

The CBAM Regulation and US BCA proposals: an analysis across the GATT non-discrimination obligations and the CBDR-RC principle

Rachele Magnaghi *

ABSTRACT

Recent Intergovernmental Panel on Climate Change reports emphasize that there is no ‘silver bullet’ to tackle the global climate crisis. In response, several Members of the World Trade Organization (WTO) are adopting policy instruments to internalize the environmental costs of greenhouse gas emissions. Yet, when adopting these policy tools, Members may face concerns about the risk of carbon leakage and the resulting loss of competitiveness. In May 2023, the European Union (EU) adopted Regulation 2023/956, establishing the Carbon Border Adjustment Mechanism (CBAM). Shortly thereafter, other WTO Members, including the USA, tabled proposals for national border carbon adjustment (BCA) mechanisms. While BCAs hold potential to advance climate mitigation and incentivize global decarbonization, they also pose complex legal and systemic challenges under the General Agreement on Tariffs and Trade (GATT). If not designed and implemented with sensitivity to global disparities, BCAs may impose disproportionate burdens on developing and least-developed countries, potentially undermining their consistency with GATT non-discrimination obligations and the *chapeau* of Article XX. To ensure that BCAs are genuinely directed towards climate objectives, interpretations of Article XX *chapeau* must be informed by the Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) principle, which must guide States’ climate mitigation efforts. Against this backdrop, this contribution critically examines and compares the core implementation challenges of the EU CBAM and four BCA proposals introduced in the 118th US Congress in 2023. With the EU CBAM nearing full implementation and growing momentum for BCAs in other jurisdictions, including the USA, addressing legal and distributive concerns is imperative to avoid adverse impacts on vulnerable economies. This is particularly pressing also in light of the potential emergence of a ‘BCA coalition’ among politically and economically aligned states. While BCAs can foster international cooperation and make meaningful contributions to climate change mitigation, their legitimacy depends on consistency with the CBDR-RC principle and compliance with the GATT.

INTRODUCTION

In the context of an accelerating climate crisis, rising greenhouse gas emissions (GHG), and a projected failure to achieve the temperature goals set out in Articles 2.1(a) and 4.1 of the 2015 Paris

* Rachele Magnaghi, Research fellow, University of Milan, Via Conservatorio, 7, 20122 Milano, Italy. Email: rachele.magnaghi@unimi.it. This paper was written in 2023–early 2024 and therefore does not take into account subsequent legislative developments.

Agreement (PA),¹ an increasing number of developed countries have adopted or indicated an intention to adopt border carbon adjustment (BCA) mechanisms as ‘defensive’² climate policy tools. These countries are indeed the ones that implement stringent climate mitigation policies, including carbon pricing measures.³

In May 2023, the European Union (EU) adopted its Carbon Border Adjustment Mechanism (CBAM)⁴ and, since that time, other jurisdictions have manifested their intention to adopt a BCA.⁵

In 2023, several bills proposing a BCA were introduced at the 118th Congress of the United States,⁶ indicating that the time may be ripe for the adoption of a BCA.⁷

BCAs are trade-related policy instruments that encompass both environmental and economic purposes. The principal objective of BCAs is to address the issue of carbon leakage and, accordingly, to promote fair competition by establishing carbon pricing equivalence between imported and domestic goods.⁸ Carbon leakage is a phenomenon whereby carbon dioxide (CO₂) emissions increase in countries that have not implemented, or have implemented less stringent, carbon pricing measures.⁹ It occurs as a result of producers relocating their operations to these jurisdictions in response to the higher costs associated with the implementation of stricter climate policies in their home country. Indeed, domestic producers may face ‘unfair competition’¹⁰ and be tempted to relocate their production where costs are lower.

Carbon leakage therefore has a negative impact on both climate change and the competitiveness of domestic industries.¹¹ In seeking to address these issues, BCAs prompt third countries to intensify their climate change mitigation efforts, particularly with regard to the adoption of carbon pricing instruments.¹²

However, if not designed and implemented with due consideration of the diverse capabilities and circumstances of other States, especially developing countries and least-developed countries (LDCs), BCAs may be in conflict with a fundamental tenet of climate change law, namely the Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) principle.¹³

CBDR-RC requires a differentiation of obligations with regard to climate change mitigation commitments, particularly between developed and developing countries.¹⁴ Consequently, it acknowledges the necessity to implement distinct mitigation policy instruments and targets that

¹ The main goals of the PA are to ‘hold the increase in the global average temperature to well below 2 °C above pre-industrial levels’ and ‘pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels’ and to ‘reach global peaking of greenhouse gas emissions as soon as possible [...]’, Paris Agreement to the United Nations Framework Convention on Climate Change’ (2015) TIAS No 16-1104 art 2.1(a), 4.1.

² Giulia Claudia Leonelli, ‘Practical Obstacles and Structural Legal Constraints in the Adoption of “Defensive” Policies: Comparing the EU Carbon Border Adjustment Mechanism and the US Proposal for a Border Carbon Adjustment’ (2022) 42 *Legal Studies* 696, 697.

³ A carbon pricing measure is a policy instrument that imposes a price on GHG emissions with the objective of reducing the cost of abatement by internalizing the social cost of emissions. Examples of such measures include carbon taxes and cap-and-trade systems.

⁴ ‘Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 Establishing a Carbon Border Adjustment Mechanism’ (EU Parliament and Council of the EU 2023) L 130/52. Note that the Regulation was published on the Official Journal of the European Union on 16 May 2023 and in entered into force in its transitional phase on 1 October 2023.

⁵ Particularly G7 States have advanced their proposals for a domestic BCA.

⁶ It is noteworthy that BCAs have been the subject of discussion in the USA for over a decade. During this time a number of proposals have been put forth. However, to date, none of these proposals have been adopted. For more details refer to 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 *Energy Policy* 42.

⁷ It should be noted that this paper considers only the proposals introduced in 2023 to amend the US Internal Revenue Code of 1986 that the author believes best reflect the different approaches.

⁸ Leonelli (n 2) 697.

⁹ *Climate Change 2007: Mitigation of Climate Change* (CUP 2007).

¹⁰ The disadvantage in competition is considered ‘unfair’ because low production costs are the result of environmentally unsustainable production practices.

¹¹ Carbon leakage has the potential to impede the efficacy of a home country’s efforts to reduce global GHG emissions and the achievement of the temperature goals set forth in the Paris Agreement. See John Stephenson and Simon Upton, ‘Round Table on Sustainable Development’ 11.

¹² Aaron Cosbey and Ieva Baršauskaitė, ‘Border Carbon Adjustments: Pivotal Design Choices for Policy-Makers’ (IISD 2023) Policy Brief 3.

¹³ Gracia Marín Durán, *Carbon Border Adjustments: Ensuring Compatibility with the International Climate and Trade Regimes* (CUP 2023).

¹⁴ ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 4.4, 4.7; Christina Voigt and Felipe Ferreira, ‘“Dynamic Differentiation”: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ (2016) 5 *Transnational Environmental Law* 285.

reflect the respective capabilities of States as well as their national circumstances, with the sole obligatory requirements of progression and ambition.¹⁵

Although the CBDR-RC principle is part of climate change law, it can play a paramount role in interpreting Article XX *chapeau* of the General Agreement on Tariffs and Trade (GATT) 1994.¹⁶ This principle may serve to ensure that the BCA has not been adopted for the purpose of promoting protectionist interests and that it does not engender protectionist effects.¹⁷

Indeed, given their trade nature, when adopted by a WTO Member, BCAs shall comply with WTO Agreements, *inter alia*, with the GATT.

The objective of this article is to undertake a comparative and evaluative analysis under the GATT of the main ‘implementation challenges’ associated with the EU CBAM and four of the proposals put forth by the USA, with the aim to ensuring the implementation of CBDR-RC and GATT-compliant BCAs. The term ‘implementation challenges’ refers here to those features that, in the absence of careful implementation, taking into account the different circumstances in developing countries and LDCs, are most likely to impose an excessive administrative burden and costs on these countries. As a result, they are likely to be found in violation of the GATT non-discrimination obligations and Article XX *chapeau*. These features are the scope of product coverage, the country exemptions, the calculation of emissions related to imported goods, and the credit for equivalence.¹⁸

The article focuses on the assessment of these aspects under Article XX *chapeau*, interpreted in the light of the CBDR-RC principle.¹⁹ The assessment is conducted resorting to a ‘holistic’ approach, that is taking into account all other relevant features of the measures.²⁰

In this regard, the study argues that the implementation challenges identified would be found to violate the GATT’s non-discrimination obligations under Articles I²¹ and III.²² These

¹⁵ ‘Paris Agreement to the United Nations Framework Convention’ (n 1) arts 2.2, 4.2–4.4; Harald Winkler, ‘Mitigation (Article 4)’, *The Paris Agreement on Climate Change: Analysis and Commentary* (OUP 2017).

¹⁶ See, *inter alia*, Michael Hertel, ‘Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities’ (2011) 45 *Journal of World Trade* 653; Pananya Larbprasertporn and Jaume Comas Mir, ‘The Interaction Between WTO Law and the Principle of Common but Differentiated Responsibilities in the Case of Climate-Related Border Tax Adjustments’ (2014) *Goettingen Journal of International Law* 6, 145–170.

¹⁷ ‘Vienna Convention on the Law of Treaties (1969)’ art 31.3(c); Michael Hertel, ‘Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities’ (2011) 45 *Journal of World Trade* 653; 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).

¹⁸ Credit for equivalence refers to the provision that allows importers to deduct any carbon price already paid in the country of origin from the amount they owe under the BCA taken into consideration.

¹⁹ Concerning the EU CBAM cf. Geraldo Vidigal and Ingo Venzke, ‘Of False Conflicts and Real Challenges: Trade Agreements, Climate Clubs, and Border Adjustments’ (2022) 116 *AJIL Unbound* 202. For more details about the legal analysis of BCAs under the GATT, refer to Madison Condon and Ada Ignaciuk, ‘Border Carbon Adjustment and International Trade: A Literature Review’ (2013) OECD Trade and Environment Working Paper 2013/06 <https://www.oecd-ilibrary.org/trade/border-carbon-adjustment-and-international-trade_5k3xn25b386c-en>. For additional information on the legal analysis under Articles I, III, XX GATT, see Sarah Davidson Ladly, ‘Border Carbon Adjustments, WTO-Law and the Principle of Common but Differentiated Responsibilities’ (2012) 12 *International Environmental Agreements: Politics, Law and Economics* 63, 73–78; Patrick Low, Gabrielle Marceau and Julia Reinaud, ‘The Interface between the Trade and Climate Change Regimes: Scoping the Issues’ (2011) Staff Working Paper ERSD-2011-1. Some scholars also posit that, given that BCAs are designed to permit more ambitious climate change policies, they should be subject to less WTO scrutiny, see Goran Dominioni and Daniel C Esty, ‘Designing Effective Border Carbon Adjustment Mechanisms: Aligning The Global Trade And Climate Change Regimes’ (2023) *Arizona Law Review* 65, 1–41.

²⁰ The analysis is more detailed for the EU CBAM as it is the only measure that has been adopted so far. Consequently, it has a larger body of literature and a greater number of developed features compared to the US proposals.

²¹ Also known as the Most-Favoured-Nation (MFN) clause.

²² Also known as the National Treatment (NT) clause. Please note that the evaluation of the qualification of the aforementioned measures as border measures or internal measures is beyond the scope of this article. To date, the qualification of CBAM under Article II or Article III GATT is still debated. For further information on this aspect, see Ilaria Espa, Harro Van Asselt and Joseph Francois, ‘The EU Proposal for a Carbon Border Adjustment Mechanism (CBAM): An Analysis under WTO and Climate Change Law’ (WTI 2022) WTI Working Paper 16, n 122, <https://www.wti.org/media/filer_public/ee/61/ee6171fd-a68d-4829-875e-d9b0c32298b5/wti_working_paper_06_2022.pdf>; Carlos A Alonso Gayon, ‘The EU’s CBAM, Complying with the CBDR Principle Could Also Mean Compliance with WTO Law’ (2023) 32 *Minnesota Journal of International Law* 278. Article II refers to duties or charges ‘imposed on or in connection with importation’ that are levied at the border on imported goods. In contrast, Articles III.2 and III.4 cover, respectively, internal taxes or charges and ‘internal laws, regulations and requirements [...]’ and allow for the imposition of charges, taxes, laws, regulations, and requirements on both imported and domestic products. To distinguish between a border measure, governed by Article II, and an internal tax, governed by Article III, WTO jurisprudence has established a specific criterion based on the event that gives rise to the obligation to pay the charge. If the latter results from an internal event, such as the distribution, sale, use, or transportation of the imported product, the charge is classified as an internal charge and falls within the scope of Article III. Conversely, if the charge is imposed ‘on importation’ and is not contingent on its distribution in the domestic market, it

provisions respectively preclude WTO Members from discriminating among trading partners and from affording imported ‘like’ products less favourable treatment vis-à-vis domestic ‘like’ products.

The relevance of this research lies in the fact that the full implementation of the EU CBAM is imminent, and failure to address potential challenges could have a detrimental impact on developing countries and LDCs. In the same vein, the momentum gained by BCAs in the USA may quite soon lead to the adoption of a measure that, like the CBAM, might disproportionately affect developing countries and LDCs.

It is therefore of the utmost importance to ensure that the implementation of these measures is effective in achieving their intended mitigation objectives and does not impede the development of developing countries and LDCs in favour of developed countries’ competitiveness.

Additionally, the potential cascading effect of a US BCA adoption is likely to result in further BCAs being pursued.²³ At that point, the EU and the USA, being two of the largest economies in the world, will serve as models for the adoption of these instruments by other jurisdictions.

Finally, the adoption of several BCAs could ultimately lead to the formation of coalitions among BCAs. BCAs and BCAs coalitions that are compliant with the CBDR-RC-GATT may indeed advance the achievement of GHG emissions reductions in a concrete manner.

SETTING THE SCENE: THE MAIN FEATURES OF THE BCAs AT STAKE

The following subsections concentrate on the description and comparison of the BCAs ‘on the hook’, focusing on the features that will form the subject of the legal analysis in “Legal analysis across the GATT and the CBDR-RC principle” section.

The EU CBAM Regulation

On 10 May 2023, the EU Parliament and the Council of the EU adopted Regulation (EU) 2023/956 establishing a CBAM, to address the risk of carbon leakage and level the economic playing field.²⁴

The CBAM is a key component of the ‘Fit for 55’ legislative package²⁵ designed to facilitate the Union’s transition to a climate-neutral economy by 2050, in alignment with the PA objectives²⁶ and the EU’s Nationally Determined Contribution (NDC) as updated in 2023.²⁷

The measure aims to complement the EU Emissions Trading System (ETS)²⁸ and to amend this mechanism to the extent it allocates free allowances to counter carbon leakage.²⁹ The EU ETS is indeed the EU domestic carbon pricing mechanism that sets a cap on the amount of GHG emissions that can be released from industrial installations in certain energy-intensive sectors.³⁰

is considered a border measure subject to Article II. See, *inter alia*, *China—Measures Affecting Imports of Automobile Parts* [2008] Panel WT/DS339/R; WT/DS340/R; WT/DS342/R, Panel Report [7.205]. Conversely, for the US proposals that establish an equivalent domestic carbon price, qualification under Article II.2(a) would be more straightforward. Distinct considerations would be necessary for the FPFA that would not impose a domestic carbon price. Nevertheless, for our purposes, we assume that all the BCAs taken into consideration would fall either under Articles II.2(a) or III GATT. In this regard, the relevance of Article III in our analysis stems from Article II.2(a) which provides that WTO Members are allowed to impose at any time on the importation of any product ‘a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III in respect of the like domestic product [...]’. Hence, Article II.2(a) functions as a bridge between Articles II.2 and III.2 of the GATT.

²³ Michael Mehling and others, ‘Bridging the Divide: Assessing the Viability of International Cooperation on Border Carbon Adjustments’ (MIT CEEPR 2024) Working Paper Series CEEPR WP 2024-06 <<https://www.jstor.org/stable/resrep59646>>.

²⁴ ‘Carbon Border Adjustment Mechanism’ (European Commission—European Commission) <https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661>.

²⁵ ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions “Fit for 55” (2021) (COM(2021)550 final).

²⁶ ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 2.

²⁷ ‘Update of the NDC of the European Union and Its Member States’ (EU 2023) Submission by Spain and the European Commission on Behalf of The European Union and its Member States.

²⁸ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) arts 1.1, 1.2; ‘Directive 2003/87/EC of the European Parliament and of the Council’ (EU Parliament and Council of the EU 2003) OJEU L 275/32.

²⁹ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) art 1.3. Allowances must be purchased on the ETS trading market, although a certain number of free allowances are distributed to prevent carbon leakage. The gradual introduction of the CBAM is aligned with the phase-out of the allocation of free allowances under the ETS.

³⁰ ‘Directive 2003/87/EC of the European Parliament’ (n 27); ‘EU Emissions Trading System (EU ETS)—European Commission’ <https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en>; ‘Scope of the EU Emissions

On 1 October 2023, the CBAM entered into force in its transitional phase, with the first reporting period³¹ for importers ending on 31 December 2025.³² For this first phase, the scope of CBAM is limited to some of the most carbon-intensive products listed in Annex I that are also covered internally by the EU ETS.³³ These are cement, electricity, fertilizers, iron and steel, aluminium, and hydrogen, together with some precursors and downstream products made from cement, iron and steel, and aluminium. However, most likely in the future, the scope of application of the CBAM will be extended in order to encompass more sectors.³⁴

The CBAM Regulation excludes from its scope of application only those countries that are listed in its Annex III.³⁵ Precisely, the CBAM exempts third countries and territories that are part of the EU ETS, or have an ETS fully linked to the latter,³⁶ and that have an electricity market integrated with the EU internal market for electricity through market coupling and that respect specific conditions.³⁷

In other words, in order to benefit from the exemption, third States, including developing countries and LDCs, must comply with the standards of the EU climate legislation.³⁸

With regard to the scope of the emissions covered, the CBAM covers direct GHG emissions released during the production of goods and indirect emissions from the production of electricity that is consumed during the production processes.³⁹ In this context, the CBAM applies to the ‘actual embedded emissions’⁴⁰ of the ‘covered goods’⁴¹ imported into the EU. These emissions are determined according to the methodology set out in Annex IV, which is consistent with the reporting of emissions under the EU ETS for the production of the same goods in the EU.⁴²

From 2026, the CBAM will mirror the ETS by requiring importers to purchase and surrender certificates based on the embedded emissions of their imported goods. The price of these certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in euros per tonne of CO₂ emitted.⁴³ Importers of the goods will have to register with national authorities,⁴⁴ either individually or through a representative, in order to be able to surrender CBAM certificates corresponding to the carbon price that would have been paid had the imported goods been produced under the EU ETS.⁴⁵ It is thus required that, by 31 May of each

Trading System—European Commission’ <https://climate.ec.europa.eu/eu-action/carbon-markets/eu-emissions-trading-system-eu-ets/scope-eu-ets_en> accessed 26 September 2023.

³¹ In addition to other pertinent information, importers are required to report, the type of goods as identified by their Combined Nomenclature code; the quantity of imported goods, the direct and indirect emissions embedded in them (calculated in accordance with specific methods), and any ‘carbon price’ already paid abroad for the emissions, including the carbon price paid for any precursor material embedded in the final product.

³² Please note that during this period, importers of goods within the scope of the new regulations will be required only to report GHG embedded in their imports. Indirect emissions will have to be reported only after the transitional period for certain sectors (cement and fertilizers), based on a defined methodology outlined in the ‘Commission Implementing Regulation (EU) 2023/... of 17 August 2023 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’ and its accompanying guidance.

³³ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 29. Those are cement, electricity, fertilizers, iron and steel, aluminium, and hydrogen, and some precursors and downstream products made from cement, iron and steel, and aluminium.

³⁴ It is indeed the intention of the EU to have all sectors covered by the ETS included within the CBAM by 2030. *ibid* 65, 67.

³⁵ *ibid* 2.4 Annex III.

³⁶ *ibid* 2.3. These countries and territories are listed in Annex III CBAM Regulation and, to date, they are Iceland, Lichtenstein, Norway, and Switzerland, together with the territories of Büsingen, Heligoland, Livigno, Ceuta, and Melilla.

³⁷ *ibid* 2.7.

³⁸ Third countries necessitate for instance formal agreements with the EU, mandating adherence to the EU laws concerning electricity, renewable energy, and regulations in energy, environment, and competition. Additionally, domestic legislation of the ‘applying’ third country must mirror key provisions of the EU electricity market laws, especially those regarding renewable energy development. The country also must commit to achieving climate neutrality by 2050 and formulating a long-term, low-GHG emissions strategy aligned with this objective. The Commission is mandated to undertake assessments upon the fulfilment of the required conditions. Furthermore, exempted countries or territories may be subject to delisting when they do not achieve sufficient progress in implementing these conditions. It is noteworthy that this ‘conditionality’ provides a framework for monitoring the commitments of third countries in climate action. *ibid* 2.7, 2.8.

³⁹ *ibid* 3.22 Annex IV. Note that during the transitional phase, indirect emissions will be covered only for a few products.

⁴⁰ *ibid* 3(22).

⁴¹ *ibid* 20, 25, 27, 31.

⁴² *ibid* 7 Annex IV. For more information, refer to Charles Codère, ‘Harmonized Implementation of Corporate Climate Disclosure Standards: A Key For Effective Carbon Border Adjustment Mechanisms’; Espa, Van Asselt and Francois (n 21) 21.

⁴³ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) paras 23, 49.

⁴⁴ *ibid* 10.

year, and for the first time in 2027, for the year 2026, the authorized CBAM declarant shall surrender via the CBAM registry a number of CBAM certificates that corresponds to the embedded emissions declared in the CBAM declaration.⁴⁶ However, to prevent importers from being required to pay twice for the carbon emissions embedded in their goods, and to acknowledge the efforts made by trading partners with carbon pricing mechanisms in place, the CBAM provides for a credit to importers that have paid an explicit carbon price⁴⁷ in the country of origin.⁴⁸

Thus far, the CBAM has not included any specific provisions addressing the destination of CBAM revenues. Nevertheless, the recitals of the Regulation, in the context of international climate finance, indicate the EU's intention to implement a novel revenue stream derived from the sale of CBAM certificates.⁴⁹

The US BCA proposals

From 7 June to 7 December 2023, four proposals to amend the US Internal Revenue Code of 1986 and to establish a BCA were submitted to the US Congress with the objective of pursuing environmental and economic interests.⁵⁰ Precisely, those are the 'Foreign Pollution Fee Act' (FPFA), the 'Energy Innovation and Carbon Dividend Act' (EICDA), the 'Clean Competition Act' (CCA), and the 'Modernizing America with Rebuilding to Kickstart the Economy of the Twenty-first Century with a Historic Infrastructure-Centered Expansion' (MARKET CHOICE) Act.

The FPFA

On 2 November 2023, the FPFA was introduced to the US Congress.⁵¹ The FPFA would levy charges on imports deemed more carbon-intensive than domestic US goods.⁵² In contrast to the other US proposed bills analysed, the FPFA would not impose a domestic carbon price but merely a fee on imported goods.⁵³ The fee would be calculated based on the average emission intensity of the product in the exporting country in comparison to the average emission intensity of the product in the USA.⁵⁴

The FPFA would encompass 15 broad categories of products derived from emissions-intensive trade-exposed (EITE) sectors, with the possibility of further expansion.⁵⁵ These would include aluminium, biofuels, cement, crude oil, glass, hydrogen, methanol, ammonia, iron and steel, and other related materials. In addition, lithium-ion batteries, natural gas, solar cells and panels, and wind turbines would also be included. As can be readily discerned, the range of products covered would be considerably more extensive than that of the CBAM (at least in relation to the products covered in its transitional phase).

In terms of exemptions, the FPFA would exempt, *inter alia*, 'covered goods' produced in countries with a free trade agreement (FTA) with the USA,⁵⁶ or that have established an 'International

⁴⁵ *ibid* 22.

⁴⁶ *ibid* 22, [45].

⁴⁷ Here, 'carbon price' refers to the monetary amount paid in a third country, under a carbon emissions reduction scheme, in the form of a tax, levy, or fee, or in the form of emission allowances under a GHG ETS, calculated on GHG covered by such a measure, and released during the production of goods, *ibid* 3.29.

⁴⁸ This is in line with the recommendation of avoiding double protection for domestic producers, see Aaron Cosbey, 'Principles and Best Practice in Border Carbon Adjustment: A Modest Proposal' (IISD 2021) Brief 3. 'Regulation (EU) 2023/956 of the European Parliament' (n 4) art 9. Art 9 is titled 'Carbon Pricing Paid in a Third Country'.

⁴⁹ 'Regulation (EU) 2023/956 of the European Parliament' (n 4) para 74.

⁵⁰ Please note that the US Congress has rejected previous proposals. See, for instance, the proposal put forward in 2007 in the Low Carbon Economy Act, or the proposal included in 2009 in the American Clean Energy and Security Act, or again the one introduced in 2019 within the EICDA.

⁵¹ It is important to note that the term 'pollution' as used in the FPFA refers to GHG emissions. Foreign Pollution Fee Act 2023 [s 3198] s 4697 'Definitions' (20).

⁵² *ibid* s 101 'Foreign Pollution Fee'.

⁵³ *ibid*.

⁵⁴ *ibid* s 4691 'Imposition of Foreign Pollution Fee' (a)(1). This would ensure that the costs incurred by US producers to comply with climate regulations are equalized against those incurred in the exporting country by local producers. The fees are *ad valorem* charges that rise as the differential rises, falling into at least 25 tiers. *ibid* s 4692 'Determination of Variable Charge'.

⁵⁵ Foreign Pollution Fee Act (n 50) s 4695 'Covered Products'.

⁵⁶ *ibid*. (4).

Partnership Agreements' (IPAs) with the USA.⁵⁷ Finally, the FPFA would allow for preferential treatment to low-income and lower-middle-income countries that have concluded an IPA with the USA.⁵⁸

With regard to the calculation of emissions, the proposed legislation makes passing reference to this matter, and only in the context of the price to be paid by foreign importers. According to the bill, emission intensity would be calculated, *inter alia*, based on the differential between the US average GHG intensity for that product and that of foreign producers.⁵⁹ GHG intensity values would be assigned to foreign producers based on the country of ownership, operation, or majority finance of the facility, rather than on geographical location.⁶⁰ Regarding the data used, foreign-provided data may be utilized subject to rigorous verification.⁶¹ In a departure from the norm, foreign producers would be permitted to utilize their facility-specific GHG intensity data instead of the standard national sectoral average figures to recognize and reward the efforts of relatively clean production.⁶²

Nonetheless, the Act does not provide for an explicit carbon credit, nor does it mention the revenue allocation.

The EICDA

On 27 September 2023, the EICDA was presented with the objective of implementing a tax on fossil fuels and carbon-intensive products, both domestic and imported.⁶³ The declared objective of the measure is to 'safeguard animal, plant, and human life and health, to conserve exhaustible natural resources by preventing carbon leakage, and to facilitate the creation of international agreements'.⁶⁴ The scope of product coverage of the EICDA would be broad, including fossil fuels, iron, steel, aluminium, cement, glass, pulp, paper, chemicals, and industrial ceramics.⁶⁵

The EICDA proposal does not include any provisions for exemptions based on country classification, including for developing countries and LDCs.

With regard to the calculation of emissions and the issue of carbon crediting, the bill does not yet contain any specific provisions addressing these matters. However, it states that the methodology employed to administer the BCA shall take into consideration (i) the disaggregation of a product's GHG content; (ii) international law and shall foster international cooperation.⁶⁶ Additionally, the methodology shall avoid double pricing of GHGs, which suggests the potential implementation of carbon credits.⁶⁷

The EICDA allocates the revenue to the US Customs and Border Protection (CBP) for administering the carbon border fee adjustment (CBFA) and to the United Nations (UN) Green Climate Fund (GCF).⁶⁸ Differently from other BCAs, and especially different from the CBAM, the EICDA is the only bill that establishes an unequivocal link to the climate change system by

⁵⁷ *ibid* s 4694 'Treatment of International Partnerships' title II. The IPA would necessitate that partner countries implement comparable policies and carbon tariffs with the objective of decarbonizing industries, waiving tariffs on imported products from member countries, and collaborating with the USA on carbon accounting.

⁵⁸ *ibid* s 203 'Support for the Participation of Low-Income and Lower-Middle-Income Countries in International Partnership Agreements'.

⁵⁹ *ibid* s 4696 'National Laboratory Advisory Board on Global Pollution Challenges'. The National Laboratory Advisory Board would be responsible for estimating the GHG intensity of USA and foreign producers for the various products.

⁶⁰ *ibid*.

⁶¹ *ibid*.

⁶² *ibid*. Note that this option is contingent upon the conclusion of a facility-specific agreement (FSA). To qualify for an FSA, a producer would be required, *inter alia*, to adhere to all standards legally imposed on US producers (e.g., the Clean Air Act and the National Environmental Policy Act), as well as any additional environmental standards, and to install real-time pollution monitoring equipment. This approach is similar to the one adopted under art 2.7 CBAM Regulation.

⁶³ Energy Innovation and Carbon Dividend Act 2023 [HR 5744] ch 102 'Carbon Border Fee Adjustment', s 9908 'Carbon Border Fee Adjustment'. Note that the proposed legislation introduces a carbon price on fossil fuels at the point of extraction, with the collected fees subsequently distributed to citizens in the form of monthly dividends. The legislation indeed rebates 100 per cent of net revenues from the carbon fee to the Americans. *ibid* s 9512 'Carbon Dividend Trust Fund'.

⁶⁴ Energy Innovation and Carbon Dividend Act (n 62) (b). It is noteworthy that the language employed in the Act resembles that of art XX GATT, paras (b) and (g).

⁶⁵ *ibid* ch 101 'Carbon Fees', s 9901 'Definitions'; ch 102 'Carbon Border Fee Adjustment', s 9908 'Carbon Border Fee Adjustment' (c)(1)(2). The bill provides for specific exemptions.

⁶⁶ *ibid* s 9909, Administration of the Carbon Border Fee Adjustment (c).

⁶⁷ *ibid*.

⁶⁸ Energy Innovation and Carbon Dividend Act (n 62) s 9910 'Allocation of Carbon Border Fee Adjustment Revenues'.

allocating the revenues to GCF, which is the Financial Mechanism of the United Nations Framework Convention on Climate Change.

The CCA

On 6 December 2023, the CCA was introduced with the aim of imposing a carbon intensity charge on both domestically produced and imported energy-intensive goods if their emissions intensity exceeded a specified benchmark.⁶⁹ Besides an internal fee,⁷⁰ the CCA would impose a carbon border adjustment on all imported EITE products.⁷¹ These are, *inter alia*, fossil fuel, petrochemicals and fertilizers, hydrogen, cement, iron, steel, and aluminium, glass, and pulp and paper.⁷² With regard to the previously examined bills, it should be noted that the CCA also encompasses a wide range of products that extend beyond those subject to the CBAM. Moreover, in 2027, the scope of sector coverage would be expanded to include imported finished goods.⁷³ The carbon fee adjustment would be determined based on a benchmark price and a domestic performance standard. It shall be noted that the default values for the calculation of the carbon intensity of imported products would be based on the general economy of the country of origin of such goods.⁷⁴ However, if data were available from a transparent market economy, the charge would be based on sectoral performance.⁷⁵

In terms of crediting, the bill would waive the fees for goods from foreign countries implementing similar policies with an explicit cost on GHG emissions.⁷⁶

The bill would also provide for a specific exemption for relatively LDCs,⁷⁷ contingent upon specific circumstances.⁷⁸

Regarding the distribution of the revenues, the bill allocates 75 per cent of the generated funds to the decarbonization of targeted domestic industries and 25 per cent to multilateral assistance for climate and clean energy programmes overseas.⁷⁹

The MARKET CHOICE Act

On 7 December 2023, the MARKET CHOICE Act was introduced,⁸⁰ proposing the replacement of federal motor vehicle and aviation fuel taxes with a broader tax on GHG emissions⁸¹ and the introduction of a border tax adjustment.⁸² Importers of covered industrial products, fossil fuels, and other manufactured products with high GHG intensity would be subject to the BCA equivalent to the domestic carbon tax.⁸³

⁶⁹ Clean Competition Act 2023 [s 1863] s 2 'Carbon Intensity Charge', 'Subchapter E', 'Carbon Intensity Charge', s 4691 'Calculation of Carbon Intensity' (a).

⁷⁰ *ibid* 'Subchapter E', 'Carbon Intensity Charge', s 4691 'Calculation of Carbon Intensity' (a).

⁷¹ *ibid* s 4692 'Imposition of Carbon Intensity Charge'.

⁷² *ibid* s 4694 'Definitions' (4)(A).

⁷³ Note that these products will be determined differently over a phased period beginning in 2027, *ibid*. (7).

⁷⁴ *ibid* s 4694 'Definitions' (3)(A)(i).

⁷⁵ Clean Competition Act (n 68) (3).

⁷⁶ *ibid* s 4692 'Imposition of Carbon Intensity Charge' (D).

⁷⁷ Note that '[r]elatively least-developed countries (as determined on the basis of criteria comparable to those used for the United Nations General Assembly list of 'least-developed countries') are characterized by extreme poverty, very limited infrastructure, and limited administrative capacity to implement basic human needs growth strategies. In such countries special measures may be necessary to ensure the full effectiveness of assistance furnished under this part', see Foreign Assistance Act of 1961 [PL 87-195] s 124.

⁷⁸ Clean Competition Act (n 68) s 4691 'Calculation of Carbon Intensity' (E). However, the 'exclusion' shall not apply if the country described in such clause produces at least 3 per cent of the total world exports by value of the covered product.

⁷⁹ *ibid* s 4694 'Definitions' (5), (d).

⁸⁰ Note that the MARKET CHOICE Act was first proposed in 2018, with a starting price of 24 USD per tonne of emissions, increasing 2 per cent above inflation each year.

⁸¹ Modernizing America with Rebuilding to Kickstart the Economy of the Twenty-first Century with a Historic Infrastructure-Centered Expansion Act 2023 [HR 6665] subtitle L 'Greenhouse Gas Emissions', PART 1 'TAXATION OF GREENHOUSE GAS EMISSIONS', s 9901 'Imposition of Tax on Combusted Fossil Fuel Greenhouse Gas Emissions' (a).

⁸² *ibid* subtitle L 'Greenhouse Gas Emissions', PART 2 'TAX ADJUSTMENTS FOR IMPORTS AND EXPORTS OF GREENHOUSE GAS INTENSIVE PRODUCTS'. A BCA which would assess an equivalent tax on the emissions of covered imported goods and rebate the tax for exported goods.

⁸³ *ibid* PART 2 'TAX ADJUSTMENTS FOR IMPORTS AND EXPORTS OF GREENHOUSE GAS INTENSIVE PRODUCTS', s 9912 'Definitions' (2).

Similarly, to the other proposed US BCAs, the bill would have a wide scope of application.⁸⁴ It would impose a tax on the GHG emissions resulting from the production of iron and steel and metallurgical coke, cement, petrochemical production, ferroalloy, glass, semiconductor manufacture, and electrical transmission and distribution, among others.⁸⁵

The MARKET CHOICE Act prescribes that regulations concerning several exemptions will be established.⁸⁶ Precisely, it stipulates that no adjustments should be made to imported products originating from a country that the UN has identified as one of the LDCs or a country that the US President has determined as responsible for less than 0.5 per cent of total global GHG emissions and less than 5 per cent of global production in the covered industrial sector.⁸⁷

Concerning the calculation of the GHG emissions and credits, the bill does not provide for a specific methodology or credits.⁸⁸ However, it prescribes the establishment of 'a general methodology for calculating the level of the border tax adjustment rate that a domestic importer of any covered good must submit and the rebate that an exporter will receive'.⁸⁹

With regard to the revenue allocation, the bill would invest the majority of the revenue in infrastructure.⁹⁰ Additional funds would be directed towards climate resilience and the research and development of climate mitigation technologies.⁹¹

LEGAL ANALYSIS ACROSS THE GATT AND THE CBDR-RC PRINCIPLE

BCAs can adopt different approaches⁹²; however, as previously mentioned, there are some features that, if not meticulously implemented, taking into account developing countries and LDCs conditions and national circumstances, are likely to result in both discrimination under the substantial GATT obligations and 'arbitrary and unjustifiable discrimination' in countries 'where the same conditions prevail' under Article XX *chapeau*.⁹³ Indeed, if not operationalized in accordance with CBDR-RC, BCAs have the potential to shift climate mitigation efforts from developed to developing countries, including LDCs, which do not bear historical responsibility for climate change and are, in fact, the most affected by it.⁹⁴

It is noteworthy that discrimination under Article XX *chapeau* occurs not only when countries 'where the same conditions prevail' are treated differently, but also when they are treated the same despite the diversity in the conditions prevailing within each of them.⁹⁵ In this regard, the CBDR-RC principle, which is a core principle of climate change law,⁹⁶ requires 'differentiated treatment'

⁸⁴ *ibid* s 9902 'Imposition of Tax on Greenhouse Gas Emissions from Certain Industrial Processes' s 9903 'Imposition of Tax on Greenhouse Gas Emissions from Certain Product Uses'.

⁸⁵ *ibid*. Note that these products will be periodically subject to a revision.

⁸⁶ *ibid* s 9901 'Imposition of Tax on Combusted Fossil Fuel Greenhouse Gas Emissions'.

⁸⁷ *ibid* PART 2 'TAX ADJUSTMENTS FOR IMPORTS AND EXPORTS OF GREENHOUSE GAS INTENSIVE PRODUCTS', s 9914 'Border Tax Adjustment Rate' (4)(A)(B).

⁸⁸ *ibid* s 9914 Border Tax Adjustment Rate.

⁸⁹ *ibid* s 9914. Border Tax Adjustment Rate (1).

⁹⁰ This will include the replenishment of the Highway Trust Fund, which is currently funded by the federal gas tax.

⁹¹ Modernizing America with Rebuilding to Kickstart (n 80) TITLE II 'DISTRIBUTION OF REVENUES FROM TAXATION OF GREENHOUSE GAS EMISSIONS', subtitle A 'Rebuilding Infrastructure and Solutions for the Environment Trust Fund, s 202 'Appropriations from the Rise Trust Fund'.

⁹² It should be noted that, in contrast to the CBAM, where the adjustment is applied to the carbon price imposed domestically under the EU ETS, the US proposals for an adjustment (with the exception of the FPPA) aim at establishing a domestic tax on the covered product together with its equivalent adjustment.

⁹³ Cf., *inter alia*, Geraldo Vidigal and Ingo Venzke, 'Of False Conflicts and Real Challenges: Trade Agreements, Climate Clubs, and Border Adjustments' (2022) 116 AJIL Unbound 202. Note that the principle of effective interpretation of treaties would require that the notion of non-discrimination under *chapeau* not overlap with the notion of non-discrimination under GATT substantive provisions, *United States—Standards for Reformulated and Conventional Gasoline* [1996] Appellate Body WT/DS2/AB/R, Appellate Body Report 23 (US—Gasoline).

⁹⁴ This would be contrary to the principle of CBDR-RC, Christoph Böhringer and others, 'Potential Impacts and Challenges of Border Carbon Adjustments' (2022) 12 Nature Climate Change 22, 27.

⁹⁵ *United States—Import Prohibition of Certain Shrimp and Shrimp Products* [1998] Appellate Body WT/DSS8/AB/R, Appellate Body Report [165] (US—Shrimp).

⁹⁶ Lavanya Rajamani, 'The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime' (2000) 9 Review of European Community & International Environmental Law 120; Philippe Sands and others, *Principles of International Environmental Law* (4th edn, CUP 2018) 244–245.

for developing countries and LDCs, given their designation as having different ‘capabilities’ and ‘national circumstances’.⁹⁷

Given the ‘dual soul’ of the measure, trade nature, and climate mitigation objectives, an interpretation of Article XX *chapeau* in light of the CBDR-RC principle is fundamental to strike a reasonable balance between the two interests.⁹⁸ If a climate mitigation measure does not comply with one of the core principles of climate change law that must inform the mitigation tools adopted by States, it would be difficult to consider the latter genuinely adopted for climate mitigation purposes.⁹⁹

This section examines the ‘implementation challenges’ of the selected BCAs under the GATT with a focus on the assessment under Article XX *chapeau* interpreted in light of the CBDR-RC.

The article makes a brief mention of the violation of Article I and/or III and assumes that the measure falls within paragraphs (b) and (g) of Article XX that respectively concern measures ‘necessary to protect human, animal or plant life or health’, and measures ‘relating to the conservation of exhaustible natural resources’.¹⁰⁰ Indeed, Article XX GATT sets out a two-tier test,¹⁰¹ which requires that first the measure is provisionally justified under of its paragraph and subsequently under the *chapeau*.

The *chapeau* targets any relevant aspects in the practical application of a measure¹⁰² and prohibits ‘arbitrary and unjustifiable’ discrimination¹⁰³ between countries ‘where the same conditions prevail [...]’¹⁰⁴ or ‘disguised restriction of international trade’.

The analysis under the *chapeau* is conducted by considering the design of the measure as a whole and the interaction between the different features.¹⁰⁵

The country exemptions

In a context where the Most Favoured Nation (MFN) principle governs trade relations, the existence of country exemptions is problematic.¹⁰⁶ Even if Article I does not necessarily prevent a Member from attaching conditions to the granting of an ‘advantage’, however, it does prohibit conditions that have a negative impact on the competitive opportunities for ‘like imported products’¹⁰⁷ from any Member.¹⁰⁸

⁹⁷ See ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 2.2. These considerations will be subjected to further analysis in the context of the Paris Agreement. However, this will not be addressed in this article, as the focus will be on the GATT compatibility and only indirectly on the concept of CBDR-RC. For more information, see Lavanya Rajamani, ‘Differentiation in a 2015 Climate Agreement, in Center for Climate and Energy Solutions’ [2015] Centre for Policy Research; Sandrine Maljean-Dubois, ‘The Paris Agreement: A New Step in the Gradual Evolution of Differential Treatment in the Climate Regime?’ (2016) 25 Review of European, Comparative & International Environmental Law 151.

⁹⁸ The purpose of the *chapeau* is indeed to ‘maintain a balance of rights and obligations between the right of a Member to invoke one or another of the exceptions of Article XX [...] and the substantive rights of the other Members under the GATT 1994’, *US–Shrimp* (n 94) para 156.

⁹⁹ It is important to consider that in the event of a WTO assessment, a WTO DSB may not be the most appropriate body to assess the measure in question under the CBDR-RC, as it may fall outside the scope of its judicial authority, see ‘Understanding on Rules and Procedures Governing the Settlement of Disputes, Marrakesh Agreement Establishing the World Trade Organization’ (1994) Annex 2, 1869 UNTS 401, 33 ILM 1226 art 3.2. However, this fact could be taken into account in order to achieve a balance between the obligations set out in GATT 1994 and the exceptions outlined in each paragraph of art XX, see *European Communities–Measures Prohibiting the Importation and Marketing of Seal Products* [2014] Appellate Body WT/DS400/AB/R WT/DS401/AB/R, Appellate Body Report [5.299–5.301] (*EC–Seal Products*); *Indonesia–Importation of Horticultural Products, Animals and Animal Products* [2017] Appellate Body WT/DS477/AB/R; WT/DS478/AB/R, Appellate Body Report [5.99].

¹⁰⁰ Jennifer Hillman, ‘Changing Climate for Carbon Taxes: Who’s Afraid of the WTO?’ [2013] Georgetown University Law Centre 10.

¹⁰¹ *US–Gasoline* (n 92) 22.

¹⁰² *EC–Seal Products* (n 98) para 5.302.

¹⁰³ Hence, the concept of discrimination differs from the one under Articles I and III GATT, see *US–Gasoline* (n 92) 28–29.

¹⁰⁴ Emphasis added, ‘General Agreement on Tariffs and Trade 1994’ (1994) Annex 1A to the Marrakesh Agreement Establishing the World Trade Organization 1867 UNTS 187, 33 ILM 1153 art XX *chapeau*.

¹⁰⁵ Note that some of the ‘implementation challenges’ will be addressed together since they are interconnected.

¹⁰⁶ *Espa, Van Asselt and Francois* (n 21) 19–21.

¹⁰⁷ Note that this article is not an appropriate forum for addressing the issue of the similarity between high-carbon-intensive and low-carbon-intensive products, neither under Article I, nor under art III GATT. For the purposes of this article, it is assumed that the products in question are ‘like’ in light of the approach adopted in previous WTO case law based on the ‘competitive relationship’ of the products (domestic and imported) in the market. See Michael A Mehling and others, ‘Designing Border Carbon Adjustments for Enhanced Climate Action’ (2019) 113 *American Journal of International Law* 433, 460–61. In this regard, Cosbey argues that there should be no national exemptions from BCA coverage based on national policies (e.g., based on the level of ambition in climate policies) since no country has the prerogative to unilaterally judge the adequacy of other countries’ climate ambition, Cosbey (n 47) 3–4; *Brazil–Measures Affecting Imports of Retreaded Tyres* [2007] Appellate Body WT/DS332/AB/R, Appellate Body Report [140] (*Brazil–Retreaded Tyres*).

¹⁰⁸ *EC–Seal Products* (n 98) para 5.88.

In the case of CBAM, it is evident that an advantage in the form of a ‘conditioned exemption’ has the potential to significantly affect the competitive landscape among exempted and non-exempted countries. Consequently, given that the MFN establishes an objective criterion based on competitive opportunities and does not permit consideration of other factors, such as environmental ones, it is probable that, in the event of a dispute before the WTO Dispute Settlement Body (DSB), the CBAM will be found to be in violation of Article I.¹⁰⁹ Nevertheless, the measure could still be justified under Article XX. To assess the measure under the *chapeau*, it is necessary to focus on the cause of the discrimination or the reasons given to explain its existence, and this assessment must be carried out in the light of the objective of the measure.¹¹⁰

In the case of the CBAM, the measure is designed to prevent carbon leakage and ensure environmental integrity.¹¹¹ It can be argued that the exemptions under the CBAM may be justified because by adopting the same or very similar carbon pricing measures as the EU would offset the risk of carbon leakage.¹¹² In any case, this argument would be inconsistent with the principles of CBDR-RC, as will be demonstrated in the following analysis.

However, in order to ascertain the nature of discrimination under Article XX *chapeau*, other factors need to be taken into consideration.¹¹³

These include whether the discrimination results from a ‘rigid and unbending requirement’,¹¹⁴ whether the measure fails to take into account different circumstances that may occur in the territories of other WTO Members, and, lastly, if the Member has undertaken cooperation activities and negotiated before adopting the unilateral measure.¹¹⁵

Regarding the first aspect, the *chapeau* shall be interpreted to prevent a Member from imposing the adoption of the same policy on other Members without taking into account different policies implemented by the latter that are comparable in effectiveness. Upon initial examination, it may appear that Article 2 of the CBAM Regulation, which exempts only countries part to EU ETS, link to the latter or have an electricity market integrated with the EU internal market for electricity, sets out unbending and inflexible requirements that amount to the imposition of unilateral EU standards and, consequently, does not take into account the different circumstances, especially the ones of developing countries and LDCs.

However, it shall be noted that the existence of carbon credit equivalence, as will be explained in subsection B below, may play a relevant role in offsetting the rigidity of the exemption and in duly taking into consideration other policies.¹¹⁶ Even if the measures adopted differ from the EU ETS or other explicit carbon pricing mechanisms, the effectiveness of the policy would be reflected in the content of the embedded emissions and recognized either in the form of credits or at the time of the surrender of the CBAM certificate.

With regard to the ‘cooperative efforts’ that shall be undertaken prior to the adoption of the unilateral measure, the AB clarified that this aspect should not be interpreted as an obligation of result, consisting of the achievement of an agreed solution. Instead, it should be understood as an obligation of means, to initiate negotiations in good faith with the aim of concluding bilateral or multilateral agreements to protect the specific interest at stake.¹¹⁷ In this context, the negotiations

¹⁰⁹ Note that between the drafting and publication of this contribution, the Russian Federation requested consultations with the EU regarding the CBAM under the WTO dispute settlement mechanism on May 12, 2025.

¹¹⁰ *Brazil—Retreaded Tyres* (n 106) paras 217, 226, 227, 246; *United States—Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products (Article 215 Mexico)* [2015] Appellate Body WT/DS381/AB/RW, Appellate Body Report 7.316. In particular, the Appellate Body Report in *Brazil—Retreaded Tyres* [217], states: ‘We have difficulty understanding how discrimination between countries where the same conditions prevail might be viewed as complying with the Chapeau[...] when the alleged rationale for discriminating does not relate to the pursuit of or would go against the objective that was provisionally found to justify a measure [...]’.

¹¹¹ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 19.

¹¹² Andrei Marcu and others, ‘Guide to the European Carbon Border Adjustment Mechanism’ (ERCST 2021) 28.

¹¹³ *EC—Seal Products* (n 98) para 5.321.

¹¹⁴ *US—Shrimp* (n 94) paras 161, 164.

¹¹⁵ *ibid.* Note that collaboration is at the heart of the Climate Change Act, see among others ‘United Nations Framework Convention on Climate Change’ (1992) S Treaty Doc No 102-38, 1771 UNTS 107 art 4, Preamble; ‘Paris Agreement to the United Nations Framework Convention’ (n 1) arts 6, 7, Preamble.

¹¹⁶ See also Mehling and others (n 22) 12.

¹¹⁷ *US—Shrimp* (n 94) para 166.

would be related to the establishment of a global carbon price and the advancement in the achievement of the temperature goals. In this regard, the stalemate of multilateral discussions on the issue of climate change is crucial.¹¹⁸ It is noteworthy that the recital of the CBAM Regulation expresses the intention of the EU to engage impartially with third countries impacted, to explore opportunities for dialogue and cooperation concerning the implementation of specific aspects of the CBAM.

Additionally, the EU is committed to investigating the potential for agreements that consider the carbon pricing mechanisms of third countries.¹¹⁹ The recitals explicitly call for the development of bilateral, plurilateral, and multilateral cooperation with third countries and encourage the establishment of ‘Climate Clubs’ to promote the implementation of ambitious climate policies worldwide and pave the way for a global carbon-pricing framework.¹²⁰

Therefore, it cannot be excluded that, in principle, the measure has been adopted to reconcile the ‘unilateral implementation’ of the PA and the impasse at the multilateral level, with the genuine intention of effectively addressing climate change and advancing climate mitigation actions.

As to what concerns the *chapeau* reference to ‘countries where the same conditions prevail’,¹²¹ the AB provided clarification on the appropriate interpretation of this sentence. The phrase has to be interpreted in light of the paragraph of Article XX that provisionally justifies the measure.¹²² Given the climate mitigation purpose of the measure, it appears reasonable that the terms need to be interpreted taking into account the principle of CBDR-RC, according to Article 31.3(c) VCLT.¹²³ The principle can be utilized as a benchmark to ascertain whether countries are in the ‘same conditions’ with regard to climate mitigation obligations. In this context, the principle explicitly delineates that developing and developed countries are not situated within the same ‘conditions’ due to the disparities in their respective responsibilities and national circumstances.¹²⁴

This author concurs with the view expressed by other scholars that taking into account CBDR-RC in the assessment under the *chapeau* would be the most appropriate approach to reconcile GHG mitigation and trade interests.¹²⁵ In this context, the fact that the exemptions provided under the CBAM do not take into consideration developing countries and, in particular, LDCs, acquires relevance.¹²⁶

The need to adopt such an exemption in BCAs has been the subject of extensive debate.¹²⁷ Granting an exemption, particularly to LDCs, would facilitate compliance with the principle of

¹¹⁸ Andrei Marcu and others, ‘Addressing Carbon Leakage in the EU: Making CBAM Work in a Portfolio of Measures’ (ERCST 2021) 7.

¹¹⁹ Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 71.

¹²⁰ This Climate Club should be open, voluntary, non-exclusive, and particularly focused on achieving high climate ambition in alignment with the Paris Agreement. It could operate under the auspices of a multilateral international organization and should facilitate the comparison and, where appropriate, coordination of measures that impact emission reductions. Additionally, the Climate Club should support the comparability of relevant climate measures by ensuring the quality of climate monitoring, reporting, and verification among its members and providing means for engagement and transparency between the EU and its trade partners.

¹²¹ *EC-Seal Products* (n 98) para 5.299–301; *Indonesia-Importation of Horticultural Products, Animals and Animal Products* [5.99]. In this regard, the context provided in the paragraphs of Article XX under which a provisional justification for a given measure has been made shall be considered. This context offers insight into the substantive obligations under the GATT that have been violated.

¹²² *EC-Seal Products* (n 98) para 5.301.

¹²³ International Legal Expert Group on Trade-Related Climate Measures and Policies (n 16) 33; Vienna Convention on the Law of Treaties’ (United Nations 1969) Treaty Series 1155 UNTS 331, 8 ILM 679 art 31.3(c); Hertel (n 16); Pananya Larbprasertporn and Jaume Comas Mir, ‘The Interaction Between WTO Law and the Principle of Common but Differentiated Responsibilities in the Case of Climate-Related Border Tax Adjustments’ (2014) 6 Goettingen Journal of International Law 145; Martti Koskenniemi, ‘Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law’ (ILC 2006) A/CN.4/L.682 paras 170, 412–19, stating that ‘[...] when elucidating the content of the relevant rights and obligations, WTO bodies must situate those rights and obligations within the overall context of general international law (including the relevant environmental and human rights treaties)’.

¹²⁴ ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 4.4, 4.7.

¹²⁵ *Cf. inter alia*, Durán (n 13) 17–23; Espa, Van Asselt and Francois (n 21).

¹²⁶ Whether the measures would be analysed in light of paragraph (b), it should be taken into consideration that in *Brazil-Retreaded Tyres* the Appellate Body, in relation to the examination of ‘possible alternative measures’ held that in the necessity test, it shall be considered the capacity of a country so as to ensure that measures do not impose ‘an undue burden’ such as ‘prohibitive costs or substantial technical difficulties’, acknowledging that the meaning of ‘an undue burden’ must be determined with reference to the degree of the development of a country, *Brazil-Retreaded Tyres* (n 106) para 156.

¹²⁷ Aaron Cosbey and others, ‘Developing Guidance for Implementing Border Carbon Adjustments: Lessons, Cautions, and Research Needs from the Literature’ (2019) 13 Review of Environmental Economics and Policy 3. The absence of any direct

CBDR-RC.¹²⁸ However, from an effectiveness and administrative standpoint, the implementation of this exemption may carry the potential for unintended consequences. Precisely, it could induce strategic shifts in trading and transshipment patterns, which could ultimately undermine the measure's goal of reducing the risk of carbon leakage and advancing climate mitigation goals.¹²⁹

Notwithstanding the absence of a specific exemption for LDCs, it is still feasible to ensure adherence to the CBDR-RC principle, for instance, through the redistribution of revenues to the countries in need, as well as the provision of technical assistance.¹³⁰

In this regard, the CBAM Regulation states the EU's intention to offer technical assistance for climate purposes to developing countries and LDCs, as designated by the UN.¹³¹ The recitals of the Regulation also state the EU's intention to continue providing financial support through the EU budget for climate change mitigation and adaptation in LDCs, in order to facilitate their decarbonization and transformation of their manufacturing industries. The EU also anticipated the intent to implement a novel revenue stream derived from the sale of CBAM certificates.¹³²

This distinctive attention on developing countries and LDCs is further exemplified in Article 30 CBAM Regulation, which requires the Commission to submit periodic reports on the impact of the CBAM on the 'covered goods' imported by developing countries, with a particular focus on LDCs. Additionally, the Commission shall assess the effects of the technical assistance provided and the impact of the latter on LDCs and evaluate and report on the extent to which the financing provided under that Regulation has contributed to the decarbonization of the manufacturing industry in LDCs.

Consequently, although the CBAM does not provide for a specific exemption, the different 'conditions' of developing countries and in particular LDCs, depending on how the EU will implement its 'intentions'.

Another interesting factor that shall be noted is that the most recent estimates show that the number of LDCs that will be negatively impacted by the CBAM is relatively limited.¹³³ In this regard, it has been highlighted that Mozambique and Zimbabwe will be particularly affected respectively due to their exports of aluminium and iron and still to the EU.¹³⁴ The countries that will be affected the most in absolute terms will be, among others, China, Russia, and India,¹³⁵ which indeed are not LDCs and whose 'developing status' within the WTO is controversial.

Finally, it is noteworthy that in terms of climate funding, the EU and its Member States are the largest providers of public international climate finance, accounting for EUR 28.5 billion in 2022.¹³⁶

exception for developing countries has been criticized for contravening the principle of CBDR-RC, and for effectively weakening the legal prospects of the CBAM in the event of a challenge before the WTO dispute settlement mechanism, especially by Espa, Van Asselt and Francois (n 21); Gracia Marín Durán, 'Securing Compatibility of Carbon Border Adjustments with the Multilateral Climate and Trade Regimes' (2023) 72 *International & Comparative Law Quarterly* 73.

¹²⁸ Cf Sunayana Sasmal and others, 'Exempting Least Developed Countries from Border Carbon Adjustments: A Legal and Economic Analysis' (Centre for International Trade and Policy [CITP] 2023) Briefing Paper.

¹²⁹ Marcu and others (n 116) 28; Durán (n 13). The option of including such an exemption was discussed, however, the EU 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 emissions' would 'run counter to the overarching objective of the CBAM', 'Impact Assessment Report Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism' (EU Commission 2021) Commission Staff Working Document SWD(2021) 643 final.

¹³⁰ Marcu and others (n 116); Carolyn Fischer and Alan K Fox, 'Comparing Policies to Combat Emissions Leakage: Border Carbon Adjustments versus Rebates' (2012) 64 *Journal of Environmental Economics and Management* 199. Cosbey and others and Böhringer and others posit that revenue recycling to third countries represents a credible commitment to the carbon leakage prevention and climate neutrality goals of the CBAM, rather than a protectionist policy, see Böhringer and others (n 93); Cosbey and others (n 126); Espa, Van Asselt and Francois (n 21) 26–28.

¹³¹ 'Regulation (EU) 2023/956 of the European Parliament' (n 4) para 74.

¹³² *ibid.*

¹³³ Luka Vasilj, Celeste Gonzalez and Andrzej Ancygier, 'CBAM: Trade Implications and Opportunities of EU Climate Neutrality Goals' (4i TRACTION 2023) Deliverable D37: Discussion papers on the impact on the EU's main partners dealing with the respective dimensions (Paper 1) 15.

¹³⁴ That represents the 6 per cent of the GDP of Mozambique. Vasilj, Gonzalez and Ancygier (n 131); 'Impact Assessment Report' (n 127); Guilherme Magacho, Etienne Espagne and Antoine Godin, 'Impacts of the CBAM on EU Trade Partners: Consequences for Developing Countries' (2024) 24 *Climate Policy* 243, 248.

¹³⁵ Magacho, Espagne and Godin, (n 132) 248.

¹³⁶ 'International Climate Finance: Status Quo, Challenges and Policy Perspectives' (EU Parliament 2023) Briefing.

It is this author's contention that these aspects should also be considered when assessing whether the circumstances and capabilities of developing countries and LDCs are duly taken into consideration by the measure.

Analogous considerations can be applied to the BCAs proposed with the US bills concerning the exemption for LDCs and revenue allocations.¹³⁷

Adopting the same approach as the CBAM, neither the FPPA nor the EICDA provides for any specific exemption for developing countries or LDCs.¹³⁸ Additionally, in contrast to the EICDA, the FPPA does not yet mention any use of the revenue to support LDCs in need.

While the EICDA provides that part of the revenues would be destined for the UN GCF,¹³⁹ the FPPA does not yet address this issue.

With regard to the aforementioned considerations, a destination of BCA revenues to fostering GHG emissions would be a suitable alternative to avoid criticism under Article XX *chapeau* as interpreted in light of the CBDR-RC principle.

Consequently, this might be an aspect that the USA could consider developing further in the FPPA proposal.

Nevertheless, it is worth noting that even the provision of an exemption for LDCs does not automatically ensure compatibility with GATT Article XX *chapeau* that, if correctly interpreted, requires taking into consideration the CBDR-RC principle, particularly when the exemption is contingent upon the quantity of exportation of the covered goods to the USA, as is the case with the CCA.¹⁴⁰ However, this could theoretically be offset by allocating some or all of the revenue to these countries.¹⁴¹

Finally, as concerns the MARKET CHOICE Act, the latter would exempt from the application of the BCA any country that the UN has identified as one of the LDCs or that the President has determined is responsible for less than 0.5 per cent of total global GHG emissions and less than 5 per cent of global production in the covered industrial sector.¹⁴² Although the exemption encompasses LDCs, it is arguably problematic in light of the second clause, which appears to grant the president complete discretion in determining which countries are eligible for the exemption. In terms of revenue allocation, no reference is explicitly made to LDCs.

In light of the aforementioned considerations and the ongoing debate within the doctrine, the decision of whether or not to include an exception for LDCs and developing countries is ultimately a matter of political discretion for each State. However, in the context of the BCAs analysed above, it is evident that to ensure CBDR-RC compliance, the negative impact on developing countries and LDCs must be offset by alternative means if not with *ad hoc* exemptions. One such means is the revenue allocations combined with the provision of carbon credits and technical assistance.

The calculation of emissions related to imported goods and the credit for equivalence

The EU and USA employ disparate methodologies for calculating the GHG content of the covered products, and this discrepancy is crucial when calculating the 'adjustment' to be paid by the importers.¹⁴³

¹³⁷ Note that as these proposals are still in the formative stages, the analysis of the implementation challenges will necessarily be more cursory than that of the CBAM.

¹³⁸ However, the FPPA provides for exceptions for third countries in case of the establishment of IPAs with the USA, similar to the concept of Climate Clubs, and particularly it grants preferential treatment to low-income and lower-middle-income countries that have concluded an IPA with the USA, Foreign Pollution Fee Act (n 50) s 4694 'Treatment of International Partnerships' s 203.

¹³⁹ Energy Innovation and Carbon Dividend Act (n 62) s 9910 'Allocation of Carbon Border Fee Adjustment Revenues'.

¹⁴⁰ The exception would not apply if the country described in such clause produces at least 3 per cent of the total world exports by value of the covered product, Clean Competition Act (n 68) s 4691 'Calculation of Carbon Intensity' (E).

¹⁴¹ Note that the CCA proposal would allocate 25 per cent of the revenues to support developing countries. This aspect will be evaluated in light of data concerning the LDCs that will be affected and considering that the remaining 75 per cent will be allocated to domestic industries.

¹⁴² Modernizing America with Rebuilding to Kickstart (n 80) PART 2 'TAX ADJUSTMENTS FOR IMPORTS AND EXPORTS OF GREENHOUSE GAS INTENSIVE PRODUCTS', s 9914 'Border tax adjustment rate' (4)(A)(B).

¹⁴³ It should be noted that the emissions of GHG that are taken into consideration vary from one US legislative proposal to another and from the CBAM. Nevertheless, all mechanisms cover carbon dioxide (CO₂) and nitrous dioxide (N₂O) emissions.

As presented above, the CBAM certificates to be surrendered depend on the ‘actual embedded emissions’ of the imported goods,¹⁴⁴ while the US proposed BCAs refer more generally to the GHG ‘intensity’ of the covered products.¹⁴⁵ In the CBAM, the embedded emissions of imported products are determined using a formula that should reflect the actual emissions contained in the good.¹⁴⁶

The CBAM methodology is therefore sophisticated and highly technical, with the objective of achieving the greatest possible precision and therefore capturing the efficiency of other climate mitigation policies. Yet, in the event that the embedded emissions cannot be adequately determined, default values¹⁴⁷ shall be applied.¹⁴⁸ This approach is relevant to covered products with the exception of electricity, where embedded emissions shall be determined based on default values unless the authorized CBAM declarant demonstrates that specific criteria as set out in Annex IV.5 are met.¹⁴⁹

An approach based on the exact calculation of the ‘actual embedded emissions’ may impose a disproportionate administrative burden on third countries, especially on those that lack the capacity and expertise to implement such a methodology. It is reasonable to assume that these countries will be developing countries and LDCs. Moreover, the inability to accurately calculate the embedded emissions in the goods, as stipulated by the Regulation, would render these countries subject to the application of default values. These default values are based on the average emission intensity of each exporting country and of each of the goods listed in Annex I, with the exception of electricity, and are increased by a proportionately designed mark-up. Therefore, the price imposed on the imported products would be discriminatory vis-à-vis the one based on the more detailed methodology.

It is evident that the approach, as described above, does not take into consideration the circumstances and capabilities of developing countries and LDCs.¹⁵⁰

Therefore, it would effectively constitute a violation of Article I GATT and, if not implemented with due care, also a violation of Article XX GATT as interpreted in light of CBDR-RC.

However, the EU has indicated in the recitals of the CBAM Regulation its determination to assist LDCs, together with low- and middle-income countries, in adopting the new regulatory requirements set out in the Regulation.¹⁵¹ Consequently, the justification for such an approach may still be upheld under Article XX *chapeau*, contingent on the manner in which the EU will implement this intention.

The USA proposed bills adopt a different approach based on ‘default values’ to determine the carbon ‘intensity’ of the covered product. These latter are often based on average data and calculations.¹⁵² Although this system is relatively straightforward to implement in administrative terms, with respect to the one adopted by the CBAM, its generic nature could potentially be challenged under Articles I and III GATT. In fact, depending on the estimates, averaging calculations based on external data may result in discrimination among the countries and less favourable treatment

¹⁴⁴ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) art 3.22 Annex IV. Note that during the transitional phase, indirect emissions will be covered only for a few products.

¹⁴⁵ Note that the EICDA is the only proposal that refers to the GHG ‘content’ of the imported carbon-intensive product, which appears to reflect the concept of embedded emissions, as adopted by the CBAM Energy Innovation and Carbon Dividend Act (n 62) s 9909 ‘Administration of the carbon border fee adjustment’.

¹⁴⁶ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) art 7.2.

¹⁴⁷ Those are values determined from the average emission intensity of each exporting country and of each of the goods listed in Annex I, with the exception of electricity, that are increased by a proportionately designed mark-up. *ibid* 4.1 Annex IV.

¹⁴⁸ *ibid* 3.27, 7.

¹⁴⁹ *ibid* 7.3 Annex IV, para 5. Those requires that Imports of electricity are subject to a power purchase agreement between the CBAM declarant and a foreign producer.

¹⁵⁰ It should be noted that the approach in question may also be problematic under Article III GATT. For the sake of brevity, this issue will not be addressed here; for further details, please refer to Espa, Van Asselt and Francois (n 21) 21–24.

¹⁵¹ ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 73. Indeed, it is possible that many countries may lack the necessary resources or capacity to adapt to the new requirements of the CBAM or to transition to low-carbon industries, Emily Benson and others, ‘Analyzing the European Union’s Carbon Border Adjustment Mechanism’ (Center for Strategic and International Studies [CSIS] 2023).

¹⁵² Foreign Pollution Fee Act (n 50) s 4693 ‘Calculation of Pollution Intensity’; Clean Competition Act (n 68) s 4691 ‘Calculation of Carbon Intensity’; Modernizing America with Rebuilding to Kickstart the Economy (n 80) s 9913 ‘Notification of Foreign Countries’.

between domestic and imported products (depending on the accuracy of the data provided and available). Such results may arise from the rough or averaging estimates that may be made on more or less accurate data, and perhaps derived based on different parameters.

Nevertheless, often these predefined calculations can be disproven by importers if the US competent authority deems the provided information to be reliable.¹⁵³ Those countries that are able to provide the US authorities with data of a sufficiently reliable nature will be able to adjust the fee and subsequently pay less than other third countries that do not have the same capabilities. It is reasonable to believe that developing countries and LDCs lack the technical capacity to provide accurate data, which would render them unreliable. Consequently, they would be discriminated against, and this approach would constitute a violation of Article XX *chapeau* as interpreted in light of CBDR-RC.

With regard to the credit equivalence analysis, it shall be recalled that the value of CBAM certificates is calculated by determining the weekly average of carbon allowances auctioned within the EU ETS.¹⁵⁴ This approach ensures that imported products are subject to a regulatory system that applies carbon costs equivalent to those borne under the EU ETS. This equalizes the playing field for foreign and EU producers of the covered products. Operating under the same fundamental premise of 'equalization of the prices', the CBAM provides credit to importers that have paid a carbon price¹⁵⁵ in the country of origin.¹⁵⁶ Nevertheless, this approach only awards credits for direct carbon pricing instruments that have been adopted in third countries.¹⁵⁷

The recognition of only direct carbon pricing instruments adopted in third countries appears problematic under Articles I and III GATT. It would result in discrimination between the domestic-like product and an imported-like product originating from a country where indirect carbon pricing instruments are adopted or equally effective non-carbon pricing instruments are implemented. Additionally, it would entail discrimination among countries that implement different climate policies.

This approach would have a profoundly detrimental impact on developing countries and, in particular, LDCs that might, in light of their capabilities, be inclined to adopt non-carbon pricing instruments.¹⁵⁸ In this context, while carbon pricing, whether through an ETS or a carbon tax, is widely regarded as an effective approach to GHG emissions reductions, the effectiveness of these instruments ultimately depends on the specific institutional context in which they are implemented.¹⁵⁹ Imposing an inflexible EU standard would therefore be considered in breach also of Article XX *chapeau*.¹⁶⁰

Nonetheless, the crediting provision of the CBAM should be read in light of the calculation of embedded emissions as presented above. If the price to pay through the surrounding of the CBAM certificate depends on the emissions embedded in the covered goods,¹⁶¹ it implies that the impact of indirect carbon pricing policies could be taken into account by CBAM to the extent that these policies actually contribute to decreasing the GHG emissions embedded in imported

¹⁵³ Energy Innovation and Carbon Dividend Act (n 62) s 9909 'Administration of the Carbon Border Fee Adjustment'; Clean Competition Act (n 68) s 4691 'Calculation of Carbon Intensity'; Foreign Pollution Fee Act (n 50) s 4693 'Calculation of Pollution Intensity'.

¹⁵⁴ 'Regulation (EU) 2023/956 of the European Parliament' (n 4) paras 23, 49; *ibid* 21.

¹⁵⁵ Here, 'carbon price' refers to the monetary amount paid in a third country, under a carbon emissions reduction scheme, in the form of a tax, levy, or fee or in the form of emission allowances under a GHG ETS, calculated on GHG covered by such a measure, and released during the production of goods, 'Regulation (EU) 2023/956 of the European Parliament' (n 4) art 3.29.

¹⁵⁶ This is in line with the recommendation of avoiding double protection for domestic producers, see Cosbey (n 47) 3. 'Regulation (EU) 2023/956 of the European Parliament' (n 4) art 9 that is titled 'Carbon pricing paid in a third country'.

¹⁵⁷ Emphasis added.

¹⁵⁸ Dominique Finon, 'Carbon Policy in Developing Countries: Giving Priority to Non-Price Instruments' (2019) 132 *Energy Policy* 38.

¹⁵⁹ Finon underscores the significance of non-carbon pricing instruments in a carbon policy package for emerging and developing countries (DCs). *ibid*. Limiting the crediting opportunity to direct carbon pricing may provide an incentive for a third country to adopt a pricing instrument and increase climate ambition. However, it may also result in the adoption of ineffective policies by countries that have political and capacity constraints to adopt carbon pricing mechanisms. See Dominioni and Esty (n 18) 15. Limiting the crediting opportunity to direct carbon pricing may provide an incentive for a third country to adopt a pricing instrument and increase climate ambition. However, it may also result in the adoption of ineffective policies by countries that have political and capacity constraints to adopt carbon pricing mechanisms.

¹⁶⁰ *US-Shrimp* (n 94) paras 161, 164.

¹⁶¹ 'Impact Assessment Report' (n 127).

goods. If performance standards or other regulations require manufacturers to improve the efficiency of their plants and reduce the carbon emissions embedded in the goods produced by these installations, the number of CBAM certificates to be surrendered for their imports will decrease or even cancel out.¹⁶² Consequently, the CBAM may consider additional measures beyond those of direct carbon pricing mechanisms.¹⁶³

However, the scope of policies other than direct carbon pricing would be constrained, and the proposition that developing countries and LDCs would be subject to the same regulations as other developing countries remains a point of contention.

In conclusion, the EU's approach, based on actual emissions and carbon equivalence, could be, in principle, compliant with the principle of CBDR-RC, provided that it is implemented with due consideration for developing countries and LDCs. This issue will become pertinent once the CBAM is fully implemented. The compatibility of the approach with the GATT will depend on how the EU addresses the aforementioned shortcomings in concrete terms.

Upon examination of the proposals put forth by the USA, it becomes evident that they also permit a form of 'credit equivalence' or waiver, which represents a distinct approach from that adopted by the EU CBAM. Primarily, these waivers are based on collaboration with US authorities and are subject to their discretion in order to reward the efforts undertaken in the country of production and thus 'adjust' the price that would be calculated by default by US authorities.

To illustrate, under the FPFA, foreign producers would be permitted to utilize their facility-specific GHG intensity data *in lieu* of the standard national sectoral average figures. Such an approach would recognize and reward the efforts of relatively clean production.¹⁶⁴ A comparable approach is proposed in the EICDA, where the pricing of GHG emissions in the country of origin should be taken into account in the methodology for administering the carbon fee adjustment.¹⁶⁵

Another strategy provided by the CCA under subsection (D) titled 'Carbon Clubs' recognizes the possibility of waiving the fees for goods from foreign countries implementing similar policies with an explicit cost on GHG emissions.¹⁶⁶

Notwithstanding the utilization of disparate methodologies in the context of the CBAM, the US bills appear to acknowledge the overall credit equivalence solely in instances where explicit carbon pricing is paid within the country of production. Consequently, the considerations previously outlined for the CBAM also apply here.

As previously stated, in contrast to CBAM, the US calculation of carbon intensity is distinct and typically based on averages of emissions intensity. However, the majority of the bills analysed do not yet establish the specific methodology to calculate the difference in intensities and consequently the adjustment. It thus follows that compliance with Article XX *chapeau*, as interpreted in light of the CBDR-RC principle, will be contingent upon this aspect.

In conclusion, the calculation of emissions related to imported goods and the credit for equivalence are features that, in both the EU and USA, require further elaboration in order to take into account CBDR-RC and ensure compliance with GATT. In the absence of an *ad hoc* exemption, it would be appropriate for BCAs to identify an efficient method for calculating equivalence carbon credits for measures adopted by other countries. This method should particularly reference non-carbon pricing measures, which are typically adopted by developing countries.

¹⁶² Anatole Boute, 'Accounting for Carbon Pricing in Third Countries Under the EU Carbon Border Adjustment Mechanism' (2024) 23 World Trade Review 169, 177.

¹⁶³ Michael A Mehling and Robert A Ritz, 'From Theory to Practice: Determining Emissions in Traded Goods under a Border Carbon Adjustment' (2023) 39 Oxford Review of Economic Policy 123, 123–124. This approach represents an effective compromise, as determining the carbon price equivalence of non-carbon pricing-based policies would likely result in disputes, particularly regarding the methodologies used to assess equivalence. In this context, Espa and others posit that the greater the number of policies included in any calculation, the greater the risk of arbitrariness, particularly in light of the inherent challenges in determining the equivalence between explicit and implicit carbon pricing measures. Consequently, adjusting for non-pricing policies could also be argued to be less compatible with WTO law, Espa, Van Asselt and Francois (n 21) 25–26; Cosbey (n 47).

¹⁶⁴ Foreign Pollution Fee Act (n 50). However, this option is contingent upon the conclusion of a FSA with the USA. To qualify for an FSA, a producer would be required to adhere to all standards legally imposed on US producers (e.g., the Clean Air Act and the National Environmental Policy Act), as well as any additional environmental standards, among other conditions.

¹⁶⁵ Energy Innovation and Carbon Dividend Act (n 62) ch 102 'Carbon Border Fee Adjustment', s 9908 'Carbon Border Fee Adjustment'.

¹⁶⁶ Clean Competition Act (n 68) s 4692 'Imposition of Carbon Intensity Charge' (D).

The scope of product coverage

The last issue that is examined in the analysis of the EU–US approaches concerns the scope of product coverage. All BCAs as examined above concentrate mostly on the energy-intensive sectors,¹⁶⁷ and all include, *inter alia*, cement, steel, and aluminium. Indeed, given the purpose of addressing the risk of carbon leakage, the scope of sector coverage of a BCA shall reflect the sectors that are effectively exposed to the phenomenon.¹⁶⁸

According to the literature, limiting the scope to some raw or basic materials would simplify the determination of the embedded emissions or carbon intensity vis-à-vis more complex products located further down the value chain.¹⁶⁹ This approach would significantly reduce the administrative and technical burden of a BCA while still providing significant climate mitigation benefits.¹⁷⁰ In contrast, an excessively broad approach that encompasses complex manufactured goods for which the measurement of embedded emissions and intensities requires significant effort and technical and administrative capacity may result in discriminatory effects. This is due to the fact that the administrative burden may, *de facto*, result in discriminatory practices against countries that lack the requisite administrative and technical capacity to administer the measure.¹⁷¹ It is reasonable to conclude that the majority of these countries would be developing countries and LDCs. A broad approach to the scope of the covered product, without duly taking into consideration developing countries and LDCs, would result in a violation under Article I and, being contrary to the CBDR-RC principle,¹⁷² would amount to ‘arbitrary and unjustifiable discrimination’ under the GATT.¹⁷³

In this context, it appears that the CBAM, as it currently stands, may not present the same challenges as its US counterparts. The CBAM employs a gradual and limited approach to sector coverage in order to facilitate the implementation of the measure. Nevertheless, the EU has signalled its intention to incorporate additional products. As with the aforementioned features, compliance with the GATT Article XX *chapeau*, as interpreted in light of CBDR-RC, will hinge on the implementation of this expansion.

Conversely, the USA would encompass a broad range of sectors, including chemicals, petrochemicals, paper, glass, and plastics, from the outset. It is noteworthy that the proposed US bills frequently would include ‘finished goods’, which are manufactured products whose measurement of emissions is more complex than that of primary goods,¹⁷⁴ such as in the case of the CCA. Despite the majority of the sectors covered by US proposals being classified as EITE, which aligns with the mitigation objective of BCAs, the extensive coverage entails significant administrative challenges.¹⁷⁵

Moreover, it is imperative to recognize that certain proposals may be even more problematic, given that they include products that are not EITE. This is exemplified by the FPPA, which includes lithium-ion batteries, solar cells and panels, and wind turbines.¹⁷⁶ This approach could potentially distort the environmental purposes of the measures and conceal protectionist intentions.¹⁷⁷

¹⁶⁷ Böhringer and others (n 93).

¹⁶⁸ Cosbey and Baršauskaitė (n 12) 3.

¹⁶⁹ Deok-Young Park (ed), *Legal Issues on Climate Change and International Trade Law* (Springer International Publishing 2016); Leonelli (n 2); ‘Impact Assessment Report’ (n 127).

¹⁷⁰ Böhringer and others (n 93).

¹⁷¹ Siddharth Saigal, ‘Navigating the Global Economy towards Net-Zero within the Confines of WTO Law and Jurisprudence: A Critical Analysis of the European Union’s Carbon Border Adjustment Mechanism and Its Implications on International Trade’ [2022] European Union Law Working Papers 56.

¹⁷² Böhringer and others (n 93). Note that this aspect will be deepened in relation to the calculation of embedded emissions.

¹⁷³ It should be noted that this aspect is linked to the calculation of emissions related to imported products.

¹⁷⁴ cf ‘Impact Assessment Report’ (n 127) 22.

¹⁷⁵ In this regard, see ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 34 providing that organic chemicals should not be included in the scope of the Regulation due to technical limitations that at the time of the adoption of the CBAM do not allow to define clearly the embedded emissions of such imported goods.

¹⁷⁶ These products do not have a high value of embedded carbon relative to value added.

¹⁷⁷ In this regard, the statement of Senator Cassidy according to which the FPPA proposal is designed to address China’s challenge to the military, geopolitical, and economic power of the USA may be problematic, Bill Cassidy, ‘A Tariff for the Climate’ [2023] *Foreign Affairs* <<https://www.foreignaffairs.com/united-states/tariff-climate-pollution-environment>>.

Finally, in some of the US proposals, the procedures for adding more products would not be explicitly designed to address certain key considerations, such as climate impacts, risk of leakage, or unfair trade practices.¹⁷⁸ For instance, in the FPPA, any sector that can demonstrate the support of petitioners representing 50 per cent or more of domestic production would be considered to be included in the list of covered products. This feature has the potential to be perceived as a disguised protectionist intent.¹⁷⁹

To conclude, if the CBAM, so far, appears to have been meticulously designed with the intention of overcoming this challenge, it would be prudent to exercise greater caution when considering US proposals with the potential to be perceived as protectionist. In any case, an optimal solution would be to include sectors where the emissions accounting is reliable and to apply objective and verifiable criteria when determining which sectors to include in the scope of the measure.

CONCLUSIONS

The analysis conducted above demonstrates that despite the different policy choices at the basis of each measure, most of the implementation challenges are commonly shared.¹⁸⁰

In the event of a dispute, which is highly probable given the discriminatory nature of the examined features, a WTO panel would likely conclude that the analysed BCAs are in violation of the substantial non-discrimination obligations set forth in the GATT.

This scenario would entail the analysis of the measures under Article XX, including under the *chapeau*. The interpretation of Article XX *chapeau* in accordance with the CBDR-RC represents the optimal means of reconciling the ‘dual soul’ of the measures and ensuring that they are genuinely implemented for the purpose of climate mitigation.

In this regard, offsetting the negative impact and ensuring a differentiated implementation of the measures in relation to developing countries and LDCs becomes crucial to guarantee compatibility with the *chapeau*. Such an assessment should be conducted based on a ‘holistic approach’, taking into account the interplay of the measures’ features.

A flexible approach and the utilization of objective and assessable criteria to anchor differentiation could prove an efficacious method to overcome the danger of protectionism and ensure the mutual support of climate mitigation and international trade regimes.¹⁸¹ In this respect, it seems that the analysed BCAs attempt to adopt methodologies designed to differentiate their implementation, taking into account — even if imperfectly — the different circumstances of countries and proposing a progressive implementation. However, further action is required, particularly in order to address the specific needs of developing countries and LDCs. Indeed, the design of the BCAs analysed so far is not sufficient to ensure compliance with the *chapeau* interpreted according to CBDR-RC. Nonetheless, the intentions seem to be moving in the right direction, and effective compliance will depend on how these latter will be implemented.

Implementation of monitoring and reporting systems to assess the impact on developing countries and LDCs, such as the one adopted by the CBAM, may facilitate the adjustment of measures while they are effectively implemented and ensure differentiation in the meaning of the CBDR-RC principle.

It is imperative to guarantee that BCAs are in compliance with GATT Article XX *chapeau* as correctly interpreted according to the CBDR-RC principle, also in view of the potential for additional regulatory actions by other jurisdictions and the formation of ‘coalitions of BCAs’.¹⁸² Such

¹⁷⁸ cf ‘Regulation (EU) 2023/956 of the European Parliament’ (n 4) para 31. Note that the MARKET CHOICE Act set out specific thresholds of emissions that have to be verified or estimated in order to include the product in the list of covered sources.

¹⁷⁹ Aaron Cosbey, ‘The Proposed Foreign Pollution Fee Act’ [2023] International Institute for Sustainable Development 2.

¹⁸⁰ The extent to which these challenges overlap is contingent upon the policy choices made by the Members, which are influenced by their respective national circumstances and interests.

¹⁸¹ ‘United Nations Framework Convention on Climate Change’ (n 114) art 3.5; ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 4.7; ‘General Agreement on Tariffs and Trade 1994’ (n 103) art XX.

¹⁸² This possibility would acquire particular relevance in light of the interest for BCAs as expressed by other WTO Members, see Mehling and others (n 22) 10.

coalitions could ensure predictability and prompt action in climate mitigation,¹⁸³ thereby enabling the leading role of developed countries and benefitting developing countries and LDCs.

Moreover, it could effectively foster cooperation, encouraging third countries that have the capabilities to implement policies that are more ambitious. If it is indeed the case that there is no ‘silver bullet’ in terms of climate mitigation to achieve the temperature goals and that each State is free to select its own policy options,¹⁸⁴ it is nevertheless clear that urgent action is required.¹⁸⁵

In this regard, if implemented with due consideration of the principles of CBDR-RC in a manner that is properly coordinated and complemented with solutions at the plurilateral level, BCAs may play a pivotal role in the advancement of climate mitigation action. Such cooperative arrangements may assume the form of climate clubs,¹⁸⁶ *ad hoc* agreements, including the Global Arrangement on Sustainable Steel and Aluminium,¹⁸⁷ and the Inclusive Forum on Carbon Mitigation Approaches.¹⁸⁸

This appears to be the explicit objective of the examined BCAs, which seem to have been designed with the specific intention of integrating cooperative approaches, particularly climate clubs.

In conclusion, the BCAs analysed, as well as BCA in general, may serve as a necessary bridge between unilateral implementation of the PA temperature goals and cooperative action. However, in order to achieve this purpose, the measures shall take into consideration the different circumstances and be based on principles of flexibility, differentiation, and progressive implementation.

FUNDING

None declared.

CONFLICTS OF INTEREST

None declared.

¹⁸³ Dieter Helm, Cameron Hepburn and Giovanni Ruta, ‘Trade, Climate Change, and the Political Game Theory of Border Carbon Adjustments’ (2012) 28 *Oxford Review of Economic Policy* 368.

¹⁸⁴ ‘Paris Agreement to the United Nations Framework Convention’ (n 1) art 4.

¹⁸⁵ Katherine Calvin and others, ‘IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change’ (First, IPCC 2023).

¹⁸⁶ Nicholas Stern and Hans Peter Lankes, ‘Collaborating and Delivering on Climate Action through a Climate Club, An Independent Report to the G7’ (LSE 2022) 22ff.

¹⁸⁷ ‘Joint EU-US Statement on a Global Arrangement on Sustainable’ (*European Commission—European Commission*) <https://ec.europa.eu/commission/presscorner/detail/it/https://ec.europa.eu/commission/presscorner/detail/it/ip_21_5724>.

¹⁸⁸ ‘Inclusive Forum on Carbon Mitigation Approaches—OECD’ <<https://www.oecd.org/en/about/programmes/inclusive-forum-on-carbon-mitigation-approaches.html>>.