to identify capacity constraints in evaluating climate mitigation policies, the Forum as such does not, however, provide any mechanism for providing (capacity-building or financial) support.

Conclusions and Way Forward

The analysis in this report suggests that none of the three initiatives discussed emerges as an ideal candidate for international cooperation on BCAs. At the same time, we acknowledge that this remains an evolving context.

On the positive side, while it may be a bit too early to anticipate the success of the Climate Club and the IFCMA, the crosscutting and facilitative efforts they are pursuing currently, such as the collection of data and advancement of common metrics and methodologies, may prepare the ground for more robust long-term cooperation on BCAs, and may also help accommodate a more diverse set of mitigation actions and policy approaches. Additionally, through their transparency and inclusiveness, they may potentially strengthen the legitimacy and acceptance of future cooperative efforts on BCAs.

What our analysis also reveals is a real risk that domestic interests and short-term political priorities will take precedence over the acknowledged benefits of international cooperation, unless any cooperative initiatives are thoroughly aligned with all participating jurisdictions' domestic policy approaches and geopolitical positions. Finding a "landing zone" for international cooperation on BCAs among trading partners with often conflicting domestic contexts and priorities will be challenging, as attested by the recent breakdown of the GASSA negotiations among only two partners with broadly aligned interests.

Inevitably, this observation gives rise to the question whether, in the current geopolitical context, there can be any way forward on international cooperation on BCAs. One thing is clear: in one form or another, BCAs are becoming an increasingly relevant part of the evolving climate policy landscape. It may be too soon to anticipate their role going forward, and whether they may prove to have been an isolated and temporary symptom of a difficult transition period in industrial decarbonization, or will proliferate and remain key policy elements far into the future. Still, the challenges they pose to established forms of international economic and environmental cooperation are not trivial, as are the risks arising from uncoordinated and unilateral initiatives.

While domestic interests and other overriding priorities may mute the appeal of such cooperation in the near term, we believe that the many benefits – political, economic and environmental – of cooperation as well as its ability to foster the perceived legitimacy and thus sustain international acceptance of BCAs will, over time, exercise growing pressure to engage in some form of cooperation. Much will also depend on the broader context of BCA cooperation, and whether, for instance, it is accompanied by efforts to honestly engage on the costs of implementation and the risks of protectionism, or includes mechanisms to extend support for developing countries that face difficulties complying with the attendant obligations.

1. Introduction

Trade policy and climate action are closely intertwined. According to the Intergovernmental Panel on Climate Change, roughly a quarter of global carbon dioxide emissions are embedded in the international trade of goods and services.[1] This creates a loophole in emissions accounting and makes it harder to tackle these emissions.[2] At the same time, trade policy can contribute to achieving the objectives of the Paris Agreement on climate change to keep global warming limited to 1.5 degree Celsius, for example by facilitating the global diffusion of low-carbon goods and services, disciplining fossil fuel subsidies, and greening aid for trade.[3] It therefore makes sense for countries to discuss how they can leverage trade policies to stimulate stronger climate action and help achieve wider development goals.

In the debate on how to align trade and climate policy, the issue of border carbon adjustments (BCAs) has – for better or for worse – taken centre stage. In a globalised economy, with countries ramping up climate action at different paces to meet the Paris Agreement goals, there is a risk of carbon leakage.[4] BCAs have emerged as a concrete trade-related policy measure to address this risk.

The idea of adopting such measures for a long time lingered in the background of climate policy discussions, with European and American policymakers entertaining the idea, but not following through.[5] However, the European Union's (EU) announcement of a Carbon Border Adjustment Mechanism (CBAM) in 2019,[6] and its subsequent adoption in 2023,[7] has moved the debate on BCAs from theory to practice. The EU is unlikely to be the only jurisdiction adopting such a border measure: countries like Canada and the United Kingdom have held consultations to determine whether they should follow suit, and several US senators have tabled or are preparing bills that include a fee on goods entering the United States (US).[8]

Although the environmental goal of these measures – preventing the shift of carbon-intensive production to third countries with fewer carbon constraints – is laudable, they remain highly controversial, especially among less developed countries wary of "green protectionism".[9] BCAs are usually adopted for a variety of reasons, which not only include carbon leakage, but often also protecting the international competitiveness of domestic industries, and inducing other countries to take step up their climate change mitigation efforts. BCAs also raise difficult normative questions about their social and economic impacts on developing countries, including those countries least responsible for the climate crisis.[10] In addition to these concerns about protectionism and fairness, there is also a growing risk of divergent approaches, with the EU's CBAM linked to the

1 Shobhakar Dhakal et al., 'Emissions Trends and Drivers' in P.R. Shukla et al. (eds.), *IPCC, 2022: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2022), 215–294.

2 Daniel Moran, Ali Hasanbeigi, and Cecilia Springer, 'The Carbon Loophole in Climate Policy: Quantifying the Embodied Carbon in Traded Products' (August 2018), https://static1.squarespace.com/static/5877e86f9de4bb8bce72105c/t/632fcdf3f7424f4e9905ffc6/1664077359978/The+Carbon+Loophole+in+Climate+Policy-Final+Rev.pdf.

3 Kasturi Das et al., 2019, 'Making the International Trading System Work for Climate Change: Assessing the Options' (2019) 49(6) *Environmental Law Reporter* 10553–10580; Carolyn Deere Birkbeck, 'Priorities for the Climate-Trade Agenda: How a Trade Ministers' Coalition for Cooperation on Climate Action Could Help' (Cascades, 18 October 2021), https://www.cascades.eu/wp-content/uploads/2021/11/CASJ9267-Climate-Trade-Agenda-report-211103.pdf.

4 Michael Grubb et al., 'Carbon Leakage, Consumption, and Trade' (2022) *47 Annual Review of Environment and Resources* 753–795.

5 Harro van Asselt and Thomas Brewer, 'Addressing Competitiveness and Leakage Concerns in Climate Policy: An Analysis of Border Adjustment Measures in the US and the EU' (2010) 38(1) *Energy Policy* 42–51.

6 European Commission, 'The European Green Deal' (Communication), COM(2019)640 final (11 December 2019), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN.

7 Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 Establishing a Carbon Border Adjustment Mechanism [2023] OJ L130/52.

8 See Section 3.

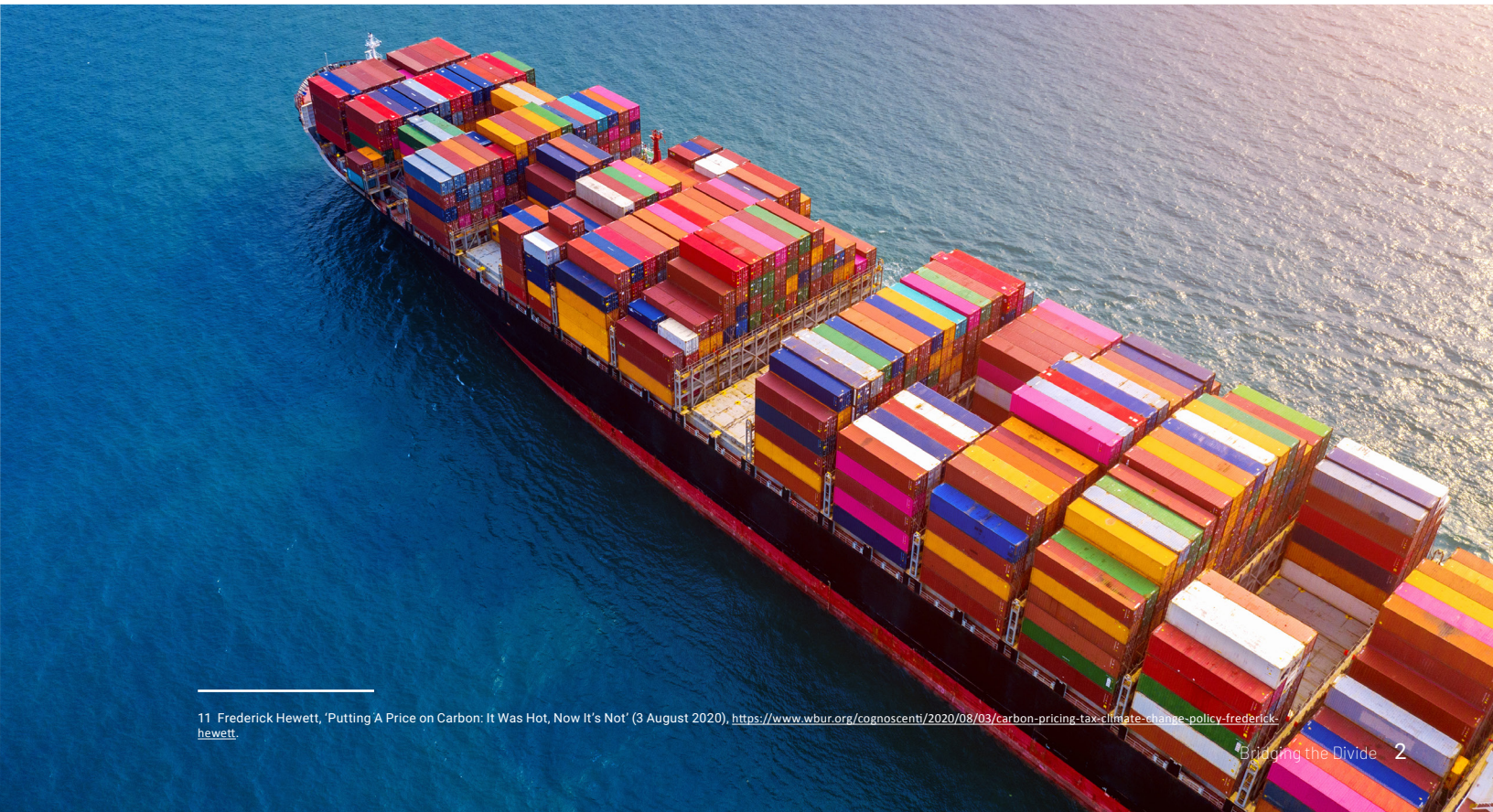
9 James Bacchus, 'Legal Issues with the European Carbon Border Adjustment Mechanism' (Cato Institute, 9 August 2021), https://www.cato.org/sites/cato.org/files/2021-08/briefing-paper-125.pdf; Andrei Marcu, Michael Mehling, and Aaron Cosbey, 'Border Carbon Adjustments in the EU: Issues and Options' (European Roundtable on Climate Change and Sustainable Transition, 2020), https://ercst.org/wp-content/uploads/2021/08/20200929-CBAM-Issues-and-Options-Paper-F-2.pdf.

10 United Nations Trade Conference on Trade and Development (UNCTAD), 'A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries' (UNCTAD, 2021), https://unctad.org/publication/european-union-carbon-border-adjustment-mechanism-implications-developing-countries.

policy instrument of carbon pricing, in contrast to US proposals that do not include such a link due the failure of past efforts to introduce a federal carbon price.[11]

Against this background, international cooperation could help to address some of these concerns, and strengthen the alignment of climate and trade policies. This report therefore assesses options for international cooperation on BCAs. In doing so, it takes into account ongoing developments on BCAs at the domestic level (particularly in the EU and the US), as well as at the international level, including the launch of a Group of 7 (G7) Climate Club, transatlantic talks on a Global Arrangement on Sustainable Steel and Aluminium (GASSA), and the creation of the Inclusive Forum on Carbon Mitigation Approaches (IFCMA) by the Organisation for Economic Co-operation and Development (OECD). These initiatives have either been recently launched and/or are still under development. Although there are still important unanswered questions about their exact scope and the nature of some of their future activities, this report looks into the potential of these initiatives to further international cooperation on BCAs.

The report is structured as follows. Section 2 sketches the evolving context of international trade and climate cooperation, including the adoption of major legislative initiatives in the EU and US, and the launch of various international initiatives. Section 3 examines the implications of existing or proposed BCAs (including the EU CBAM) for third countries. Section 4 discusses the rationales and possible goals for international cooperation on BCAs. Section 5 examines three international cooperative initiatives – the G7 Climate Club, the GASSA and the IFCMA – with a view to identifying their inclusiveness, institutional strength, and their propensity to contribute to the identified goals for international cooperation on BCAs. This section also sketches some of the limitations of, and obstacles to, international cooperation, reflecting on the role of these initiatives as well as multilateral institutions such as the World Trade Organization (WTO) and the United Nations Framework Convention on Climate Change (UNFCCC) process. Section 6 concludes.



11 Frederick Hewett, 'Putting A Price on Carbon: It Was Hot, Now It's Not' (3 August 2020), https://www.wbur.org/cognoscenti/2020/08/03/carbon-pricing-tax-climate-change-policy-frederick-hewett.

2. The Evolving Trade and Climate Context

The 1990s ushered in an era of rapid progress on multilateralism and international trade cooperation, as the collapse of the former Soviet Union ended nearly a century of ideological divergence and the newly arrived unipolar moment[12] kicked off a period of democratization and market reforms[13] that culminated in the creation of the WTO. However, recent years have seen an equally dramatic pivot towards nationalist retrenchment and protectionist trade policies. Spurred by populist domestic politics,[14] growing geopolitical tensions, and widespread disenchantment with the unintended effects of globalization,[15] economic integration and trade cooperation have given way to a new dynamic of strategic autonomy and unbridled use of political and market power that has paralyzed the governance of international trade[16] and brought about widespread "geoeconomic fragmentation".[17]

Paradoxically, this challenging context for multilateral and regional cooperation has also witnessed a surge in initiatives on trade and climate policy, breaking with a decade-long pattern of indecision and gridlock that characterized any effort to bridge the unclear assignment of responsibility for cooperation at the nexus of the international trade and climate regimes.[18] Over the last five years, advances on this front have included:

- the anchoring of provisions related to climate change in preferential trade agreements,[19]
- the negotiation of a new generation of trade agreements such as the Agreement on Climate Change, Trade and Sustainability between Costa Rica, Fiji, Iceland, New Zealand, Norway and Switzerland announced in 2019,[20] reflecting a trend that could see significant future proliferation;[21] and
- the launch of the Trade and Environmental Sustainability Structured Discussions, in 2020, which has attracted participation of WTO members representing over 80% of world trade, and features discussions on "how trade-related climate measures and policies can best contribute to climate and environmental goals and commitments while being consistent with WTO rules and principles".[22]

In 2023 alone, the nexus of trade and climate cooperation has seen the launch of a Ministerial-level global forum dedicated to trade and climate and sustainable development issues, the Coalition of Trade Ministers on Climate;[23] a joint effort of the

12 Charles Krauthammer, 'The Unipolar Moment' (1990) 70(1) *Foreign Affairs* 23–33.
13 Francis Fukuyama, *The End of History and the Last Man* (Free Press, 1992).
14 Dani Rodrik, 'Populism and the Economics of Globalization' (2018) 1 *Journal of International Business Policy* 1 12–33.
15 Anthea Roberts and Nicolas Lamp, *Six Faces of Globalization: Who Wins, Who Loses, and Why It Matters* (Harvard University Press, 2021).
16 Bernard M. Hoekman and Petros C. Mavroidis, 'Preventing the Bad from Getting Worse: The End of the World (Trade Organization) As We Know It?' (2021) 32(3) *European Journal of International Law* 743–770; Peter Van den Bossche, 'Is There a Future for the WTO Appellate Body and WTO Dispute Settlement?', WTI Working Paper, vol. 01/2022 (World Trade Institute, 2022), https://www.wti.org/research/publications/1344/is-there-a-future-for-the-wto-appellate-body-and-wto-dispute-settlement.
17 International Monetary Fund (IMF), 'World Economic Outlook: A Rocky Recovery' (IMF, April 2023), https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023; see also International Chamber of Commerce (ICC), 'ICC 2023 Trade Report: A Fragmenting World' (ICC, 2023), https://iccwbo.org/news-publications/policies-reports/icc-2023-trade-report-a-fragmenting-world; Pinelopi Goldberg and Tristan Reed, 'Is the Global Economy Deglobalizing? And If So, Why? And What is Next?' (Brookings Institution, 2023), https://www.brookings.edu/wp-content/uploads/2023/03/BPEA_Spring2023_Goldberg-Reed_unembargoed.pdf.
18 Das et al. (n. 3); Susanne Droege et al., 'The Trade System and Climate Action: Ways Forward under the Paris Agreement' (2017) 13(2) *South Carolina Journal of International Law and Business* 195–262.
19 WTO, 'Climate Change in Regional Trade Agreements' (WTO, 2022), https://www.wto.org/english/news_e/news21_e/clim_03nov21-2_e.pdf. See also Jean-Frédéric Morin and Sikina Jinnah, 'The Untapped Potential of Preferential Trade Agreements for Climate Governance' (2018) 27(3) *Environmental Politics* 541–565.
20 Ronald Steenblik and Susanne Droege, 'Time to ACCTS? Five Countries Announce New Initiative on Trade and Climate Change' (International Institute for Sustainable Development, 25 September 2019, https://www.iisd.org/articles/insight/time-accts-five-countries-announce-new-initiative-trade-and-climate-change.
21 Noémie Laurens, Clara Brandi, and Jean-Frédéric Morin, 'Climate and Trade Policies: From Silos to Integration' (2022) 22(2) *Climate Policy* 248–253.
22 Ministerial Conference, 'Trade and Environmental Sustainability Structured Discussions (TESSD): Ministerial Statement on Trade and Environmental Sustainability (Revision)' (WTO, 14 December 2021), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN21/6R2.pdf&Open=True.
23 The Coalition of Trade Ministers on Climate, 'Coalition Launch Statement' (January 2023), https://www.tradeministersonclimate.org.

WTO, the World Bank, and the World Economic Forum labelled Action on Climate and Trade that is intended to help developing economies use trade to meet their climate change mitigation and adaptation goals;[24] a Clean Energy Economy Action Plan agreed by the leaders of the G7 leading industrialized nations that highlights the role of trade and trade policies in accelerating decarbonization and a clean energy transition globally;[25] a Transatlantic Initiative on Sustainable Trade announced by the EU and the United States as part of the regular EU-US Trade and Technology Council process, establishing a work program to "accelerate the transition to a climate neutral and circular economy to the benefit of businesses, workers, and consumers on both sides of the Atlantic";[26] and a dedicated "Trade Day" and "Trade Pavilion" organized as part of the United Nations Climate Change Conference in Dubai (COP28).[27]

Although less explicitly targeted at the intersection of trade and climate cooperation, several other initiatives that have been recently set in motion are nonetheless seen as a forum for discussions on the implications of trade on decarbonization and vice versa. Among these is IFCMA, an initiative announced in 2022 by the OECD to promote data and information sharing, mutual learning, and inclusive multilateral dialogue on emissions reduction efforts across a "diverse set of countries – developed, emerging and developing".[28] Also in 2022, the G7 leading industrialized nations launched a so-called "Climate Club" that is meant to accelerate climate action and will be "inclusive in nature and open to countries that are committed to the full implementation of the Paris Agreement".[29] These initiatives emphasize their cooperative, open and inclusive nature, yet seek to address politically sensitive issues such as emissions leakage and the comparability of climate efforts, both of which are closely related to the use of trade-related climate measures such as BCAs.

Other initiatives have adopted a sectoral focus. This includes another transatlantic initiative, the Global Arrangement on Sustainable Steel and Aluminium, which has been under negotiation since 2022 and aims to facilitate trade in low-carbon steel and aluminum while simultaneously addressing global overcapacity in the sector. Although it also professes openness to "like-minded countries", it is more explicit in how it brandishes trade restrictions to advance economic and environmental policy goals.[30] Such declared recourse to controversial means of implementation has also, in turn, raised the political stakes between the two jurisdictions negotiating the arrangement as well as for trade partners who stand to be affected by limited market access. As policy developments at the intersection of trade and climate become more specific in scope and reveal political sensitivities, it seems they also render international cooperation increasingly challenging.

Nowhere is this more apparent than in the unilateral efforts of countries or regions already embracing climate policy measures that directly restrict international trade in goods. Although these efforts still occasionally declare cooperation a desirable goal, they are, first and foremost, driven by domestic stakeholder politics and national economic

24 World Economic Forum, 'Action on Climate and Trade: A Developing World Imperative for Climate-Adjusted Trade Flows' (World Economic Forum, 19 April 2023), https://www.weforum.org/press/2023/04/action-on-climate-and-trade-a-developing-world-imperative-for-climate-adjusted-trade-flows.

25 Group of Seven (G7), 'G7 Clean Energy Economy Action Plan' (20 May 2023), https://www.mofa.go.jp/files/100506846.pdf.

26 EU–US Trade and Technology Council, 'Joint Statement EU-US Trade and Technology Council of 31 May 2023 in Lulea, Sweden. Annex I: Transatlantic Initiative on Sustainable Trade Work Programme' (EU–US Trade and Technology Council, 31 May 2023), https://ec.europa.eu/commission/presscorner/detail/en/statement_23_2992.

27 WTO, 'WTO Secretariat to Highlight Role of Trade Policy for Climate Action at COP28 in Dubai' (WTO, 9 November 2023), https://www.wto.org/english/news_e/news23_e/cop28_09nov23_e.htm.

28 Organisation for Economic Co-operation and Development (OECD), 'OECD Secretary-General Report to G20 Leaders on the Establishment of the Inclusive Forum on Carbon Mitigation Approaches' (OECD, November 2022), https://www.oecd.org/tax/oecd-secretary-general-report-g20-leaders-establishment-ifcma-indonesia-november-2022.pdf. See further Section 5.4.

29 G7, 'G7 Statement on Climate Club' (G7, 28 June 2022), https://www.g7germany.de/resource/blob/974430/2057926/2a7cd9f10213a481924492942dd660a1/2022-06-28-g7-climate-club-data.pdf. See further Section 5.2.

30 European Union and United States, 'Joint EU-US Statement on a Global Arrangement on Sustainable Steel and Aluminium' (European Commission, 31 October 2021), https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5724. See further Section 5.3.

interests. Many of the protectionist tendencies that underlie the current dynamic of economic retrenchment and fragmentation are mediated by industrial policy strategies that invoke climate ambition and deep decarbonization as both a justification and a central objective: these include the border carbon adjustments that will be discussed in greater detail in Section 3.1, such as the EU CBAM and several bills recently introduced in the US Congress, but extend well beyond such narrow policies applied to imported goods and comprise a much broader range of government interventions aimed at creating, building, or shaping industries to stimulate technology creation and deployment, spur employment opportunities, diversify production, and build supply chain resilience.[31]

Most ambitious among these interventions is the Inflation Reduction Act (IRA) of 2022,[32] a sweeping investment program that comprises a range of tax incentives, grants and concessionary loans for clean technology deployment initially estimated by the Congressional Budget Office to amount to approximately US$ 391 billion over the next decade,[33] but which may end up being a multiple of that figure due to the uncapped nature of the tax credits and subsequently expanded eligibility rules.[34] Coupled with further fiscal appropriations and expenditures under the previously adopted Infrastructure Investment and Jobs Act of 2021[35] and CHIPS and Science Act of 2022[36] as well as policies adopted by the executive branch, such as a public procurement mandate that recruits the purchasing power of the Federal Government to advance climate policy objectives,[37] these initiatives variously affect trade in goods and services between the United States and its economic partners by conditioning incentives and the award of tendered projects on climate criteria and through local content or assembly requirements aimed at relocating manufacturing capacities to the United States.

While the foregoing US efforts may be unrivalled in sheer scope, other regions have not hesitated to leverage similar trade measures as part of their industrial policy strategies.[38] Under its ambitious European Green Deal, the EU has set out a Green Deal Industrial Plan[39] and proposed related implementation measures, notably the Net Zero Industry Act[40] and Critical Raw Materials Act,[41] that stipulate domestic extraction, processing, manufacturing, and deployment targets for various advanced technologies and materials. They draw on and complement several existing funds and financial instruments, such as the Green Deal Investment Plan, the NextGenerationEU Recovery and Resilience Facility, the RePowerEU initiative, the Innovation Fund, and Horizon Europe, as well as loosened restrictions on domestic subsidies under the Temporary Crisis and Transition Framework for State Aid[42] to mobilize the necessary investment flows.

31 Dani Rodrik, 'Green Industrial Policy' (2014) 30(3) *Oxford Review of Economic Policy* 469–491.

32 117th Congress, 'To Provide for Reconciliation Pursuant to Title II of S. Con. Res. 14', Pub. L. No. 117–169, § 136 Stat., 1818 (2022), https://www.govinfo.gov/content/pkg/PLAW-117publ169/pdf/PLAW-117publ169.pdf.

33 Congressional Budget Office, 'Estimated Budgetary Effects of Public Law 117-169, to Provide for Reconciliation Pursuant to Title II of S. Con. Res. 14' (Congressional Budget Office, 16 August 2022), https://www.cbo.gov/publication/58455.

34 John E.T. Bistline, Neil Mehrotra, and Catherine Wolfram, 'Economic Implications of the Climate Provisions of the Inflation Reduction Act' (Brookings Institution, 2023), https://www.brookings.edu/wp-content/uploads/2023/03/BPEA_Spring2023_Bistline-et-al_unembargoedUpdated.pdf; Credit Suisse, 'US Inflation Reduction Act: A Tipping Point in Climate Action' (Credit Suisse, 2022), https://www.credit-suisse.com/treeprintusinflationreductionact.

35 117th Congress, 'An Act to Authorize Funds for Federal-Aid Highways, Highway Safety Programs, and Transit Programs, and for Other Purposes', Pub. L. No. 117–58, § 135 Stat., 429 (2021), https://www.govinfo.gov/content/pkg/PLAW-117publ58/pdf/PLAW-117publ58.pdf.

36 117th Congress, 'Making Appropriations for Legislative Branch for the Fiscal Year Ending September 30, 2022, and for Other Purposes', Pub. L. No. 117–167, § 136 Stat., 1366 (2022), https://www.govinfo.gov/content/pkg/PLAW-117publ169/pdf/PLAW-117publ169.pdf.

37 Executive Office of the President, 'Executive Order 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability' (Federal Government, 8 December 2021), https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability.

38 David Kleimann et al., 'Green Tech Race? The US Inflation Reduction Act and the EU Net Zero Industry Act' (2023, fc.) *The World Economy*, https://onlinelibrary.wiley.com/doi/10.1111/twec.13469.

39 European Commission, 'Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: A Green Deal Industrial Plan for the Net-Zero Age', COM(2023) 62 final (1 February 2023), https://commission.europa.eu/system/files/2023-02/COM_2023_62_2_EN_ACT_A%20Green%20Deal%20Industrial%20Plan%20for%20the%20Net-Zero%20Age.pdf.

40 European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on Establishing a Framework of Measures for Strengthening Europe's Net-Zero Technology Products Manufacturing Ecosystem (Net Zero Industry Act)' COM(2023) 161 final (16 March 2023), https://single-market-economy.ec.europa.eu/system/files/2023-03/COM_2023_161_1_EN_ACT_part1_v9.pdf.

41 European Commission, 'Proposal for a Regulation of the European Parliament and of the Council Establishing a Framework for Ensuring a Secure and Sustainable Supply of Critical Raw Materials (Critical Raw Materials Act)' COM(2023) 160 Final (16 March 2023), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023PC0160.

42 European Commission, 'Communication from the Commission: Temporary Crisis and Transition Framework for State Aid Measures to Support the Economy Following the Aggression against Ukraine by Russia' C(2023) 1711 final (9 March 2023), https://competition-policy.ec.europa.eu/state-aid/ukraine_en.

Similarly, China – as a centrally planned economy – has heavily relied on government interventions to strengthen the competitiveness of its domestic industries and expand market share in global markets. Most recently, the Made in China 2025 plan adopted in 2015 identified ten strategically important sectors – including several low-carbon technologies, such as electric vehicles, advanced rail and shipbuilding, and renewable energy – that would benefit from heavy direct investment in advanced manufacturing and new guidelines to limit foreign competition.[43] Its stated ambition has been to achieve global dominance in those industries, objectives that are also reflected in the current 14th Five-Year Plan and its mandate to "[d]evelop and expand strategic emerging industries".[44]

Common to all these unilateral policy initiatives are direct and often forceful interventions in trade flows justified by objectives that include climate policy, be it through support for domestic manufacturing or restrictions on foreign goods and services. While ostensibly serving to advance greenhouse gas emission reductions, these initiatives have also been criticized for fragmenting markets and thereby increasing costs for materials and components essential to decarbonization,[45] or disguising outright protectionism to promote domestic economic interests[46] at the expense of market access and economic opportunities for developing countries.[47] Also common to these unilateral policies is a relative dearth of meaningful attempts to engage in international cooperation, despite the clear and often intended impacts on international trade.

There are exceptions to this pattern: a flurry of hastily negotiated agreements to cooperate on critical minerals and other raw materials to mitigate diplomatic tensions following passage of the IRA, or the aforementioned transatlantic process to elaborate the GASSA, evidence some willingness to collaborate, yet this willingness appears limited to close strategic allies and motivated by overriding geopolitical considerations. Ultimately, thus, the remarkable rise in activities at the nexus of trade and climate policy traced at the outset of this section may be less owed to a sudden resolve to bridge the enduring gap between both issue areas than a recognition that decades of progress on trade liberalization are now threatened by the recent wave of unilateral market interventions to advance particular economic, strategic and environmental interests. The extent to which these interventions encompass an international dimension, and potential ways to strengthen cooperation and harness benefits while limiting risks, is therefore discussed in greater detail in the next sections of this report.

43 State Council, 'Notice of the State Council on the Publication of "Made in China 2025" (Unofficial Translation)' (Central People's Government of the People's Republic of China, 8 May 2015), https://cset.georgetown.edu/wp-content/uploads/t0432_made_in_china_2025_EN.pdf.

44 National People's Congress, 'The 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives Through the Year 2035' (Central People's Government of the People's Republic of China, 12 March 2021), http://www.gov.cn/xinwen/2021-03/13/content_5592657.htm.

45 John Paul Helveston, Gang He, and Michael R. Davidson, 'Quantifying the Cost Savings of Global Solar Photovoltaic Supply Chains' (2022) 612(7938) *Nature* 83–87; Prerna Prabhakar and Hemant Mallya, 'Sustainability-driven Non-tariff Measures: Assessing Risks to India's Foreign Trade' (Council on Energy, Environment and Water, September 2023), https://www.ceew.in/sites/default/files/sustainability-driven-non-tariff-measures-and-assessing-risks-foreign-trade-risks-india.pdf.

46 Pooja Rajawat and Jayam Jha, 'Tracing Protectionism in EU's Carbon Border Adjustment Mechanism (CBAM)' (Modern Diplomacy, 16 June 2023), https://moderndiplomacy.eu/2023/06/16/tracing-protectionism-in-eus-carbon-border-adjustment-mechanism-cbam; Arvind Ravikumar, 'Carbon Border Taxes Are Unjust' (*MIT Technology Review*, 27 July 2020), https://www.technologyreview.com/2020/07/27/1005641/carbon-border-taxes-eu-climate-change-opinion.

47 The African Climate Foundation and the Firoz Lalji Institute for Africa, 'Implications for African Countries of a Carbon Border Adjustment Mechanism in the EU' (London School of Economics and Political Science, 2023), https://www.lse.ac.uk/africa/assets/Documents/AFC-and-LSE-Report-Implications-for-Africa-of-a-CBAM-in-the-EU.pdf; Ravikumar (n. 46); UNCTAD (n. 10).

3. The External Dimensions of BCAs

3.1 The Global Diffusion of BCAs

As the introduction already highlighted, BCAs have seen growing momentum as a policy option at the intersection of climate change and international trade, with a proliferation of policy announcements and concrete developments already evincing far-reaching international reactions. Most importantly, after more than a decade of hesitant debate driven by individual Member States and domestic stakeholder constituencies, the **European Union** recently adopted its CBAM, which has entered into force and is currently undergoing further operationalization.

Concerns about the legal and diplomatic repercussions had impeded earlier action on BCAs in Europe, and only the successful adoption of the Paris Agreement, a broader deterioration in international trade relations, and a surging carbon price under the EU Emissions Trading System (EU ETS) converged to alter the parameters of political debate in Brussels and allow the rapid embrace of a previously shunned policy instrument. From its first announcement in the Political Guidelines of the incoming European Commission President Ursula von der Leyen in July 2019[48] to its publication in the Official Journal in May 2023,[49] the CBAM saw accelerated passage by the European institutions despite major external shocks, including the COVID-19 pandemic, a pronounced energy crisis, and the Russian invasion of Ukraine.

From October 2023, the CBAM requires importers of six product categories – cement, iron and steel, aluminum, fertilizer, electricity, and hydrogen – to declare the emissions embedded in these goods based on emissions data from foreign producers or default assumptions about the carbon intensity of these goods once they enter the customs territory of the EU. From 2026, importers will additionally need to purchase and annually surrender certificates in an amount equal to the verified emissions from the preceding year, with certificates priced at the same level as EU ETS allowances. From that date until 2034, the CBAM will successively replace free allocation of allowances as the primary safeguard against emissions leakage under the EU ETS.

Although in force, the CBAM Regulation merely defines overarching objectives and sets out the basic obligations, while also creating an institutional and procedural framework for its implementation by the European Commission and Member State authorities. Important aspects have yet to be operationalized on the basis of several provisions in the CBAM Regulation that mandate reviews of CBAM performance and empower the European Commission to adopt implementing and delegated acts on specific issues, including emissions reporting, verification of emission reports and accreditation of verifiers, and accounting for carbon prices paid in the country of origin of imported goods. A first such implementing act, the Implementing Regulation setting out the rules and process for emissions reporting during the transitional period, was adopted through the comitology procedure and entered into force in August 2023.[50]

48 Ursula von der Leyen, 'Political Guidelines for the Next European Commission 2019-2024' (Luxembourg: Publications Office of the European Union, 2020), https://data.europa.eu/doi/10.2775/101756.
49 Regulation (EU) 2023/956 (n. 7).
50 Commission Implementing Regulation (EU) 2023/1773 Laying down the Rules for the Application of Regulation (EU) 2023/956 of the European Parliament and of the Council as Regards Reporting Obligations for the Purposes of the Carbon Border Adjustment Mechanism During the Transitional Period [2023] OJ L228/94.

In the **United States**, BCAs have similarly been discussed for more than a decade,[51] although it was mostly the absence of domestic constraints on industrial emissions that prevented BCAs from acquiring greater purchase in the federal policy debate. Instead, California became the first jurisdiction to adopt a BCA at the subnational level, although its scope was limited to electricity imports from neighbouring states. More recently, however, combining international trade and climate policy has gained renewed traction as one of the limited climate policy options that might secure bipartisan support in the federal legislature, given the ability of such policies at the interface of trade and climate to promote domestic industrial policy objectives and strengthen US interests vis-à-vis geopolitical rivals such as China.

Several recent proposals introduced in the US Congress would advance some form of import fee to leverage the perceived US "carbon advantage".[52] A bill introduced in July 2021 by Senator Christopher A. Coons and Representative Scott H. Peters, the FAIR Transition and Competition Act, would impose a fee on imports of petroleum, natural gas, coal, and several primary goods such as aluminum, steel, iron, and cement, basing the fee on the "domestic environmental cost" incurred by US producers under a portfolio of federal and state climate policies.[53]

In June 2022, Senator Sheldon Whitehouse introduced his bill for a Clean Competition Act that would similarly place a fee on imports of fossil fuels and industrial primary products, as well as finished goods containing a minimum share of covered primary goods. Unlike the proposed fee in the FAIR Transition and Competition Act, however, this fee would begin at US$ 55 per ton, increasing at 5% above inflation per year, and would only be due on the share of emissions that exceeds an annually declining US emissions intensity baseline for each product category; the methods to determine embedded emissions would be differentiated by country of origin.[54]

While these two bills were introduced by Democratic legislators, a more recent legislative proposal for a "foreign pollution fee" was introduced in November 2023 by a Republican lawmaker, Senator William M. Cassidy.[55] As described by its sponsor, this proposal would serve to counter China and its challenge to US military, geopolitical and economic might.[56] Like the other proposals described above, its scope would be broader than the EU CBAM and include various energy products such as fuels, batteries, solar panels and wind turbines, alongside the common industrial goods. Covered goods would be subject to a foreign pollution fee if their average carbon intensity in the country of origin exceeds the average carbon intensity of comparable US products by 10% or more, with the fee level calculated to ensure that the overall carbon intensity of imports remains below specific thresholds. Unlike the Clean Competition Act introduced by Senator Whitehouse, the Foreign Pollution Fee Act would not create any new compliance obligations for domestic producers of covered goods. Importantly, however, the bill envisions opportunities for international partnerships, allowing trade partners to avoid the foreign pollution fee under certain conditions, but requiring them to apply similar measures to imports from third countries, provide verified emissions data to the US, and lower trade barriers for US products.

51 van Asselt and Brewer (n. 5)
52 The notion of a US 'carbon advantage' was first coined in Catrina Rorke and Greg Bertelsen, 'America's Carbon Advantage' (Climate Leadership Council, 12 September 2020), https://clcouncil.org/reports/americas-carbon-advantage.pdf; see, however, also Shuting Pomerleau, 'Is the U.S. Really a Global Leader in Low-Carbon Industry?' (Washington, DC: Niskanen Center, September 2023), https://www.niskanencenter.org/wp-content/uploads/2023/09/Is-the-U.S.-really-a-global-leader-in-low-carbon-industry-1.pdf.
53 117th Congress, 1nd Session, S. 2378, 'Fair, Affordable, Innovative, and Resilient Transition and Competition (FAIR) Act' (2021), https://www.congress.gov/bill/117th-congress/senate-bill/2378/text.
54 117th Congress, 2 st Session, S. 4355, 'Clean Competition Act' (2022), https://www.congress.gov/bill/117th-congress/senate-bill/4355/text.
55 118 Congress, 1 Session, 'Foreign Pollution Fee Act of 2023', S. 3198 (2023), https://www.congress.gov/118/bills/s3198/BILLS-118s3198is.pdf.
56 Bill Cassidy, 'A Tariff for the Climate' (*Foreign Affairs*, 5 October 2023), https://www.foreignaffairs.com/united-states/tariff-climate-pollution-environment.

Spurred by the evolving global context and growing climate policy ambition, several **additional jurisdictions** have likewise begun exploring BCAs as a domestic policy option. These jurisdictions include Canada[57] and the United Kingdom,[58] which have each launched formal consultations on carbon leakage and the potential deployment of BCAs, as well as, at various stages of discussion, Australia,[59] Japan,[60] and Taiwan.[61] Some proposals, such as that allegedly under discussion within the government of India to levy a fee on imports from countries with higher per capita or cumulative greenhouse gas emissions,[62] are more likely an expression of protest against the introduction of the EU CBAM than reflective of an earnest concern about emissions leakage, yet increased mention of BCAs in domestic policy debates shows a clear surge in interest also across developing countries and emerging economies, including Brazil and Mexico.

If reactions to the EU's adoption of the CBAM are any indication, the gradual expansion of BCAs will elicit widespread criticism.[63] Still, in a remarkable demonstration of the "Brussels Effect",[64] the CBAM has triggered cascading spillover effects, from rendering BCAs a viable policy response to persistent climate policy asymmetries in the post-Paris world, to the dramatic acceleration of carbon pricing initiatives across its major trading partners.[65] To no small degree, these spillover effects are owed to specific features of the CBAM design which account for external dimensions, such as physical or policy developments in foreign trade partners. Importantly, such links to external aspects can also become an entry point for cooperation across BCAs. The next section therefore discusses how the design and implementation of BCAs can reflect external developments, drawing on the CBAM and other recent BCA proposals as relevant case studies.

3.2 How BCAs Account for External Dimensions

Various features in the design and implementation of BCAs introduce an external dimension that relates to circumstances or developments in third countries. Such features render the application of the BCA or elements thereof conditional on, or otherwise affect, factors beyond the territory of the implementing jurisdiction. Because of how these features account for or actively influence circumstances and developments in trade partner jurisdictions, they are of inherent relevance for the question of bilateral, regional or multilateral cooperation on BCAs. In the following paragraphs, this subsection surveys the various design and implementation aspects of a BCA that have such an external dimension, providing examples from existing or proposed BCAs to illustrate their potential relevance for cross-border cooperation.

First, BCAs may condition their **geographic scope** – that is, the countries to whose goods they are applied – on particular criteria, such as development status or the achievement of a particular level of climate policy ambition. All goods originating from countries that fall under those criteria would be exempted from the application of the BCA, or otherwise enjoy favourable treatment under the BCA. Several proposals for BCAs discussed over

57 Government of Canada, 'Consultation on Border Carbon Adjustments' (2021), https://www.canada.ca/en/department-finance/programs/consultations/2021/border-carbon-adjustments.html.
58 Government of United Kingdom, 'Addressing Carbon Leakage Risk to Support Decarbonisation' (30 March 2023), https://www.gov.uk/government/consultations/addressing-carbon-leakage-risk-to-support-decarbonisation.
59 Christopher E.G. Bowen, 'Speech to Australian Business Economists' (15 August 2023), https://minister.dcceew.gov.au/bowen/speeches/speech-australian-business-economists.
60 Ministry of Economy, Trade and Industry, ' . (Interim Report of the Study Group on Economic Methods to Achieve Worldwide Carbon Neutrality)' (Tokyo: METI, August 2021), https://www.meti.go.jp/shingikai/energy_environment/carbon_neutral_jitsugen/pdf/20210825_2.pdf.
61 Taiwan, 'Climate Change Response Act', Presidential Order Hua-Tsung-Yi-Yi-Tzu No. 11200010681 § (2023), https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=O0020098 Art. 31.
62 Abhishek Law, 'India to Raise at WTO EU's Plan to Levy Carbon Tax on Imports' (*The Hindu BusinessLine*, 27 January 2023), sec. Economy, https://www.thehindubusinessline.com/economy/india-may-raise-eus-carbon-tax-issue-at-wto/article66440036.ece.
63 Daniel Bergin et al., 'Perception of the Planned EU Carbon Border Adjustment Mechanism in Asia Pacific: An Expert Survey' (Konrad Adenauer Stiftung e.V., 2021), https://www.kas.de/documents/265079/265128/EU+Carbon+Border+Adjustment+Mechanism.pdf/fed1d5a4-4424-c450-a1b9-b7dbd3616179?version=1.1&t=1615356593906; Indra Overland and Rahat Sabyrbekov, 'Know Your Opponent: Which Countries Might Fight the European Carbon Border Adjustment Mechanism?' (2022) 169 *Energy Policy* 113175.
64 Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford University Press, 2020).
65 World Bank, *State and Trends of Carbon Pricing 2022* (World Bank, 2022), 28.

time in the United States, for instance, would have altogether exempted Least Developed Countries (LDCs), countries eligible for official development assistance, or countries responsible for a de minimis share of global emissions, from their geographic scope.[66] Likewise, they would have exempted countries deemed to have taken comparable climate action, countries that are parties to relevant cooperative agreements, or countries whose goods are as carbon intensive as, or less carbon intensive than, the same goods produced in the United States.[67] The most recent US legislative proposal, the Foreign Pollution Fee Act, attaches consequences to average income levels in trade partner countries, distinguishing between low or lower middle income and upper middle income countries to afford the former some concessions not enjoyed by advanced emerging economies such as China.[68]

By contrast, the EU CBAM does not exempt any countries based on development status. While legislators debated the option of including such an exemption,[69] the European Commission cautioned against it, stating that "blanket exemptions from a CBAM should be avoided, as setting up a mechanism that will encourage LDCs to increase their level of emission" would "run counter to the overarching objective of the CBAM."[70] Instead, the CBAM Regulation now merely states in a recital to its preamble that "[t]he Union should provide technical assistance … to developing countries and to least developed countries as identified by the United Nations (LDCs)", without however specifying whether and how such assistance will be provided.[71] The absence of any direct concessions for developing countries has been criticized for contravening the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) of the UNFCCC, and for effectively weakening the legal prospects of the CBAM in the event of a challenge before the WTO dispute settlement mechanism.[72]

While the CBAM may not provide for exemptions based on development status, it does exclude the countries and territories listed in an annex to the CBAM Regulation.[73] Countries listed in this annex are those that are fully integrated into the EU ETS, namely the European Economic Area (EEA) member states Iceland, Liechtenstein, and Norway, as well as countries with an emissions trading system that is linked to the EU ETS, currently only Switzerland. The rationale for this exclusion is the fact that carbon prices in these countries are comparable to those in the EU, obviating the concern about emissions leakage due to differences in the carbon cost faced by industrial emitters. Neighbouring countries may also be temporarily exempted from coverage of electricity imports if their electricity markets are integrated with the EU internal market for electricity through market coupling.[74] Additionally, the annex excludes several offshore territories of the EU that have no relevant industrial emissions.

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66 111th Congress, 1 Session, 'American Clean Energy and Security Act of 2009', H.R. 2454 (2009), https://www.congress.gov/111/bills/hr2454/BILLS-111hr2454pcs.pdf, Sec. 768(a)(1)(E)(ii) and (iii): "any foreign country that the United Nations has identified as among the least developed of developing countries' or 'any foreign country ... responsible for less than 0.5 percent of total global greenhouse gas emissions"; Coons and Peters, Fair, Affordable, Innovative, and Resilient Transition and Competition (FAIR) Act, Sec. 9904(b)(2)(A): "any country included on the list of Least Developed Countries on the most recent Development Assistance Committee List of Official Development Assistance Recipients published by the Organisation for Economic Co-operation and Development"; Clean Competition Act, Sec. 4691(b)(3)(D): "produced in a relatively least developed country (as described in section 124 of the Foreign Assistance Act of 1961 [22 U.S.C. 2151v])".

67 American Clean Energy and Security Act of 2009, Sec. 767(c)(1) to (3): exemptions apply if "[t]he country is a party to an international agreement to which the United States is a party that includes a nationally enforceable and economy-wide greenhouse gas emissions reduction commitment for that country that is at least as stringent as that of the United States" or the "country is a party to a multilateral or bilateral emission reduction agreement for that sector to the which the United States is a party" or the "country has an annual energy or greenhouse gas intensity … for the sector that is equal to or less than the energy or greenhouse gas intensity for such industrial sector in the United States"; Fair, Affordable, Innovative, and Resilient Transition and Competition (FAIR) Act Sec. 9904(b)(2)(B)(ii): "enforces laws and regulations designed to limit or reduce greenhouse gas emissions that are at least as ambitious as Federal laws and regulations designed to limit or reduce greenhouse gas emissions".

68 Foreign Pollution Fee Act of 2023, Sec. 203.

69 European Parliament, 'A WTO-Compatible EU Carbon Border Adjustment Mechanism' (10 March 2021), https://www.europarl.europa.eu/doceo/document/TA-9-2021-0071_EN.html, para. 8: "Least Developed Countries and Small Island Developing States should be given special treatment in order to take account of their specificities and the potential negative impacts of the CBAM on their development".

70 European Commission, 'Commission Staff Working Document Impact Assessment Report Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism', SWD(2021) 643 final, 14 July 2021, 30, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021SC0643.

71 Regulation (EU) 2023/956 (n. 7), recital 21.

72 Ilaria Espa and Kateryna Holzer, 'From Unilateral Border Carbon Adjustments to Cooperation in Climate Clubs: Rethinking Exclusion in Light of Trade and Climate Law Constraints', in Jelena Bäumler et al. (eds.), *European Yearbook of International Economic Law 2022* (Springer, 2023), 389–410; Gracia Marín Durán, 'Securing Compatibility of Carbon Border Adjustments with the Multilateral Climate and Trade Regimes' (2023) 72(1) *International & Comparative Law Quarterly* 73–103.; Ilaria Espa, Joseph Francois, and Harro van Asselt, 'The EU Proposal for a Carbon Border Adjustment Mechanism (CBAM): An Analysis under WTO and Climate Change Law' (2022) 20(1) *Oil, Gas & Energy Law* 1–32.

73 Regulation (EU) 2023/956 (n. 7), Annex III.

74 Ibid., Art. 7(2).

A second way in which BCAs can take into account external factors is by reflecting these in the **calculation of the adjustment** itself. Rather than exempt entire countries from the scope of the BCA, the level of the adjustment imposed on imported goods can be prorated to give credit for a carbon price or climate policy cost borne by those goods in the country of origin. That is also the approach chosen by the EU CBAM, which explicitly provides for "a reduction in the number of CBAM certificates to be surrendered in order to take into account the carbon price paid in the country of origin for the declared embedded emissions".[75] At first glance, this approach appears a logical way to avoid pricing the same emissions twice, which would overshoot the stated objective of preventing carbon leakage and raise questions of fairness; it also creates a strong incentive for third countries to introduce their own carbon pricing systems, which in turn further reduces the risk of carbon leakage.[76] At the same time, it also gives rise to challenging questions about the various forms of carbon pricing that can be considered eligible for credit, and has been criticized by third countries for interfering with their sovereign right under general international law and the Paris Agreement to determine their own climate policy choice.[77]

Recent proposals for a BCA in the United States would not have accounted for a carbon price paid abroad, not least because the US currently has no domestic carbon price in place at the federal level that can be adjusted for. This raises the question of whether and how policies other than a carbon price could be accounted for in the calculation of the adjustment under a BCA, given that such policies do not express the compliance burden they impose – and thus the carbon cost – in monetary terms that can be easily credited against the BCA payment obligation. Here, the FAIR Transition and Competition Act provides an example of how this compliance burden under climate policies other than a carbon price could be converted into monetary terms by requiring determination of the "domestic environmental cost" incurred, that is, the estimated compliance cost faced by emitters under one or more climate policies, although any such conversion will always remain vulnerable to diverging views on the appropriate estimation methodology and more broadly elicit questions about the comparability of climate policy efforts, a question that also arises in the context of cooperative initiatives such as the IFCMA (see Section 5.4).

While consideration of external factors in the geographic scope of a BCA and the calculation of the adjustment it imposes are the main ways in which BCAs can integrate an external dimension, other design and implementation features will also typically consider developments beyond the territory of the imposing jurisdiction. One such feature is the **determination of embedded emissions**, which by definition relates to physical processes occurring in third countries, that is, the countries of origin of covered goods. A BCA can opt to assume default values reflecting aggregated data on producer, sectoral or country-level emissions in different countries, obviating the need for emissions accounting by foreign producers. Such default values – which could, for instance, consist of the average carbon intensity of products originating from a particular country or region – have the advantage of greater administrative simplicity, but sacrifice many of the benefits of product-specific emissions data while also increasing the legal risk under general international law and WTO law.[78] With its implementing regulation

75 Ibid., Art. 9.
76 Jos Delbeke and Peter Vis, 'How CBAM Can Become a Stepping Stone towards Carbon Pricing Globally' (European University Institute, 2023), https://doi.org/10.2870/603414.
77 Andrei C. Marcu et al., 'Methods for Crediting Carbon Prices under the CBAM' (Brussels: European Roundtable on Climate Change and Sustainable Transition, 5 October 2023), https://ercst.org/crediting-carbon-prices-under-the-cbam/.
78 Michael A. Mehling and Robert A. Ritz, 'From Theory to Practice: Determining Emissions in Traded Goods under a Border Carbon Adjustment' (2023) 39(1) *Oxford Review of Economic Policy* 123–133.

on emissions reporting during the transitional period, by contrast, the EU CBAM has opted for an approach that is very similar to that applied under the EU ETS, setting out detailed rules and procedures for product-specific emissions monitoring, reporting and verification (MRV) for each category of covered goods.[79] In this system, default values only acquire relevance if importers are unable to, or refuse to, report specific embedded emissions.

Aside from extending the reach of domestic MRV rules and procedures to foreign emissions, this approach may also have implications for institutional structures in third countries when it comes to accrediting legal entities mandated with independent verification of the emission reports submitted under the EU CBAM, a procedure for which detailed rules and eligibility criteria have yet to be set out. Compared to the EU approach, US BCA proposals have instead tended towards applying default rather than reported emission values, at times explicitly mentioning the risk of circumvention if producers are allowed to report actual emissions and export "only their cleanest products".[80] although often allowing for a procedure through which foreign producers can petition for a revision based on actual individual or sectoral data.[81] A more recent legislative proposal, the PROVE IT Act introduced by Senators Christopher A. Coons and Kevin J. Cramer in June 2023, would direct the Department of Energy to calculate the average emissions intensity of a several industrial goods produced both in the United States and in key trading partners,[82] creating a foundation of emissions data for the future implementation of a BCA based on such estimated – rather than actually reported – emissions intensity values.

Finally, a BCA can also incorporate an external dimension through the targeted **use of revenues** collected through its application. Earmarking such revenue for investments in developing countries was already proposed early on to reduce international opposition to the introduction of BCAs and better align it with international climate finance commitments and the aforementioned principle of CBDR-RC under the UNFCCC.[83] Neither the EU CBAM nor any of the US legislative proposals expressly provide for such a revenue allocation to third countries, however, assigning it instead to the general budget or for domestic investments in decarbonization and to assist vulnerable communities. The only suggestion that the EU may offer financial support to third countries in relation to CBAM is provided in the proposal's recital, which indicates that the EU "is committed to working with and supporting low and middle-income third countries towards the decarbonisation of their manufacturing industries".[84]

What the foregoing survey of external dimensions has very clearly shown is that existing or proposed BCAs differ widely in how they consider factors outside the territory of the imposing jurisdiction. This further underscores the potential benefits of international cooperation, and highlights ways in which the external dimension of BCAs could promote or facilitate such cooperation, for instance through strategic use of revenue. Still, leveraging any such opportunities for greater coordination will also face considerable challenges, as the experience with existing cooperative initiatives have already shown. Before tracing progress in such initiatives and the barriers these have encountered in Section 5, however, the next section offers a more detailed analysis of the rationale of international cooperation.

79 Implementing Regulation (EU) 2023/1773 (n. 50).
80 William M. Cassidy, 'Foreign Pollution Fee' (2023), https://www.cassidy.senate.gov/wp-content/uploads/media/doc/fpf_policy_details.pdf: "Pollution intensity calculations are based on a national average related to a covered product to prevent bad actors from only exporting their cleanest products".
81 Fair, Affordable, Innovative, and Resilient Transition and Competition (FAIR) Act Sec. 4691(b)(3)(A) and (B); Clean Competition Act, Sec. 9905(b) and (c).
82 118th Congress, 1st Session, 'PROVE IT Act of 2023', S.1863 (2023), https://www.congress.gov/bill/118th-congress/senate-bill/1863/text?s=10&r=1.
83 Marco Springmann, 'Carbon Tariffs for Financing Clean Development' (2013) 13(1) *Climate Policy* 20–42; Michael Grubb, 'International Climate Finance from Border Carbon Cost Levelling' (2011) 11(3) *Climate Policy* 1050–1057.

Table 1. External dimensions of BCAs.

BCA Name / External Dimension	Carbon Border Adjustment Mechanism (CBAM)	FAIR Transition and Competition Act (Coons/Peters)	Clean Competition Act (Whitehouse)	Foreign Pollution Fee Act (Cassidy)
Jurisdiction	EU	US (federal)	US (federal)	US (federal)
Year	2023	2021	2022	2023
Status	In force	Proposed	Proposed	Proposed
Geographic scope	Exemption of EEA members and countries with linked ETS; no exemption for LDCs	Exemption for LDCs and countries that do not impose a BCA against the US and enforce enforce constraints that "are at least as ambitious" as US federal emission constraints	Exclusion of LDCs	Concessions for lower and lower middle income countries
Calculation of adjustment	Deduction of carbon price effectively paid	No deductions	No deductions	No deductions
Determination of embedded emissions	MRV for each imported product	Default values, with petition procedure for importers	Default values, with petition procedure for importers	Default values, with consideration of voluntarily reported MRV data and option of facility-specific agreements
Use of revenues	Accrues to EU budget; no earmarking	Accrues to States for a Resilient Communities Grant Program and to support RD&D, transfer, export and commercialization of low-carbon technologies commercialization of low-carbon technologies	Accrues to competitive grant program for reductions in carbon intensity and a State Department Economic Support Fund	No specification

4. The Rationales and Goals of International Cooperation on BCAs

4.1 Why Cooperate?

The international dimensions of BCAs discussed in Section 3 underscore the need for countries adopting them (or considering doing so) to engage with third countries. Indeed, international cooperation arguably is a sine qua non for legal as well as political/diplomatic reasons.

International cooperation is a core principle of international (environmental) law, reiterated both in general declarations[85] as well as more specific instruments, such as the Rio Declaration on Environment and Development.[86] This principle has been reiterated in the context of climate change.[87] The preamble of the UNFCCC states that "the global nature of climate change calls for the widest possible cooperation by all countries".[88] Moreover, the UNFCCC principle governing the relationship with the international economic system calls on Parties to "cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties …".[89] The Paris Agreement further requires its Parties to "take into consideration in the implementation … the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties".[90]

International trade law also stresses the importance of cooperation. An early WTO Committee on Trade and Environment report emphasized "multilateral solutions based on international cooperation and consensus as the best and most effective way for governments to tackle environmental problems of a transboundary or global nature".[91] Moreover, the WTO Appellate Body in its interpretation of the chapeau of Article XX of the General Agreement on Tariffs and Trade (GATT) – a provision that could be used to save measures that are deemed to violate the main rules of the GATT – has emphasized the importance of cooperation in the form of "serious good faith" efforts to reach an international agreement".[92] In short, not only does international law offer clear normative guidance for states to cooperate, cooperation may also help the state adopting a trade measure in case such a measure is challenged and deemed to violate the main disciplines of the GATT.

Additionally, from the perspective of international politics and diplomacy, international cooperation can be deemed necessary to avoid exacerbating tensions created by the adoption of BCAs for several reasons:

85 UNGA, 'Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations' UN Doc. A/RES/2625(XXV) (24 October 1970).
86 See Rio Declaration on Environment and Development in 'Report of the United Nations Conference on Environment and Development' UN Doc. A/CONF.151/26 (vol I) (12 August 1992) Principles 7, 12, 27.
87 E.g., UNGA, 'Protection of Global Climate for Present and Future Generations of Humankind' UN Doc. A/RES/77/165; (14 December 2022), preamble; see also 'Draft Guidelines on the Protection of the Atmosphere' in International Law Commission, 'Report of the International Law Commission Seventy-second session (26 April–4 June and 5 July–6 August 2021)' UN Doc. A/76/10 (2021), Guideline 8.
88 United Nations Framework Convention on Climate Change (adopted 29 May 1992, entered into force 21 March 1994) 1771 UNTS 107, preamble.
89 Ibid., Art. 3.5.
90 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS, Art. 4.15.
91 World Trade Organization, 'Report (1996) of the Committee on Trade and Environment', WT/CTE/1 (12 November 1996), para. 171.
92 *United States – Import Prohibition of Certain Shrimp and Shrimp Products (Recourse to Article 21.5)*, WT/DS58/AB/RW (22 October 2001), para. 115ff.

- International cooperation can mitigate the risk of countries adopting protectionist policies disguised as measures to advance climate change mitigation.
- International cooperation can help address the risk that unilateral BCAs lead to retaliatory measures from third countries,[93] which third countries may adopt irrespective of whether a BCA is deemed compatible with WTO law or not.[94] Although formal steps to retaliate against the EU CBAM have yet to materialize, the possibility cannot be ruled out altogether,[95] with some countries openly contemplating a judicial challenge.[96]
- Unilateral BCAs present risks for international climate diplomacy, particularly if they involve a developed country adopting a measure that restricts market access for developing countries. Such measures need to be seen against a broader North-South backdrop in which developed countries have failed to meet pledges to provide financial support,[97] and have long resisted efforts to finance loss and damage arising from climate change impacts.[98] To the extent that BCAs are considered unfair by developing countries,[99] this may lead to further entrenchment of international negotiation positions. International cooperation could help to assuage these concerns and help to build trust through dialogue and the development of jointly agreed guidance.
- International cooperation can lead to the diffusion of best practices in the design and implementation of BCAs.[100]

4.2 Goals of International Cooperation on BCAs

At a general level, there is therefore a clear case for countries to pursue international cooperation on BCAs. More specifically, several different (and non-mutually exclusive) goals can be pursued with international cooperation on BCAs:

(1) Increasing Transparency of BCAs

First, international cooperation can be aimed at strengthening transparency around BCAs, including their regulatory design and implementation. International cooperation could, for instance, seek to share information: (i) about the rationale(s) for why a country is adopting a BCA (and why other measures were not considered appropriate); (ii) on the possible effects of BCAs, including effects on greenhouse gas emissions, and on international trade flows; and (iii) on certain design elements and how they would be implemented in practice (e.g., how BCAs are calculated, what kind of information importers need to provide, the extent to which other policies are credited, etc.). Transparency is important diplomatically, with a view to building trust among countries.

93 Jean Fouré, Houssein Guimbard, and Stéphanie Monjon, 'Border Carbon Adjustment and Trade Retaliation: What Would Be the Cost for the European Union?' (2016) 54 *Energy Economics* 349–362.
94 Joost Pauwelyn and David Kleimann, 'Trade Related Aspects of a Carbon Border Adjustment Mechanism: A Legal Assessment', Briefing (European Parliament, April 2020), https://www.europarl.europa.eu/cmsdata/210514/EXPO_BRI(2020)603502_EN.pdf, 6.
95 Paola Tamma, 'EU's Carbon Border Levy Risks Death by a Thousand Cuts' (Politico, 6 July 2021), https://www.politico.eu/article/brussels-lonely-crusade-for-a-carbon-border-tax.
96 Anil Nair, 'India to Challenge EU's Carbon Border Tax at WTO' (Policy Circle, 19 September 2023) https://www.policycircle.org/economy/eu-carbon-border-tax/.
97 Oxfam, 'Climate Finance Shadow Report 2023: Assessing the Delivery of the $100 Billion Commitment' (Oxfam, 5 June 2023), https://policy-practice.oxfam.org/resources/climate-finance-shadow-report-2023-621500/.
98 Linda Siegele, 'Financing for Loss and Damage under the UNFCCC: Have We Come Full Circle?' (2023) 32(3) *Review of European, Comparative & International Environmental Law* 403–415. See also Silvia Weko, 'The Future for Global Trade in a Changing Climate: What to Know about the Implications of the EU's Carbon Border Adjustment Mechanism on International Trade' (Chatham House, 5 December 2022), https://www.chathamhouse.org/2022/12/future-global-trade-changing-climate.
99 The African Climate Foundation and the Firoz Lalji Institute for Africa (n 47); Ravikumar (n 46).
100 Dave Sawyer and Renaud Gignac, 'Border Carbon Adjustments: The Case for a Cooperative, Principles-Based Approach' (Canadian Institute for Climate Choices, 2022), https://climateinstitute.ca/wp-content/uploads/2022/01/Border-Carbon-Adjustments-scoping-paper.pdf.

Transparency is also important for businesses and other actors potentially impacted by BCAs, allowing them to adapt their practices where possible.[101]

(2) Developing Shared Objectives and Principles for BCAs

Another goal of international cooperation can be the development of an agreed set of objectives and principles for BCAs. Doing so would allow countries adopting BCAs to align activities without ceding control over the process and content of BCA deployment. To this end, they could agree on a set of shared understandings on, for instance: (1) legitimate objectives of BCAs and the circumstances that justify their use; (2) core principles to adhere to in the development of BCAs, such as transparency and openness, and fairness and due process; (3) best practices in BCA design and implementation, including for the determination of emissions embedded in traded goods, recognition of climate efforts by trade partners, or revenue use; and (4) addressing the impacts of BCA implementation on vulnerable countries.[102]

(3) Improving Comparability

International cooperation could also be aimed at improving understanding of how different climate change mitigation policies compare to each other (i.e., to what extent can different policies be considered equivalent[103]). Where BCAs credit third countries' climate policies (e.g., based on the carbon price paid in a third country in the case of the EU CBAM[104]) or exempt countries on the basis of mitigation efforts,[105] an indirect comparison of different policies takes place. Such a comparison is arguably relatively straightforward in the context of two countries where an explicit carbon price prevails,[106] but with countries adopting a wide range of policy instruments – e.g., carbon pricing, regulatory standards, subsidies, often combined in a complex mix with varying sectoral coverage – international cooperation could seek to develop concrete methodologies how such policies (and their costs and/or mitigation effects) could be compared,[107] taking into account the specific circumstances of developing countries.

(4) Promoting Harmonization

If BCAs or similar measures targeting the carbon footprint of imports are increasingly adopted, there will be a growing need for harmonizing technical standards related to the embedded emissions of traded goods. Such standards could involve (minimum) product

101 International Legal Expert Group on Trade-Related Climate Measures and Policies, 'Principles of International Law Relevant for Consideration in the Design and Implementation of Trade-Related Climate Measures and Policies' (Forum on Trade, Environment, & the SDGs (TESS), 2023), https://tessforum.org/latest/principles-of-international-law-relevant-for-consideration-in-the-design-and-implementation-of-trade-related-climate-measures-and-policies.

102 Aaron Cosbey, 'Principles and Best Practice in Border Carbon Adjustment: A Modest Proposal' (International Institute for Sustainable Development, September 2021), https://www.iisd.org/system/files/2021-09/border-carbon-adjustment-modest-proposal.pdf; Sawyer and Renaud (n. 100).

103 Emily Lydgate, 'Climate Equivalence and International Trade' (2023) 22 *World Trade Review*, 484–496.

104 Regulation (EU) 2023/956 (n. 7), Art. 9.

105 Early bills including BCAs in the United States exempted countries that had taken "comparable action" to the United States. For a discussion, see van Asselt and Brewer (n. 5).

106 Although even such a comparison is by no means simple. See Andrei Marcu et al., 'Methods for Crediting Carbon Prices under the CBAM' (European Roundtable on Climate Change and Sustainable Transition, 12 October 2023), https://ercst.org/crediting-carbon-prices-under-the-cbam/.

107 Notwithstanding academic proposals for such methodologies (e.g. Joseph E. Aldy and William A. Pizer, 'Alternative Metrics for Comparing Domestic Climate Change Mitigation Efforts and the Emerging International Climate Policy Architecture' (2016) 10(1) *Review of Environmental Economics and Policy* 3–24), suggestions to implement this in practice have thus far failed. A notable example is the World Bank's proposal for an "independent rating system and independent, private sector rating agencies", put forward as part of its Networked Carbon Markets initiative. See World Bank, 'Globally Networked Carbon Markets' (December 2013), https://www.worldbank.org/content/dam/Worldbank/document/SDN/cop19-networked-

carbon standards, or standards related to the monitoring, reporting and verification (MRV) of embedded emissions.[108] International cooperation to develop such standards could help to address the risk of a patchwork of diverging requirements, which would significantly increase transaction costs, and would likely pose particular challenges to exporters (especially micro-, small and medium-sized enterprises) in certain developing countries and least developed countries with limited technical and financial resources.[109] Experience with relevant efforts to date, such as the IFCMA operated by the OECD (see Sections 2 and 5.4), suggests that countries with existing MRV standards will prove reluctant to abandon deeply established methodologies and procedures, however, calling for creative and sovereignty-sensitive approaches to harmonization. One such approach could be in the form of mutual recognition agreements, under which countries could accept each other's standards as being equivalent.

(5) Contributing to Global Climate Ambition

Last but not least, international cooperation could be aimed at contributing to an increase in global climate ambition. BCAs can be an important way to create domestic buy-in for an increase in climate ambition. BCAs can also trigger spillover effects by inducing climate action in trading partners. International cooperation with trading partners could ensure that the BCAs are not just used as a "stick", but are combined with "carrots" that also allow third countries to increase their own ambition (e.g., through financial support or technology cooperation). Third countries may also decide to increase their own ambition so as to ensure that any benefits from stronger climate policies accrue at the domestic level (e.g., revenues from carbon pricing).[110]

108 Theresa Wildgrube, Iryna Holovko, and Leon Heckmann, 'The EU CBAM and a Climate Club Synergies and Potential Obstacles for Full Integration' (Adelphi, 2022), https://adelphi.de/en/publications/the-eu-cbam-and-a-climate-club-0.
109 See, e.g., 'Susannah Rodgers, '"Trepidation" as SMEs Get to Grips with EU's CBAM Reporting Rules that Run Deep' (*Carbon Pulse*, 5 October 2023). See also Chris Kardish and Theresa Wildgrube, 'Carbon Border Adjustment Mechanism Administrative Structure and Implementation Challenges' (Adelphi, 2022), https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2022-05-19_climate-change_21-2022_cbam-administrative-structures.pdf.
110 Sawyer and Renaud (n.100).

5. Assessing International Cooperation on BCAs

5.1 Framework for Assessment

This section turns to how international cooperation on BCA could look like. In principle, international cooperation can be pursued through a wide array of venues. Here, we explore the prospects of pursuing cooperation through three recently formed bilateral or plurilateral initiatives that directly or indirectly link to the adoption of BCAs, namely the G7 Climate Club, the GASSA and the IFCMA.[111] Specifically, we examine the potential and limitations of these emerging initiatives to advance international cooperation on BCAs, and how they may complement multilateral forums such as the WTO and UNFCCC.

International cooperation on BCAs can vary along several dimensions:

- The number of parties, ranging from bilateral to plurilateral to multilateral initiatives.
- The type of participants, including states, as well as other actors (e.g., businesses and investors, civil society organizations).
- Whether behaviour is governed in an ad hoc, one-off way, or whether institutions are established for long-term cooperation.
- The legal form in which it is shaped, ranging from informal arrangements without any legal status to legally binding treaties.[112]

Here, we concentrate on two core features of international cooperative initiatives, namely their inclusiveness and institutional strength. Both features can be linked to an initiative's input legitimacy, which refers to the quality of the process through which decisions are made.[113] Inclusiveness relates to the procedural legitimation of authority, whereas institutional strength can be seen as a way of assessing the source upon which authority is based.[114]

Under these two features we consider the following:

- **Inclusiveness:** This refers to the extent to which an initiative is open to participation, including other states, but also non-state actors. On one end of the spectrum is a completely closed (i.e., exclusive) club to which no new members would be allowed. On the other end of the spectrum is an initiative that is open to participation by any state. In between these two ends of the spectrum, participation may be made conditional upon meeting certain criteria. The extent to which an initiative is inclusive offers an indication of whether it is able to respond to the demands and concerns of actors beyond those that spearheaded the initiative. Although inclusiveness does not

111 BCAs have also been discussed in the WTO context, including through its Committee on Trade and Environment and the TESSD. See, e.g., WTO, 'Report of the Meeting Held on 12 June 2023', WT/CTE/M/78 (29 August 2023); and WTO, 'Trade and Environmental Sustainability Structured Discussions, Informal Working Group Meetings, Held on 16–17 March 2023', INF/TE/SSD/R/16 (17 April 2023). Unilateral trade measures have been regularly discussed in the context of the UNFCCC's Forum on the Impact of the Implementation of Response Measures. However, this Forum has been characterized by highly contentious debates, and little substantive progress has been made over many years. See Annela Anger-Kraavi and Nicholas Chan, Pocket Guide to Response Measures' (European Capacity Building Initiative, 2021).

112 See also Daniel Bodansky, *The Art and Craft of International Environmental Law* (Harvard University Press, 2010), 155ff.

113 Fritz Scharpf, *Governing in Europe: Effective and Democratic?* (Oxford University Press, 1999). According to Bodansky, "[i]nput-based legitimacy derives from the process by which decisions are made, including factors such as transparency, participation, and representation". Daniel Bodansky, 'Legitimacy in International Law and International Relations' in Jeffrey L. Dunoff and Mark A. Pollack, *Interdisciplinary Perspectives on International Law and International Relations* (Cambridge University Press, 2013), 321–341, 330.

114 Daniel Bodansky, 'The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?' (1999) 93(3) *American Journal of International Law* 596–624.

mean that an initiative will be "pro-development", it is more likely that an inclusive initiative can better take developing country interests into account.

- **Institutional strength:** This refers to: (1) the extent to which an initiative is embedded in more permanent structures; (2) the capacity of an initiative (i.e., the material or other resources it can avail of); and (3) the extent to which it is capable of standard-setting (including legally binding rules). On one end of the spectrum there are ad hoc initiatives that may have limited funding and cannot go beyond political statements. On the other end are initiatives hosted by permanent bodies (e.g., UN agencies or the OECD), which can avail themselves of a sizeable secretariat and financial support from members, along with an ability to develop legally binding rules. The institutional strength of an initiative offers an indication of the extent to which it is able to act as an enduring and central forum for international cooperation on BCAs.

For each of the three initiatives – G7 Climate Club, the GASSA, IFCMA – we will discuss the extent to which they can be considered inclusive, as well as their purported institutional strength, based on publicly available documents.

In addition, we also assess the propensity of these three initiatives to contribute to one or more of the five goals discussed in Section 4, i.e.:

(1) Increasing Transparency of BCAs

(2) Developing Shared Objectives and Principles for BCAs

(3) Improving Comparability

(4) Promoting Harmonization

(5) Contributing to Global Climate Ambition

By doing so, we also offer an initial indication of the possible output legitimacy of these initiatives, i.e. how likely are they to be effective in achieving certain goals?[115]

5.2 G7 Climate Club

In 2021, the German government prepared for presiding over the G7. The German Finance Ministry suggested to build upon a G7 initiative for a minimum corporate tax which had been joined by 38 OECD member countries by that time.[116] Accordingly, the German G7 presidency promoted that G7 members should introduce a price on carbon and develop a system with a common BCA over time, drawing on a climate club proposal by Nobel laureate William Nordhaus.[117] In Nordhaus' proposal, tariffs help to establish a club of countries cooperating on carbon pricing. To incentivize club cooperation, a trade

115 Bodansky (n. 113), 330 suggests that "output-based legitimacy derives from the results of governance".
116 Alan Rappeport, 'Finance Leaders Reach Global Tax Deal Aimed at Ending Profit Shifting' (*New York Times*, 8 October 2021), https://www.nytimes.com/2021/06/05/us/politics/g7-global-minimum-tax.html.
117 William Nordhaus, 'Climate Clubs: Overcoming Freeriding in International Climate Policy' (2015) 105(4) *American Economic Review* 1339–1370.

penalty for non-cooperating countries is required. A BCA could serve that purpose. The initial G7 Climate Club idea thus sought to include some form of border measure. Based on the theoretical concept, this type of cooperation has to be exclusive, as it aims at deterring free riding, in the sense that trade partners that do not have a carbon price in place could free ride on the (carbon pricing) efforts of the climate club members. Such free riders could end up benefiting from (1) the global mitigation effects of carbon pricing by the club members and (2) the competitive advantages on account of a carbon price differential, as long as they do not put a price on carbon. A BCA would level the carbon price differential and prevent carbon leakage when non-club members trade with the club members. Early on in the G7 Climate Club iterations it became clear that a common national policy approach towards tackling emissions, namely a joint carbon price, among the G7 members would not be feasible. The United States, in particular, expressed reservations against any mention of carbon pricing, as it had repeatedly sought – and failed – to adopt a federal carbon price; instead, its climate policy efforts are increasingly determined by fiscal and other financial incentives such as those afforded under the IRA (Section 2).

After extensive negotiations among G7 members about possible members, national climate policy tools and potential comparability of climate action in key sectors, the "Climate Club"[118] was launched in December 2022 under the umbrella of the OECD and the IEA.[119] The terms of reference of the initiative list three pillars of cooperation: (1) advancing ambitious and transparent climate change mitigation policies; (2) transforming industries; and (3) boosting international climate cooperation and partnerships.[120] The first pillar calls on members to share assessments and best practices concerning mitigation policies in the sectors covered by the club.[121] Under this pillar, the club would also pursue the "development of comparable methodologies and standards".[122] The second pillar seeks to advance "the enabling conditions for substantial sectoral industry decarbonisation by discussing and aiming to align, as far as possible, methodologies, standards, sectoral strategies and milestones and expanding markets for green industrial products".[123] To do so, it seeks to build on existing international initiatives on industrial decarbonization, such as the G7 Industrial Decarbonization Agenda and Hydrogen Action Pact, the Breakthrough Agenda, the Clean Energy Ministerial Industrial Deep Decarbonization Initiative, and the First Movers Coalition.[124] As part of the third pillar, the G7 calls for voluntary financial and technical support for industrial decarbonization in developing countries.[125] Such support would be channeled through a new "global matchmaking platform".[126]

In terms of inclusiveness, the Climate Club now defines itself an inclusive forum for high climate ambition, and is open for all interested partners beyond the G7.[127] Since 2022 the Climate Club's membership has increased. Membership has reached 33 by November 2023, including all G7 countries and the EU as well as an additional 19 countries. Although the majority of club members are also OECD members, they also include some major emerging economies such as Argentina and Indonesia.[128]

118 See https://climate-club.org/.
119 Federal Ministry for Economic Affairs and Climate Action, 'G7 Establishes Climate Club' (12 December 2022), https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/12/20221212-g7-establishes-climate-club.html.
120 Climate Club, 'Terms of Reference for the Climate Club' (12 December 2022), https://climate-club.org/wp-content/uploads/2023/09/TOR.pdf.
121 Ibid.
122 Ibid. Work on "standards and definitions" is also foreseen in a paper prepared by Climate Club Interim Secretariat, 'Climate Club: Accelerating Global Industry Decarbonisation through Stronger International Collaboration' (November 2023), <https://climate-club.org/wp-content/uploads/2023/11/Climate-Club-COP-28-background-paper.pdf>.
123 Ibid.
124 Ibid.
125 Ibid.
126 See https://climate-club.org/.
127 Ibid.
128 G7 Climate Club members as of the end of November 2023 are: Chile (Co-Chair), Germany (Co-Chair), Argentina, Australia, Austria, Canada, Colombia, Costa Rica, Denmark, Egypt, EU, Finland, France, Indonesia, Italy, Japan, Kazakhstan, Kenya, Korea, Luxembourg, Mozambique, Morocco, the Netherlands, Norway, Peru, Singapore, Spain, Switzerland, Ukraine, United Kingdom, United States, Uruguay, Vanuatu. Ibid.

In terms of its **institutional strength**, the Climate Club is highly dependent on political momentum and strong leadership by a few countries. The initiative will therefore be contingent upon the support of the subsequent G7 presidencies. Each presidency will decide how much impetus the club should add to UNFCCC negotiations and how attractive the forum can be. The annual G7 summits add to its strength, but do not automatically deliver on progress. A Climate Club Task Force under the G7 is planned for, and its interim secretariat will be hosted by the OECD and IEA, with a close link to the IFCMA (see Section 5.3). The International Monetary Fund and World Bank are also invited to cooperate.[129] These institutional settings help to strengthen the Climate Club's resources, but have yet to be realized by the task force that includes the G7 and other club members. The development of common standards or rules for BCA cooperation are not part of the terms of reference. Moreover, the club is not grounded in a legally binding agreement, which would underpin members' obligations to cooperate.

The following discusses the propensity of the Climate Club to contribute to the five goals identified in Section 4:

(1) Increasing Transparency of BCAs

The Climate Club does not cooperate on BCAs directly, yet it will increase transparency on progress made in the decarbonization of industry. Increasing transparency is part of the club's first pillar, which includes sharing information on best practices for emission reduction by various policy approaches, including carbon pricing. Detailed progress will thus rather be made under the IFCMA (see Section 5.4), which aims to develop a comprehensive database of different policy approaches and accounting methodologies. This would then inform the Climate Club in case BCAs become a subject in future elaborations of its scope and mandate. Another area where BCAs may become part of the discussions in the Climate Club is through a possible "strategic dialogue on carbon leakage".[130]

(2) Developing Shared Objectives and Principles for BCAs

The Climate Club has a clear mission to improve both ambition of national climate action and the mutual transparency regarding actions taken by members. This indirectly helps to understand the role of BCAs for particular member countries, such as EU Member States that have joined the club and have already begun implementing the EU CBAM (see Section 3.1). The Climate Club is a forum that could discuss the ramifications of the CBAM in the context of EU climate ambitions. It could serve as a diplomatic forum in this respect rather than a forum for developing objectives and principles.

(3) Improving Comparability

Members of the Climate Club signed up to engage in the advancement of comparable methodologies to measure, estimate and collect emissions data. The G7 Climate Club will rely on the IFCMA for the details of climate action comparability, in particular emission intensities of energy-intensive sectors that are decarbonizing. The task force will mainly

129 Terms of Reference (n. 120).
130 Ibid.

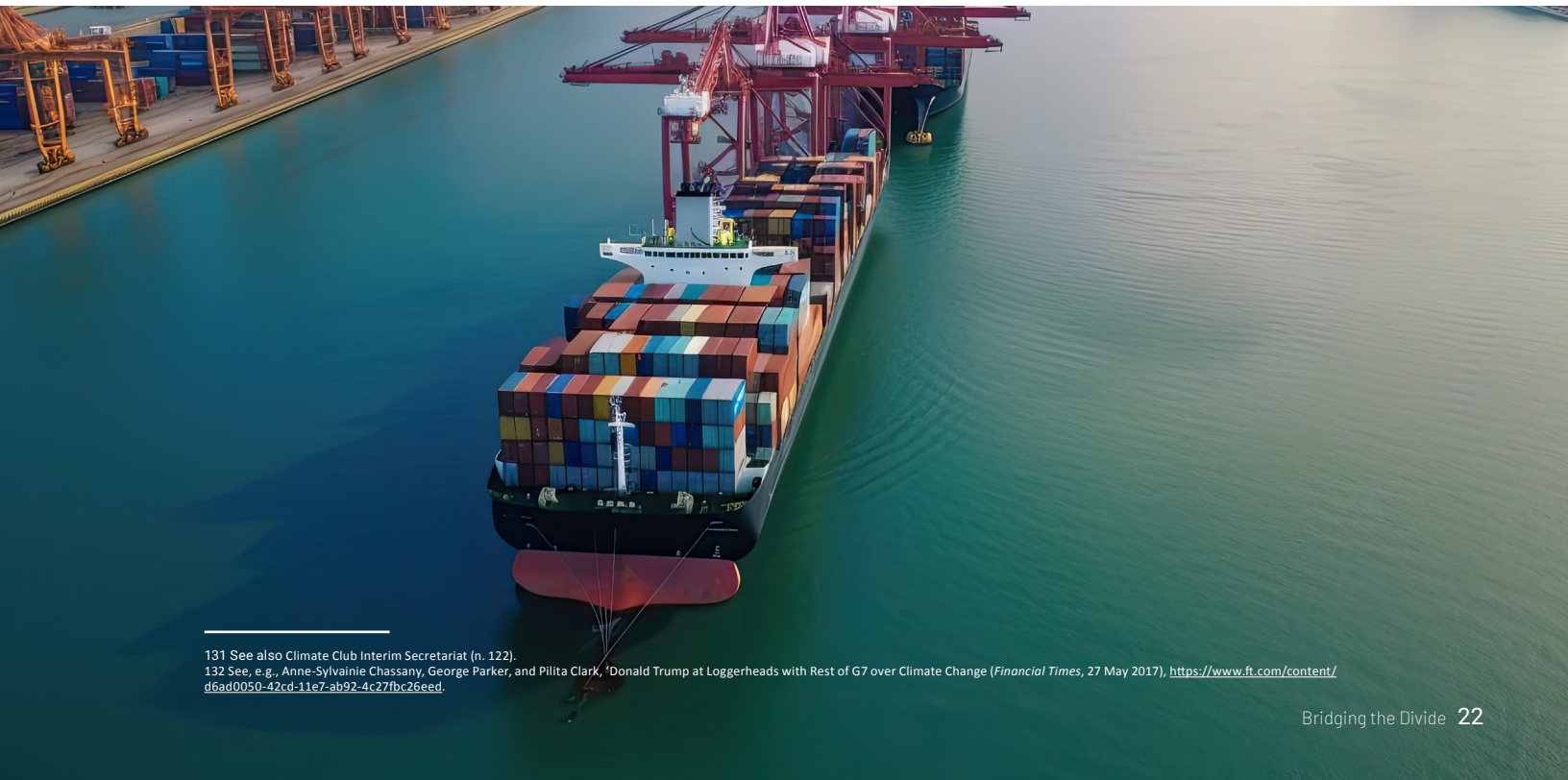
inform G7 leaders on the progress of the Climate Club, as well as the governance details, but it will not produce its own analysis on metrics and methodologies for comparing climate action.

(4) Promoting Harmonization

The club relies primarily on a number of specific initiatives on particular technologies. Progress on those initiatives will determine how far cooperation on standards and development of common metrics for embedded carbon and harmonisation can evolve over the next few years. Although standard-setting is not an explicit part of the Climate Club's mandate, it can make a contribution by adopting or promoting standards and definitions developed elsewhere.[131] As BCA are not part of the club's terms of reference at present, there is little prospect of promoting a harmonized approach on BCA.

(5) Contributing to Global Climate Ambition

The Climate Club focuses on ambition, the transition of energy-intensive sectors toward decarbonization, and voluntary cooperation with developing countries. This helps to promote cooperation on climate action. Cooperation will materialize even if countries do not follow the same implementation approaches in tackling climate change. The key factor in this respect, however, is the political priority each G7 presidency gives to climate action year-on-year, as the G7 presidencies establish varying agendas across economic, social and security issues in the light of domestic and international challenges. Hence, there is no guarantee of consistent follow-up on climate action. The US example illustrates this clearly: under the Trump Administration (2017–2021), the G7's role as a forum for international policy cooperation, including on climate action, was severely put into question.[132] Again, as BCAs are not explicitly part of the Climate Club agenda, the role of the club in enhancing ambition is linked to other channels of cooperation.



131 See also Climate Club Interim Secretariat (n. 122).
132 See, e.g., Anne-Sylvainie Chassany, George Parker, and Pilita Clark, 'Donald Trump at Loggerheads with Rest of G7 over Climate Change (*Financial Times*, 27 May 2017), https://www.ft.com/content/d6ad0050-42cd-11e7-ab92-4c27fbc26eed.

Table 2. Summary table G7 Climate Club.

Inclusiveness	Open to all countries; membership has to be applied for.
Institutional strength	Secretariat and permanent resources foreseen, but will not set standards, and not be based on a legally binding agreement.
Contribution to goals of international cooperation on BCAs	
Increasing transparency of BCAs	Indirectly via IFCMA and regular exchange on national climate actions, with focus on CBAM.
Developing shared objectives and principles for BCAs	Not part of the terms of reference.
Improving comparability	Indirectly, via IFCMA and regular exchange on national climate actions.
Promoting harmonization	Not part of the terms of reference.
Contributing to global climate action	Yes, depending on political priorities by acting G7 presidency and future institutional stand-alone capacities.

5.3 GASSA

The origins of Global Arrangement on Sustainable Steel and Aluminium (GASSA) can be traced back to tariffs imposed on national security grounds by the Trump Administration in 2018, which included tariffs of 25% on steel and 10% on aluminium. In response to these tariffs, the EU retaliated with tariffs on products such as Harley Davidsons and bourbon. The US tariffs were subsequently challenged at the WTO by both the EU and China.[133]

Once the Biden Administration took office, transatlantic trade relations improved, and in the run-up to COP26 in Glasgow in 2021, the US and the EU issued a joint announcement on steel and aluminium.[134] In the announcement, the EU agreed to suspend its WTO challenge[135] and remove its tariffs, while the US introduced a Tariff Rate Quota under which a limited amount of EU steel could enter the US market free of duties. The deal also marked the launch of negotiations on a Global Arrangement on Sustainable Steel and Aluminium, with an aim to conclude these negotiations within two years.[136]

The GASSA aims to address two separate, but related issues, namely what is referred to as "non-market excess capacity", which is an implicit reference to China's subsidization of its steel industry, and the carbon intensity of steel and aluminium production. The arrangement would be open to "like-minded economies" that share the goals of tackling these two issues.[137] Under the arrangement, participants would, among other things, commit to restrict market access for non-participants that are not market-oriented and contribute to non-market excess capacity – again, an implicit reference to China – through anti-dumping and anti-subsidy measures. They would also "restrict market

133 These tariffs have in the meantime been deemed to violate WTO law by a WTO panel, following a complaint by China. This ruling is being appealed by the United States. See WTO, *United States – Certain Measures on Steel and Aluminium Products*, Panel Report, WT/DS544/R (9 December 2022).
134 Joint EU-US Statement (n. 30).
135 See https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds548_e.htm.
136 Joint EU-US Statement (n. 30).
137 Ibid.

access for non-participants that do not meet standards for low-carbon intensity", and ensure that their domestic policies help lower carbon intensity.[138] As part of the negotiations, the EU and the US created a technical working group for discussing methodologies for calculating embedded carbon in steel and aluminium products and sharing relevant data.[139]

A US concept proposal was tabled in December 2022, proposing a tiered tariff approach, with tariffs rising along with the carbon intensity of production, and additional tariffs applied to non-member countries.[140] An EU concept proposal was released a month after its US counterpart, focusing more on the types of obligations that GASSA members would take on with a view to decarbonizing their own steel and aluminium industries.[141]

Initially, the aim was to conclude GASSA negotiations in October 2023. However, with the deadline approaching, the US and the EU first decided to postpone the conclusion until the end of 2023,[142] and are currently said to be considering an extension by two years to avoid entanglement with the upcoming elections.[143] Reportedly, part of the reason for the delay is the threat by the US to reimpose tariffs on the EU if its conditions are not met.[144] Another reason for the EU may be that the market restrictions which the GASSA would impose are more likely to fall afoul of WTO rules, given the US desire to impose tariffs linked to the carbon intensity of production in third countries without necessarily putting in place corresponding measures domestically. By contrast, the EU's CBAM has been carefully and painfully crafted to ensure compliance with international trade rules. Moreover, one of the goals pursued by the US – exempting steel and aluminium from CBAM – could jeopardize the CBAM by making it more likely to violate WTO rules.[145] Whether a deal will be struck by the end of 2023 thus remains doubtful, with the EU concluding at the end of November 2023 that, in light of US reluctance to permanently lift tariffs on EU steel and aluminium exports, there is "no prospect to agree on a concept for a [GASSA]", and that accordingly no mandate for the GASSA would be put forward.[146]

With regard to **inclusiveness**, although negotiations currently only involve the two transatlantic blocs, the GASSA is in principle open to "like-minded economies", and Canada and the UK have already expressed their interest in the initiative.[147] The US concept proposal links eligibility for membership to "countries' average embedded product emissions, applicant economies' contributions to 'non-market excess capacity', and a to-be-agreed minimum percentage of public procurement of low-emission steel and aluminium".[148] The first criterion would make membership dependent on the average carbon intensity of steel and aluminium, as compared to the EU and US.[149] By contrast, the second criterion, which is related to non-market excess capacity,[150] seems to specifically exclude China from GASSA membership, and discourage GASSA members from trading with or investing in China.[151] This casts doubt on the GASSA's true inclusiveness.[152]

138 Ibid.
139 Ibid.
140 Ana Swanson, 'U.S. Scales Back Hope for Ambitious Climate Trade Deal With Europe' (*New York Times*, 10 October 2023), https://www.nytimes.com/2023/10/10/business/economy/us-eu-climate-trade-deal.html.
141 David Kleimann, 'Section 232 Reloaded: The False Promise of the Transatlantic 'Climate Club' for Steel and Aluminium', Working Paper 11/2023, (Bruegel, 2023), 12, https://www.bruegel.org/sites/default/files/2023-07/WP%2011.pdf.
142 'U.S.-EU Summit Joint Statement', https://www.consilium.europa.eu/media/67448/us-eu-statement-final.pdf, para. 30. See also Michele Rimini et al., 'The EU–US Global Arrangement on Sustainable Steel and Aluminium' (E3G, 27 July 2023), https://www.e3g.org/publications/the-eu-us-global-arrangement-on-sustainable-steel-and-aluminium; Swanson (n. 136).
143 Alberto Nardelli, Eric Martin, and Jorge Valero, 'US, EU Seek to Extend Steel Truce Amid Stalemate on Longer Fix' (*Bloomberg*, 16 November 2023), https://www.bloomberg.com/news/articles/2023-11-16/us-eu-seek-to-extend-steel-truce-amid-stalemate-on-longer-fix.
144 Sarah Anne Aarup and Camille Gijs, 'EU-US Metals Talks Go Down to the Wire Ahead of Friday Summit' (*Politico*, 17 October 2023), https://www.politico.eu/article/eu-fumes-at-latest-us-proposal-for-green-steel-club/.
145 Rana Foroohar, 'Steel and Its Discontents' (*Financial Times*, 23 October 2023), https://www.ft.com/content/84412b19-2502-4c9e-9e06-ca1565bd2a87; Alan Beattie, 'Trade Secrets' (*Financial Times*, 23 October 2023), https://www.ft.com/content/a1b7aba6-9178-4e2f-809f-0e92aa261b54.
146 'Speech by Executive Vice-President Dombrovskis at the International Trade Committee (INTA) of the European Parliament' (28 November 2023) <https://ec.europa.eu/commission/presscorner/detail/en/speech_23_6150>.
147 Reuben Francis, Daniel Hoenig and Holly Rooper, 'Getting Ahead of the Curve: Primer on Border Carbon Adjustment Policy Proposals' (Climate Leadership Council, March 2023), https://clcouncil.org/report/getting-ahead-of-the-curve/.
148 Kleimann (n. 137), 8 (emphasis in original).
149 Ibid.
150 Sub-criteria include "an assessment of the risk of an economy becoming the source of non-market excess capacity, the operation of state-owned or controlled enterprises in an applicant economy, a commitment to refrain from export restrictions on 'relevant raw materials, intermediate inputs, and other related products', trade and investments from non-market economy sources with and in [GASSA] applicants as well as measures taken to address market distortive effects deriving therefrom, and adherence to international labour standards". Ibid.
151 Ibid., 10.

Like the US proposal, the EU concept proposal also links membership to the average emissions intensity of US and EU steel and aluminium. In addition, the EU has proposed that members would need to adopt legally binding commitments on decarbonizing the steel and aluminium sectors, including adopting a net-zero by 2050 roadmap as well as putting in place interim decarbonization targets.[153]

Concerning institutional strength, few details have been disclosed on how the GASSA, if agreed, would work. Moreover, with the US and EU still diverging on the functioning of the arrangement, it remains difficult to foresee what institutional structures would be created, and how they would be supported. What is clear is that the EU is pursuing a legally binding agreement, with obligations related to decarbonizing the steel and aluminium industry, as well as obligations related to transparency.[154] To the extent that the EU and the US would agree on imposing joint carbon intensity-related tariffs, the GASSA would need to develop the regulatory infrastructure – including MRV procedures – to ensure that goods entering the two jurisdictions comply with the commitments under the arrangement.

Next, the analysis turns to the likelihood of the GASSA contributing to the five goals listed in Section 4.

(1) Increasing Transparency of BCAs

The GASSA, if adopted, could lead to the adoption of a common border measure among the US, EU and any other "like-minded economies" joining the arrangement. The adoption of such a measure is complicated, however, by the fact that one of the negotiation partners, the EU, already has a BCA in force. The relationship between the GASSA and CBAM remains unclear, and depends on whose perspective is adopted. From the US perspective, the adoption of the GASSA would lead to an exemption from CBAM.[155] From the EU perspective, the CBAM would continue to apply irrespective of GASSA commitments.[156] From the EU perspective, therefore, the GASSA would not necessarily be a forum to discuss the design and implementation of its CBAM or other BCAs. With that in mind, the GASSA is unlikely to be a key forum to discuss the rationale, design details or effects of BCAs adopted by different economies. This finding is reinforced by the fact that the GASSA is only focused on one sector, whereas BCAs generally affect a variety of energy-intensive industries.

(2) Developing Shared Objectives and Principles for BCAs

Given that the GASSA would be unlikely to serve as an institution in which the design and implementation of BCAs could be discussed, it is equally unlikely that it would offer a forum for developing shared objectives and principles.

153 Kleimann (n. 137), 12.
154 Ibid.
155 Alberto Nardelli, Jorge Valero and Eric Martin, 'US Seeks Exemption from EU Carbon Border Levy to End Tariff Dispute' (*Bloomberg*, 23 March 2023), https://www.bloomberg.com/news/articles/2023-03-23/us-seeks-exemption-from-eu-carbon-border-levy-to-end-tariff-spat.
156Kleimann (n. 137).

(3) Improving Comparability

The GASSA is not concerned with the effects of individual mitigation policies as such. Instead, its focus is primarily on the resulting emissions intensity of production in the steel and aluminium sector. As such, it is unlikely to serve as a forum that enhances the comparability of individual carbon mitigation policies.

(4) Promoting Harmonization

Although GASSA documents do not indicate this specifically, the technical discussions on methodologies for calculating embedded carbon in steel and aluminium products could lead to a "shared understanding of the particular 'low carbon intensity standards' with which exporters must comply".[157] To the extent that such standards would be used as a benchmark for the common imposition of market restrictions, the GASSA could result in a minimum harmonization of MRV approaches of its members. However, there is likely to be disagreement between US and EU stakeholders concerning the types of standard, with US industry likely to prefer a carbon intensity standard, whereas EU stakeholders would likely prefer multiple standards.[158]

(5) Contributing to Global Climate Ambition

There have been diverging perspectives on the GASSA's potential contribution to global climate ambition. Some proponents have argued that the GASSA would be "smart industrial policy".[159] They point to how emissions intensity standards pursued by the GASSA would drive decarbonization in third countries, and how such standards would be ratcheted up over time as the average emissions intensity in GASSA members decreases further.[160] Others, however, have pointed out that the focus on average carbon intensity not only is self-serving for the US (which has one of the lowest carbon intensities of steel production due to a high share of scrap steel recycling), but also can lead to perverse environmental effects by shielding the dirtiest producers in the US (if, following the US proposal, the GASSA is not accompanied by restrictions for domestic industry), whilst penalizing clean producers from countries whose average carbon intensity is higher than that of the US.[161] Moreover, exempting US steel and aluminium from the CBAM – as requested by the US – would also reduce decarbonization incentives and undermine the CBAM.[162] The contribution of the GASSA to global climate ambition, if it takes the shape foreseen by the US, would therefore be limited.

157 Lydgate (n. 148) 490. Leonelli, referring to public statements by EU officials, goes beyond this by stating that negotiations are focusing on standards. See Giulia Claudia Leonelli, 'The Long and Winding Road towards the Creation of Climate Clubs: Transatlantic Negotiations, Potential Regulatory Models and Challenges Ahead' (2023) 32(3) *Review of European, Comparative & International Environmental Law* 453–464.

158 Charlotte Unger, 'A Limping Coalition of the Willing: Why is Transatlantic Cooperation on Clean Steel Lagging Behind?' (American-German Institute, 7 September 2023), https://americangerman.institute/publication/a-limping-coalition-of-the-willing/.

159 Todd N. Tucker and Jonathan Barth, 'How the US and EU Can Snatch Climate-Trade Victory from the Jaws of Defeat' (*Energy Monitor,* 19 October 2023), https://www.energymonitor.ai/newsletters/how-the-us-and-eu-can-snatch-climate-trade-victory-from-the-jaws-of-defeat. See also Todd N. Tucker and Timothy Meyer, 'A Green Steel Deal: Toward Pro-Jobs, Pro-Climate Transatlantic Cooperation on Carbon Border Measures' (Roosevelt Institute, 2021), https://rooseveltinstitute.org/publications/a-green-steel-deal-towards-pro-jobs-pro-climate-trans-atlantic-cooperation-on-carbon-border-measure; Timothy Meyer and Todd N. Tucker, 'A Pragmatic Approach to Carbon Border Measures' (2022) 21(1) *World Trade Review* 109–120; Joseph E. Stiglitz, Todd N. Tucker and Isabel Estevez, 'Fighting Climate Change Through Trade Despite Many Setbacks, Biden Can Still Make Progress' (*Foreign Affairs*, 25 July 2022); Jennifer Hillman and Alex Tippett, 'A New Transatlantic Agreement Could Hold the Key to Green Steel and Aluminum' (Council on Foreign Relations, 19 November 2021), https://www.cfr.org/blog/new-transatlantic-agreement-could-hold-key-green-steel-and-aluminum.

160 Todd N. Tucker and Timothy Meyer, 'Responding to Critics of the Global Arrangement on Sustainable Steel and Aluminum' (Roosevelt Institute, 18 July 2023), https://rooseveltinstitute.org/2023/07/18/responding-to-critics-of-the-global-arrangement-on-sustainable-steel-and-aluminum/.

161 Lee Harris, 'U.S. and EU Struggle to Form Green Steel Club' (11 October 2023), https://prospect.org/economy/2023-10-11-us-eu-trade-green-steel-club/. See also Kleimann (n. 137); and Inu Manak and Helena Kopans-Johnson, 'In Green Steel Discussions, the United States Is Playing Dirty' (*Council on Foreign Relations*, 8 November 2023), https://www.cfr.org/blog/green-steel-discussions-united-states-playing-dirty.

162 Kleimann (n. 137).

Table 3. Summary table GASSA.

Inclusiveness	Open to "like-minded economies", but US position about current trade and industrial policy practices in China would likely exclude participation by the latter.
Institutional strength	Unclear. Likely to require a legally binding agreement and the development of regulatory infrastructure to impose and enforce market restrictions.
Contribution to goals of international cooperation on BCAs	
Increasing transparency of BCAs	Unlikely to serve as a forum for sharing BCA design and implementation information.
Developing shared objectives and principles for BCAs	Unlikely to serve as a forum for developing shared objectives and principles for BCAs.
Improving comparability	Unlikely to serve as a forum for enhancing comparability of individual mitigation policies.
Promoting harmonization	Technical discussion on methodologies could lead to shared understanding of low-carbon intensity standards in steel and aluminium sectors.
Contributing to global climate ambition	Common market restrictions may incentivize decarbonization in third countries, but impact limited if there are no constraints on domestic production and/or if clean producers from third countries are penalized.

5.4 IFCMA

In June 2022, the OECD formally launched its new initiative known as the Inclusive Forum on Carbon Mitigation Approaches.[163] The inaugural meeting was later hosted in February 2023, bringing together representatives from 104 countries and several international organizations, including the UNFCCC, the WTO and the World Bank.[164] The overall objective of the forum is to help enhance the impact of emission reductions efforts globally, through "data and information sharing, evidence-based mutual learning and inclusive multilateral dialogue".[165] Under the auspices of the IFCMA, technical work will be carried out that seeks to provide a platform to assess the different climate mitigation policies that have been implemented by countries across the world, through the development and application of a consistent methodology.[166] This will cover a diverse range of both price-based and non-price-based policy instruments, for example clean technology subsidies and carbon pricing. This work will take place in two phases.[167] First, the forum will develop methodologies for a stocktaking and mapping exercise focusing

163 OECD, '2022 Ministerial Council Statement' (OECD, June 2022), https://www.oecd.org/mcm/2022-MCM-Statement-EN.pdf.
164 OECD, 'Inclusive Forum on Carbon Mitigation Approaches', https://www.oecd.org/climate-change/inclusive-forum-on-carbon-mitigation-approaches/.
165 Ibid.
166 Kateryna Holzer and Ievgeniia Kopytsia, 'Legal Challenges of Tracing Carbon Emissions in Steel Trade' (2023) 4 *Korea Europe Review*.
167 Nicholas Stern and Hans Peter Lankes, 'Collaborating and Delivering on Climate Action through a Climate Club: An Independent Report to the G7' (London School of Economics and Political Science, October 2022), https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/10/Collaborating-and-delivering-on-climate-action-through-a-Climate-Club.pdf; OECD, 'OECD Secretary-General Report to G20 Finance Ministers and Central Bank Governors on the Establishment of the Inclusive Forum on Carbon Mitigation Approaches' (OECD, October 2022), https://www.oecd.org/g20/topics/international-taxation/oecd-secretary-general-report-g20-finance-ministers-central-bank-governors-establishment-ifcma-indonesia-october-2022.pdf.

on four to six pilot countries.[168] These methodologies will then be applied (and refined where necessary) to the broader IFCMA membership. Another prong of the Forum's technical work is to look into methodologies for calculating sector- and product-level carbon intensity metrics. In addition to the technical work, the IFCMA will also host an "inclusive multilateral dialogue", which brings together member countries in various formats and is aimed to provide a "safe space" for peer and mutual learning.[169]

With regard to inclusiveness, the IFCMA seeks to attract a range of participants that includes both OECD member countries and non-member countries.[170] The mention of the term "inclusive" in the forum's name itself is indicative of its aim to be open in terms of membership. As mentioned, representatives from over 100 countries – including developed and developing countries – participated in the inaugural meeting, and by September 2023 the IFCMA had 56 members, including 13 G20 members such as Argentina and South Africa (but not Brazil, China, India, Indonesia, Russia and Saudi Arabia).[171] Due to its traditionally restricted membership, the OECD has been previously criticized as representing a "club of rich countries".[172] Accordingly, the IFCMA represents a positive step towards inclusivity by extending participation to non-member countries, with the OECD stating that countries will participate on an "equal footing".[173] However, it remains to be seen whether and to what extent non-OECD member countries will determine the direction of the initiative. Other "inclusive" initiatives developed by the OECD – such as the Inclusive Framework on Base Erosion and Profit Shifting[174]– have been largely driven by OECD member countries.[175]

With respect to **institutional strength**, the IFCMA is hosted by a permanent body (i.e., the OECD). In terms of its organizational structure, the OECD has a decision-making body in the form of the OECD Council, which can adopt legally binding instruments. In addition, the OECD is also backed by a strong secretariat, comprising over 3,000 employees.[176] However, while the OECD generally has the ability to set standards and adopt binding decisions through its Council, this is not necessarily the case for the IFCMA. Unlike other initiatives of the OECD – for example the Inclusive Framework on Base Erosion and Profit Shifting, which serves to establish global standards – the ICFMA is explicitly not intended to act as a standard-setting body. Instead of laying down common standards, the aim of the Forum is to help facilitate the collection and exchange of information between countries and discern best practices.[177] Nevertheless, through its technical work, the Forum could inform future standard-setting initiatives.

Having briefly evaluated the inclusiveness and institutional strength of the IFCMA, we will now assess to what extent the forum may contribute to the five goals outlined in Section 4.

(1) Increasing Transparency of BCAs

The IFCMA can help with strengthening transparency around climate mitigation policies by developing a comprehensive database of different policy approaches, and

168 OECD, 'OECD Secretary-General Report to G20 Leaders on the Work of the Inclusive Forum on Carbon Mitigation Approaches' (OECD, September 2023), https://www.oecd.org/climate-change/inclusive-forum-on-carbon-mitigation-approaches/IFCMA-report-G20-September-2023.pdf.
169 Ibid.
170 OECD (n. 163).
171 OECD (n. 164).
172 Sol Picciotto, 'The G20 and the "Base Erosion and Profit Shifting (BEPS) Project"' (German Institute of Development and Sustainability, April 2017). https://www.idos-research.de/uploads/media/DP_18.2017.pdf.
173 OECD (n. 164).
174 OECD, 'First Meeting of the New Inclusive Framework to Tackle Base Erosion and Profit Shifting Marks a New Era in International Tax Co-operation' (OECD, 30 June 2016), https://web-archive.oecd.org/2016-11-08/407519-first-meeting-of-the-new-inclusive-framework-to-tackle-base-erosion-and-profit-shifting-marks-a-new-era-in-international-tax-co-operation.htm.
175 Picciotto (n. 168).
176 OECD, 'About: Organisational Structure', https://www.oecd.org/about/structure/.
177 OECD (n. 164).

by showcasing their actual effectiveness in reducing emissions through a consistent accounting methodology. Doing so could help countries to determine whether and to what extent to credit policy efforts in third countries when designing and implementing BCAs, for example through bilateral agreements.[178] Although the Forum is not focused on strengthening transparency around BCAs as such, its remit – which includes taking stock of mitigation policy instruments (and policy packages) and their effects on emissions – is sufficiently broad to include a discussion of BCAs as part of mitigation policy packages.

(2) Developing Shared Objectives and Principles for BCAs

Developing shared objectives and principles for BCAs is not directly within the scope of the IFCMA. However, to the extent that sharing of information on mitigation policies and their effects includes the sharing of information on BCAs (as discussed under the first goal), this could feed into the IFCMA's aim of enhancing "international collaboration on climate policies to minimise negative crossborder spillover risks".[179] This could be specifically achieved through the "inclusive multilateral dialogue", which among others is intended to discuss best practices.

(3) Improving Comparability

One of the main areas in which the IFCMA can make a contribution is enhancing comparability, specifically through the methodologies that it will employ to assess the effectiveness of different carbon mitigation approaches in tackling emissions, as well as through its work on carbon intensity metrics. Indeed, the IFCMA is explicitly seeking to enhance "understanding of the comparative impact of the full spectrum of carbon mitigation approaches deployed around the world".[180] By doing so, the IFCMA could possibly inform future developments concerning the creation of a metric that explicitly compares price-based policies against non-price-based policies with respect to a so-called "carbon price equivalent", i.e. the carbon price required to generate the same level of emission reductions that would be brought about by a certain policy.[181] While the IFCMA may thus inform discussions about comparability, it is also explicit in that it does not seek to "rank" countries.[182] How the initiative will walk the fine line by shedding light on the comparative impacts of mitigation policies whilst not suggesting that one is more effective than another remains to be seen.

(4) Promoting Harmonization

Although standard-setting is explicitly not one of the aims of the IFCMA, its technical work could lay the foundations for the development of harmonized standards. Much depends here on the extent to which the methodologies developed on mapping and assessing the effects of mitigation policies find support among the IFCMA membership. The work on carbon intensity metrics may also inform future standards, with the OECD

178 Delbeke and Vis (n. 76) 7.
179 OECD (n. 164), 4.
180 Ibid.
181 Stern and Lankes (n 163).
182 OECD (n. 164).

noting that the IFCMA will explore "how governments might support the widespread calculation and use of carbon intensity metrics, whilst minimising trade frictions and disproportionate costs for firms, including through international coordination and cooperation".[183]

(5) Contributing to Global Climate Ambition

Overall, the IFCMA aims to improve the combined impact and effectiveness of carbon mitigation approaches globally. This also involves avoiding any undesirable spillovers that may arise from countries unilaterally pursuing their own mitigation policies, for example carbon leakage.[184] By enhancing understanding and highlighting the impacts of different emission reductions efforts through technical analysis and evidence-based learning, the IFCMA may lay the groundwork for determining what the most optimal and effective policies are for tackling climate change, and shed light on what role, if any, BCAs can play in policy packages. Although the work of the IFCMA seeks to identify capacity constraints in evaluating climate mitigation policies, the Forum as such does not provide any mechanism for providing (capacity-building or financial) support.

Table 4. Summary table IFCMA.

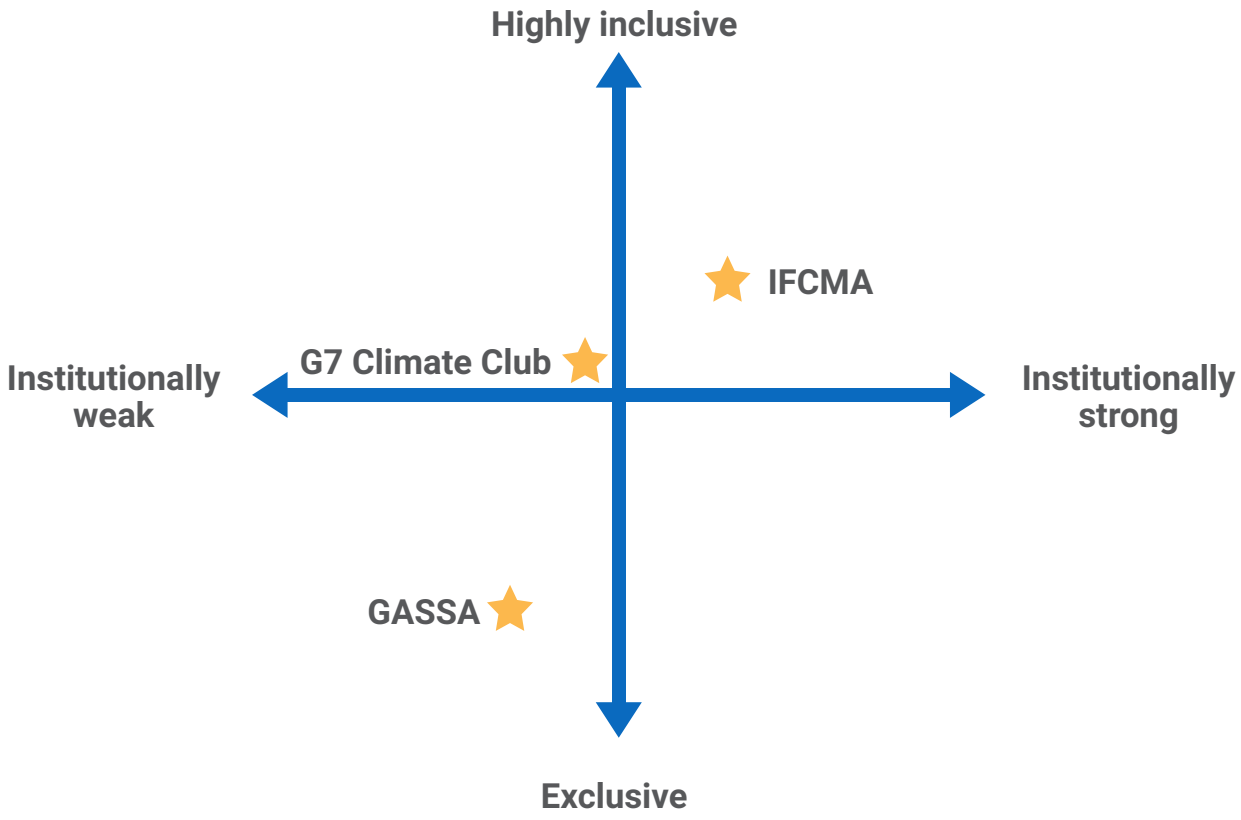
Inclusiveness	Reasonably high degree of inclusiveness with 56 members from OECD and non-OECD countries.
Institutional strength	High. OECD acts as a permanent host. Potential of legally binding decisions via OECD Council. Yet no standard-setting mandate for IFCMA.
Contribution to goals of international cooperation on BCAs	
Increasing transparency of BCAs	Indirectly, as no BCA focus. High potential for creating more transparency on mitigation policies. Shares information relevant for crediting policy efforts under a BCA.
Developing shared objectives and principles for BCAs	Indirectly, as no BCA focus. Potential for shared objectives through sharing information on national climate policies, including anti-leakage measures.
Improving comparability	High. Core task is to develop methodologies to compare emission reduction measures and their impacts. No ranking of countries intended.
Promoting harmonization	No mandate for developing common standards, but can lay foundation for their development.
Contributing to global climate ambition	Indirectly. Will deliver information on effectiveness of national policy measures and best practices, including BCA application.

183 Ibid. Hufbauer and colleagues suggest a role for the OECD in developing a common MRV standard for industrial carbon emissions. See Gary Clyde Hufbauer et al., 'EU Carbon Border Adjustment Mechanism Faces Many Challenges' (Peterson Institute for International Economics, 2022), 20, https://www.piie.com/sites/default/files/2022-10/pb22-14.pdf.
184 OECD (n. 163).

5.5 The Prospects of International Cooperation on BCAs

We present our findings – which are necessarily crude and preliminary, given the still inchoate nature of the initiatives assessed in this report – in Figure 1 and Table 5 below. As we establish, none of the three initiatives we have examined emerges as an ideal forum for advancing international cooperation on BCAs. However, the potential of one of the initiatives – the IFCMA – is clearly significant.

Figure 1. Comparison of inclusiveness and institutional strength.



In terms of inclusiveness, the IFCMA clearly performs best, with the participation by a wide range of countries suggesting that the "inclusive" part of the forum's title is taken seriously. In the run-up to its full launch by the end of 2023, the G7 Climate Club is also growing in terms of membership. The GASSA, by contrast, is still primarily the subject of transatlantic negotiations, and even if those negotiations are successful, it is rather uncertain whether it will attract many "like-minded economies".

Likewise, concerning institutional strength, the IFCMA seems to fare reasonably well. It can draw on the OECD's institutional infrastructure and resources, and even though it may not have the goal of setting standards, it could lay the groundwork for other standard-setting organizations. Although the G7 can also build on the institutional resources at the OECD (as well as the IEA), it is more prone to the changing political priorities of G7 presidencies. For the GASSA, details on its institutional embedding remain sparse, but its rules would likely be legally binding.

Table 5. Comparison of contribution to five goals of international cooperation on BCAs.

	G7 Climate Club	*GASSA*	*IFCMA*
Enhancing transparency	(✓)	X	(✓)
Developing shared objectives and principles	X	X	(✓)
Improving comparability	(✓)	X	(✓)
Promoting harmonization	X	( )	(✓)
Contributing to global climate action	(✓)	(X)	(✓)

In terms of the contribution to the five goals, we again find that the IFCMA is the initiative most likely to perform best. Its contribution to the goal of improving comparability is clearest, but it also has the potential to contribute to all other goals. That is not the case for the G7 Climate Club, which is likely to rely on the technical work of the IFCMA regarding comparability, and even less so for the GASSA, which may at most contribute to harmonization of standard-setting in its member countries and, at worst, have a negative impact on climate action.

Overall, the preceding survey of three ongoing collaborative initiatives cautions against expecting rapid progress on international cooperation on BCAs that meaningfully advances the goals discussed in Section 4. With only one jurisdiction having introduced a significant BCA – the EU with its CBAM – and others still at different stages in the political discussion of this policy instrument, the time may not yet have arrived to actively explore the possibilities and potential benefits of cooperation.

Factors complicating international cooperation include deeply entrenched path dependencies, such as the legislative and policy frameworks put in place for reducing emissions (e.g., the EU ETS legislation dating back to 2003) or for MRV (e.g., the EU's greenhouse gas monitoring framework dating back to 1992). Moreover, domestic politics can have a major impact on the prospects of international cooperation. For instance, the steel industry has a major influence in swing states (such as Ohio and Pennsylvania) in the US, where elections are looming.[185] As the EU CBAM is already demonstrating, the operationalization of BCAs risks setting in motion new path dependencies that will render it even more difficult in future to advance goals such as alignment on objectives and principles, or on harmonization.

The sobering outcome of the latest negotiations between the US and the EU on the GASSA was, at least in part, owed to the fact that the EU already had an advanced BCA in place from which the US sought an exemption – a concession that the legislative architecture of the CBAM would not have allowed without substantial revisions and entailing the risk of having to revisit a carefully crafted and delicate political compromise enshrined in the existing CBAM Regulation.

For the time being, therefore, these collaborative efforts may have to limit themselves to preparing a foundation for future cooperative engagement on BCAs. To the extent that

185 Beattie (n. 141).

they can progress mutual understanding on the comparability of mitigation approaches, the development of joint metrics, and generally improve transparency around domestic climate policy design and implementation, they may pave the ground for more robust cooperation in the long term. In this regard, the IFCMA – with its conscious choice to focus on methodologies and data collection – may be a useful starting point, which can, in turn, benefit the Climate Club and the GASSA, should the latter resume discussions on the inclusion of carbon intensity requirements for steel and aluminium.

In the short term, if each initiative is able to successfully leverage its potential, the GASSA thus may serve as a bellwether for the prospects of identifying common ground on how traded goods and their embedded emissions should be handled under very different national carbon constraints, such as carbon pricing and product standards; the IFCMA, by contrast, might prove an important effort to achieve clarity on data and methodologies related to carbon intensities of products, as well as on national climate policy efforts. Finally, the Climate Club could prove a viable approach to keep cooperation on decarbonization, inclusiveness, partnerships, and climate ambition alive, even if it cannot yet serve as a forum to advance particular instruments such as a BCA. Progress under each one of these efforts can build on progress under the others, yet all depend in equal measure on political will and an alignment of domestic priorities to leverage their true potential.

It bears noting that the analysis in this section has been focused on plurilateral initiatives relevant to BCA cooperation. Although the GASSA is emerging as a bilateral initiative, it was envisioned from the outset to evolve into a plurilateral forum. Truly multilateral cooperation on BCAs, by contrast, has not made much headway so far. Two multilateral regimes, the UNFCCC and the WTO, have faced demands for more proactive engagement at the intersection of climate and trade, including in the context of the EU CBAM. China, for instance, has called for dedicated multilateral discussions at the WTO to enhance the understanding of the EU CBAM and other future BCAs. The proposed dedicated discussions are aimed at enhancing "the understanding of the policy objectives, means of implementation and potential impacts of the relevant measures, with a view to clarifying understandings, identifying controversies, and diffusing trade tensions by way of enhancing the inclusiveness of such measures and improving their conformity with WTO rules and basic principles of international law".[186]

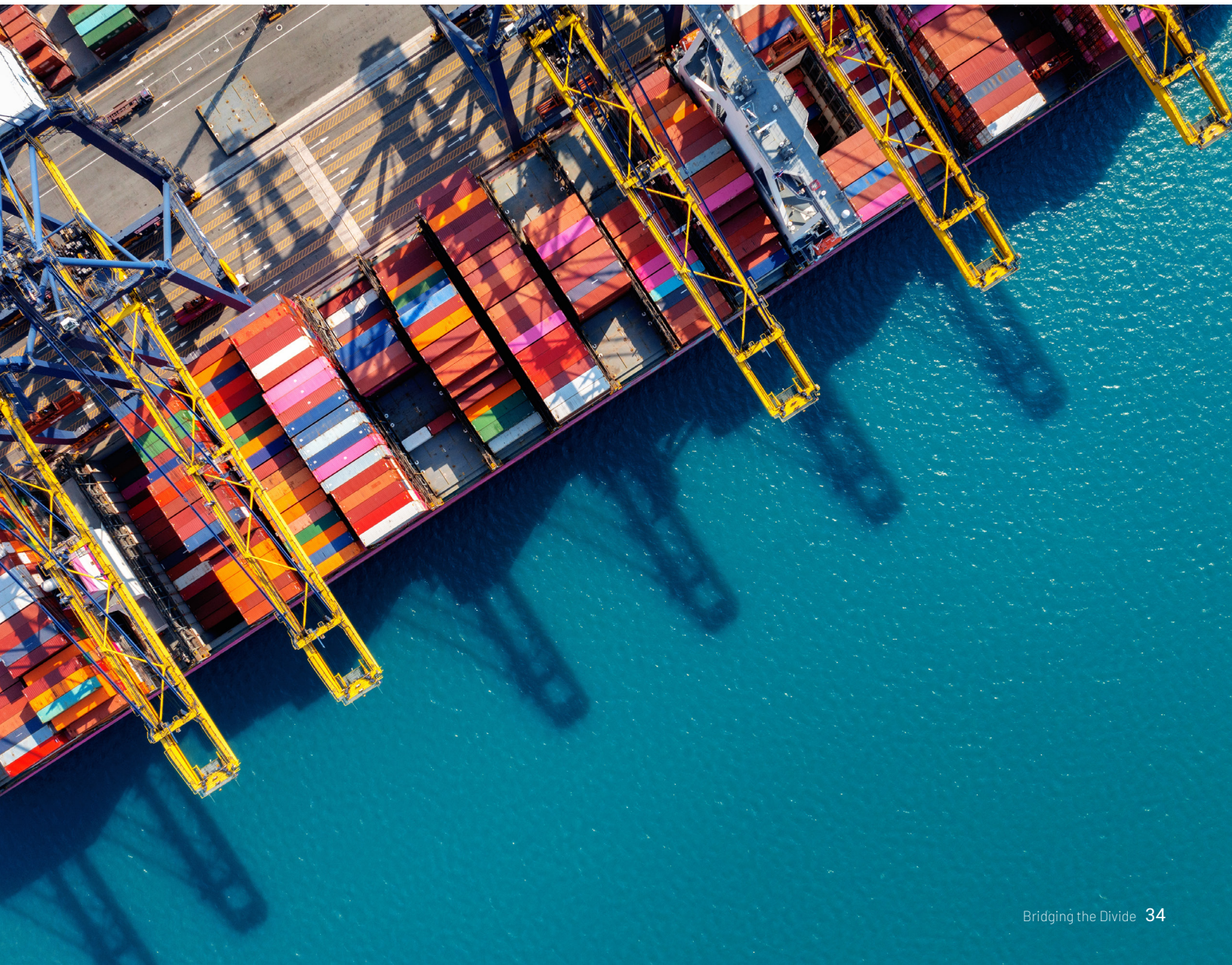
Notwithstanding their own sets of limitations, multilateral approaches would score favorably in terms of their inclusivity and legitimacy, making them a prospective avenue for BCA cooperation in the more distant future. The WTO offers a useful case in point: as a multilateral forum with 164 members, its breadth and diversity as well as a mature and highly sophisticated institutional infrastructure afford it advantages that none of the initiatives discussed earlier in this report can match. Its Committee on Trade and Environment offers an established forum to discuss trade and climate policy issues, and the established mechanism of Trade Policy Reviews allows it to take up national measures – including climate policy tools such as BCAs – that might impact trade, thereby increasing transparency for all WTO member states.

As such, it could seem a well-placed forum for multilateral cooperation on BCAs. At the same time, the WTO has also been facing protracted political gridlock among its members, impeding or halting virtually all attempts at a reform that would improve integration of

186 'Further Elaboration on Dedicated Multilateral Discussions on the Trade Aspects and Implications of Certain Environmental Measures. Communication from China', JOB/TE/81 (12 June 2023), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/Jobs/TE/81.pdf&Open=True.

climate concerns into the governance of world trade. Its legacy as a product of the post-World War II global order has been challenged by profound geopolitical changes since the late 1990s (see Section 2). Enforcement of multilateral trade rules and principles has been undermined by an increasing number of regional and bilateral trade agreements among WTO parties.

Accordingly, despite its inherent potential, the WTO currently has very limited political latitude to develop any meaningful rules or guidelines relevant to BCA cooperation.[187] A dispute on the EU CBAM, raised by a trade partner of the EU, could secure legal clarity on the WTO-legality of this particular BCA, but that can hardly be considered a means of deliberate cooperation on BCA design and implementation. For the time being, forums such as the WTO and the UNFCCC appear to be too burdened by their own internal divisions and the broader headwinds currently facing multilateral cooperation, and have hence not been included in this survey.



6. Conclusions

International cooperation on climate change and trade is intensifying, as highlighted by numerous initiatives launched at the multilateral, plurilateral and bilateral levels. This is an encouraging development that underscores the major role that trade policy can play in supporting countries in their efforts to decarbonize and adapt to the impacts of climate change. At the same time, many of these initiatives eschew one of the most contested issues at the interface of trade and climate policies: BCAs.

The EU CBAM is unlikely to be the last or only BCA, with various jurisdictions contemplating similar measures as they adopt increasingly ambitious climate change mitigation policies and pursue other policy objectives, such as improved national security or industrial policy. With many jurisdictions pursuing their own BCA designs and implementation strategies, however, come increased risks of uncoordinated proliferation of divergent approaches, which in turn can translate into greater uncertainty, higher transaction and administrative costs, and detrimental effects on international cooperation – including climate diplomacy – more generally.

By targeting traded products, BCAs inherently have an external dimension. In the concrete design of BCAs, the spillover effects are largely determined by provisions on the geographic scope (i.e., the extent to which countries are exempted), the calculation of the adjustment (e.g., whether and what kind of mitigation policies in third countries are credited), the determination of embedded emissions (e.g., whether based on actual emissions in the country of origin or some kind of default values), and the use of revenues (e.g., whether BCA revenues are recycled back to the affected trading partners). These external dimensions of BCAs both add relevance to, and can serve as an anchor for, international cooperation.

Cooperation is not only one of the core principles underpinning the international legal order, including the international climate and trade regimes, but it can also help address some of the adverse impacts associated with BCAs. These include the risks that BCAs lead to green protectionism and tit-for-tat trade retaliation. International cooperation could further ensure that BCAs become part of broader diplomatic efforts on climate change, taking into account, among other things, the interests and priorities of countries in the Global South that would be adversely affected by BCA implementation. Moreover, international cooperation could reduce the risk of multiple – and possibly diverging – approaches to BCAs emerging in different parts of the world.

In this report, we have focused on two core features of international cooperation, namely its inclusiveness and institutional strength, both of which can be linked to an initiative's input legitimacy, which refers to the quality of the process through which decisions are made. The rationale for international cooperation points to different goals that can be pursued with international cooperation on BCAs. In this report, we identified five possible goals, namely:

(1) promoting transparency (i.e., sharing information on the design, implementation and effects of BCAs);

(2) developing objectives and principles for BCAs (i.e., identifying best practices that could guide future design and implementation);

(3) improving comparability by developing methodologies that allow for the comparison of different types of mitigation policies and their effects;

(4) promoting harmonization with a view to developing product or MRV standards; and

(5) broadly contributing to global climate ambition, by either strengthening domestic or third-country climate policies.

We have applied this analytical framework to three emerging models of cooperation relating to BCAs, namely the Climate Club, the GASSA, and the IFCMA. For each of the aforesaid three initiatives, we have discussed the extent to which they can be considered inclusive, as well as their purported institutional strength based on publicly available documents. In addition, we have also assessed the propensity of the three initiatives to contribute to one or more of the five goals mentioned above.

Our analysis suggests that none of the three initiatives discussed in this report stands to emerge as an ideal candidate for international cooperation on BCAs. At the same time, we acknowledge that this remains an evolving context. What the analysis reveals is a real risk that domestic interests and short-term political priorities will take precedence over the acknowledged benefits of international cooperation, unless any cooperative initiatives are thoroughly aligned with all participating jurisdictions' domestic policy approaches and geopolitical positions. Finding a "landing zone" for international cooperation on BCAs among trading partners with often conflicting domestic contexts and priorities will be challenging, as attested by the recent breakdown of the GASSA negotiations among only two partners with broadly aligned interests.

Inevitably, this observation gives rise to the question whether, in the current geopolitical context, there can be any way forward on international cooperation on BCAs. While domestic interests and other overriding priorities may mute the appeal of such cooperation in the near term, we believe that the many benefits – political, economic and environmental – of cooperation as well as its ability to foster the perceived legitimacy and thus sustain international acceptance of BCAs will, over time, exercise growing pressure to engage in some form of cooperation. Much will also depend on the broader context of BCA cooperation, and whether – for instance – it is accompanied by efforts to honestly engage on the costs of implementation and the risks of protectionism, or

includes mechanisms to extend support for developing countries that face difficulties complying with the attendant obligations.

Ongoing initiatives such as the Climate Club and IFCMA already appear to recognize this dilemma: as different countries advance their respective industrial decarbonization strategies, they are at very different stages in that process and have embraced very different approaches. With the timing thus being arguably premature for meaningful cooperation on BCAs, they have instead opted to focus on broader procedural and facilitative aspects – such as data collection or information exchange – while emphasizing their openness to broad participation, and the importance of offering support to economically less advanced countries. As the sole initiative that initially sought to bring two closely aligned jurisdictions together behind a common policy effort, the GASSA has hit a serious impasse.

On the positive side, while it remains too early to anticipate the success of the Climate Club and the IFCMA, the crosscutting and facilitative efforts they are currently pursuing, such as the collection of data and advancement of common metrics and methodologies, may prepare the ground for more robust long-term engagement on BCA cooperation, and may also help accommodate a more diverse set of mitigation actions and policy approaches. Additionally, through their transparency and inclusiveness, they can strengthen the legitimacy and acceptance of future cooperative efforts.

One thing is clear: in one form or another, BCAs are becoming an increasingly relevant part of the evolving climate policy landscape. It may be too soon to anticipate their role going forward, and whether they may prove to have been an isolated and temporary symptom of a difficult transition period in industrial decarbonization, or will proliferate and remain key policy elements far into the future. Still, the challenges they pose to established forms of international economic and environmental cooperation are not trivial, as are the risks arising from uncoordinated and unilateral initiatives. Current circumstances may not favour cooperation, yet failure to engage on the design and implementation BCAs beyond jurisdictional boundaries will also exact a growing price. The combination of shallow efforts to facilitate debate and information exchange, coupled with the growing prospect of economic and political fragmentation, may ultimately be what translates into rising pressure to cooperate, until such time as a relevant group of actors is ready to embark on a journey through the varied and challenging landscape of BCA cooperation.

CLIMATE Strategies

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https://climatestrategies.org/projects/climate-trade-2-0/

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