DECARBONIZING THE WORLD: CAN THE EU CBAM PROVIDE THE INCENTIVE WE NEED?

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Synopsis: The European Union (EU) Carbon Border Adjustment Mechanism (CBAM) began its transition phase¹ in October 2023. The CBAM extends beyond EU's borders, covering imported goods like electricity, iron and steel, aluminum, cement, fertilizers and hydrogen.² This measure could impact EU's trade partners lacking a similar in-house measure, leaving them with three choices: paying a carbon tax to the EU through the CBAM, establishing a comparable domestic measure, or challenging the CBAM at the World Trade Organization (WTO) Dispute Settlement Body. This paper examines differing state perspectives to the EU CBAM, with a focus on key players like the United States and China. Additionally, it addresses concerns raised by developing countries about sharing climate change mitigation costs with major polluters in global trade. Finally, the study evaluates the CBAM in light of the General Agreement on Tariffs and Trade (GATT) to assess potential challenges at the WTO Dispute Settlement Body. Although the measure may face a challenge in the WTO Dispute Settlement Body, if such an attempt proves unsuccessful, other countries will be encouraged to adopt a comparable measure within their own borders.

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- 1. See Carbon Border Adjustment Mechanism, EUR. COMM'N 2-3 (May 13, 2023), https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en. During the Transition Phase, traders of electricity, iron and steel, aluminum, cement, fertilizers, and hydrogen will have to report carbon emissions of the products imported into the EU. During this phase, they will not be required to pay a carbon tax. Upon completion of the transition phase, during which EU gathered the necessary data, a carbon tax will be paid for the goods imported into the EU as elaborated herein. *Id.*
- 2. Initially, hydrogen was not part of the European Commission proposal, however as a result of negotiations between the European Commission, the European Parliament, and the Council, hydrogen was included in the EU CBAM. The data on this article precedes the inclusion of hydrogen.

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I. INTRODUCTION

Climate change has emerged as a pressing global issue, necessitating prompt and concerted action by world leaders to avert catastrophic consequences.³ In this context, the European Union (EU) member states took a progressive step in December 2022 by implementing the Carbon Border Adjustment Mechanism (CBAM),⁴ aimed at deterring carbon-intensive processes, preventing carbon leakage, promoting green innovations, encouraging environmentally friendly investments, and leveling the field between EU products and imported products that are not subject to an EU Emissions Trading System (ETS) equivalent scheme.⁵ The EU CBAM is a tariff trade measure on carbon emissions of imported products by imposing financial obligations for embedded carbon emissions of imported goods within the EU.⁶ Although the EU's move is commendable because it strives to reduce emissions, the adoption of the CBAM raises questions about its potential impact on global trade and whether other countries will adopt similar domestic measures.⁷

^{3.} Climate Change 2023 Synthesis Report: Summary for Policymakers, IPCC 24 (2023), https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf.

^{4.} Press Release, European Commission, European Green Deal: Agreement Reached on the Carbon Border Adjustment Mechanism (CBAM) (Dec. 13, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7719.

^{5.} CBAM: What you need to know about the new EU decarbonization incentive, WORLD ECON. F. 3 (Dec. 19, 2022), https://www.weforum.org/agenda/2022/12/cbam-the-new-eu-decarbonization-incentive-and-what-you-need-to-know/ [hereinafter WORLD ECON. F.].

^{6.} Carbon Border Adjustment Mechanism, supra note 1, at 1.

^{7.} WORLD ECON. F., supra note 5, at 5.

Key EU trading partners like the United States (U.S.) and the People's Republic of China (PRC) have presented ambitious goals for reducing carbon emissions and achieving carbon neutrality, but they have not yet implemented a CBAM or similar measure. This article explores the extent to which the EU CBAM will impact the most prominent players in international trade, and whether a CBAM may be on the table for them as well?

Relatedly, one controversial aspect of the EU CBAM is that it does not provide any exemption for developing or least developed countries, ¹⁰ which could negatively impact the economies of those poorer countries. ¹¹ While the exemption of least developing countries from this measure would not undermine significantly EU's decarbonization effort, the lack of an exemption would likely cause material damage to least developing countries. ¹² This article argues that the EU should exclude least developed countries from this measure and support developing and least developing countries on their climate change mitigation efforts.

Other large countries potentially affected by the EU CBAM have expressed their dissatisfaction with the EU's attempt to impose to them a carbon tax comparable to the EU ETS. Some of them consider the CBAM an EU's unilateral protectionist measure as well as a violation of GATT's main principles. Russia, as the most negatively affected country, asserts that this measure is a violation of global trade rules set forth in the GATT. Turkey considers the measure a serious threat to its economy.

This article conducts a five-part analysis to predict whether more countries will join the EU in implementing measures similar to the CBAM. In the first two sections, the article considers the role of international trade in climate change and

- 8. Paris Agreement, art. 6. Dec. 12, 2015, 80 Stat. 271, T.I.A.S. No. 16-1104.
- 9. Silvia Weko, *The Future of Global Trade in a Changing Climate*, CHATHAM HOUSE 2 (Dec. 5, 2022), https://www.chathamhouse.org/2022/12/future-global-trade-changing-climate.
 - 0. *Id*.
- 11. Sam Lowe, *The EU's carbon border adjustment mechanism: How to make it work for developing countries*, CTR. FOR EUR. REFORM 6 (Apr. 22, 2021), https://www.cer.eu/publications/archive/policy-brief/2021/eus-carbon-border-adjustment-mechanism-how-make-it-work. Currently, EU unilateral preference schemes or economic partnership agreements have offered most of the developing countries quota free access to the EU Market. While these arrangements have given these countries a significant advantage in the Market, this adjustment mechanism would add an additional burden to them by worsening their position in the EU Market. As the carbon price increases, the tariff would increase as well. This would affect the competitiveness of the products of developing countries in the market. *Id.*
 - 12. *Id.* at 14.
- 13. Adrien Assous et al., A Storm in a Teacup: Impacts and Geopolitical Risks of the European Carbon Border Adjustment Mechanism, SANDBAG SMARTER CLIMATE POL'Y (Aug. 2021), https://sandbag.be/wp-content/uploads/E3G-Sandbag-CBAM-Paper.pdf.
- 14. *Id.* at 4.3; *Russia Says EU Carbon Border Tax May Impinge on Global Trade*, REUTERS 1 (June 17, 2021), https://www.reuters.com/business/russia-says-eu-carbon-border-tax-may-impinge-global-trade-rules-2021-06-17/ [hereinafter REUTERS].
- 15. Id. at 1; EU's Planned Carbon Border Adjustment Mechanism Could Cause Additional Costs for Russian Exporters, BOFIT (Nov. 26, 2021), https://www.bofit.fi/en/monitoring/weekly/2021/vw202147 3/.
- 16. Heli Simola, *CBAM! Assessing Potential Costs of the EU Carbon Border Adjustment Mechanism for Emerging Economies*, BOFIT Policy Brief, No. 10/2021, ECONSTOR 8 (2021), https://www.econstor.eu/bitstream/10419/251711/1/bpb2110.pdf.

analyzes the CBAM as an international trade mechanism in the fight against climate change. Third, it analyzes the practical implications of the EU CBAM. Fourth, it addresses the reactions of other players in global trade — will they support the EU CBAM by implementing similar measures or will they challenge this measure at the WTO or through other mechanisms? Lastly, this article analyzes General Agreement on Tariffs and Trade (GATT) provisions that may conflict with the CBAM and potential EU defenses. Following this five-part discussion, this article will conclude, on which countries are likely to implement a similar measure to the EU CBAM on their efforts to mitigate climate change.

II. HOW CARBONIZATION IS FUELING CLIMATE CHANGE

Climate change is no longer a matter of the future; climate change is happening now. Today, we can visually observe the effects of climate change caused by human activity. This visual observation has led to climate change becoming one of the most concerning issues of this century, crossing every border and reaching every human being. The Intergovernmental Panel on Climate Change (IPCC), in its 2023 report, highlights some of the observed changes and impacts such as heatwaves, heavy precipitation, droughts, tropical cyclones, food and water insecurity, human mortality, and many other visible issues.¹⁷

In 2015, one hundred ninety-six countries joined the Paris Agreement at the United Nations Climate Change Conference of Parties. The Paris Agreement Parties committed to limiting global warming to less than 2°C, and put their best effort into limiting it to 1.5 °C. ¹⁹ Under Article 14(2) of the Paris Agreement, this year in 2023, Parties will hold a Conference where they will provide an update on Parties' efforts and results. ²⁰ However, the United Nations Environmental Programme (UNEP) warns that the Paris Agreement Parties are off-schedule in meeting the Agreement's goals. ²¹

International trade can play an essential role in decarbonization efforts.²² Countries can adopt strategies to reduce carbon emissions associated with international trade, such as carbon efficiency in transportation and the environmental sustainability of supply chains.²³ In the realm of international trade, several strategies can be used to foster carbon efficiency in transportation.²⁴ These approaches encompass shifting to more carbon-efficient transportation modes, opting for shorter transportation routes, and encouraging use of fuel-efficient vehicles.²⁵ In addition.

^{17.} Synthesis Report of the IPCC Sixth Assessment Report Summary for Policymakers, IPCC 5 (Mar. 20, 2023) https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf.

^{18.} The Paris Agreement: What is the Paris Agreement?, UNFCCC, https://unfccc.int/process-and-meetings/the-paris-agreement.

^{19.} Paris Agreement, supra note 8, at 3.

^{20.} Id. at 19.

^{21.} World is Off Track to Meet Paris Agreement Climate Targets, UNEP COPENHAGEN CLIMATE CTR. (Sept. 16, 2021) https://unepccc.org/world-is-off-track-to-meet-paris-agreement-climate-targets/.

^{22.} World Trade Report 2022: Climate Change and International Trade, WTO 102, 113 (Sept. 1, 2022), https://www.wto.org/english/res_e/booksp_e/wtr22_e/wtr22_e.pdf [hereinafter World Trade Report 2022].

^{23.} Id. at 100.

^{24.} Id. at 9.

^{25.} Id. at 12.

countries can facilitate environmental sustainability through a range of policy measures. ²⁶ These initiatives include promoting the use of sustainable materials, optimizing energy efficiency throughout the supply chain, minimizing waste generation, and enhancing consumer education. ²⁷

Regions such as the EU have encouraged carbon-free technologies in international trade by applying measures such as Carbon Border Adjustment Mechanism.²⁸ Such measures put a price on carbon by incentivizing businesses to invest towards eco-friendly technology to compete in the market.²⁹ Other decarbonization measures applied in international trade include taxes for climate change mitigation, technical regulations, labelling schemes, and conformity assessment procedures as shown in the below diagram.³⁰ While many countries have implemented domestic measures in mitigating climate change (e.g., Canada – renewable fuel regulations, Switzerland – Emission Trading Scheme, Japan – carbon tax),³¹ the EU CBAM is anticipated to impact international trade by encouraging other countries to adopt similar approaches.

Examples of trade measures included in countries' nationally determined contributions

Type of measure	Measures indicated in nationally determined contributions			
Taxes	Tax for Climate Change Mitigation (Japan)			
	Carbon Border Adjustment Mechanism (European Union)			
Market-based mechanisms	Participation in carbon markets (Panama)			
	Emission Trading Scheme (European Union, Switzerland)			
Technical regulation and	Renewable fuel regulations (Canada)			
standards	Import ban on vehicles older than 3 years (Gabon)			
	Establishment of efficiency standards for the importation of all vehicles and appliances (Antigua and Barbuda)			
	Issue national standards to ensure the quality of energy-saving equipment (Viet Nam)			
Subsidies	State-level Renewable Portfolio Standards (United States of America)			
	Removal of fossil fuel subsidies (Ethiopia)			
	Feed-in tariffs (selected European Union Members and Switzerland)			

Source: Table compiled by the authors on the basis of national NDCs communicated to the UNFCCC Secretariat.

Source: United Nations, Making Trade Work for Climate Change Mitigation: The Case of Technical Regulations. ³²

^{26.} World Trade Report 2022, supra note 22, at 135.

^{27.} *Id.* at 118-119.

^{28.} Carbon Border Adjustment Mechanism, supra note 1.

^{29.} *Id.* at 1.

^{30.} U.N. Conference on Trade and Development, *Making Trade Work for Climate Change Mitigation: The Case of Technical Regulations*, UNCTAD/DITC/TAB/2022/7, 1, 7 (2022), https://unctad.org/system/files/official-document/ditctab2022d7 en.pdf [hereinafter UNCTAD].

^{31.} *Id*.

^{32.} *Id*.

III. UNDERSTANDING THE EU CARBON TAX AND ITS IMPACT ON TRADE

Global trade expansion has promoted economic growth in many regions but has also raised environmental sustainability concerns.³³ The production and distribution of traded goods and services, estimated at eight billion tons, is responsible for approximately one quarter of global emissions (32 billion tons).³⁴

While trade has a significant impact on climate change, it can also play a critical role in its mitigation.³⁵ "The Marrakesh Agreement, which led to the creation of the World Trade Organization (WTO) recognized the importance of adopting international trade policies that align with environmental protection in its preamble."³⁶ Countries have responded to the threats of climate change by implementing various trade measures, including taxes, market-based mechanisms, technical regulation, and standards/subsidies.³⁷

Recently, the EU introduced a first-of-its-kind carbon tax on imported products that extends beyond its borders, sparking a vigorous global debate on whether this measure is a violation of international trade rules and what will be the reaction of EU's trade partners.³⁸ This carbon border adjustment mechanism is a revolutionary trade measure to reduce greenhouse gas emissions.³⁹ The following sections address various types of carbon border adjustment mechanisms, history and implementation of the EU CBAM, and the practical implications of this measure.

A. Exploring Different Types of Carbon Border Adjustment Mechanisms

CBAM was established in the fight against climate change and puts a price on the carbon emissions of imported products.⁴⁰ The carbon tax on imports sets the CBAM apart from other types of domestic carbon tax policies, which some countries have already implemented.⁴¹ According to the World Bank, as of June

^{33.} Trade and the environment, OECD 2, https://www.oecd.org/trade/topics/trade-and-the-environment/ (last visited May 15, 2023) (noting that expanding trade for economic growth can directly harm the environment by causing pollution and depleting natural resources. Furthermore, when trade opens up, countries with varying environmental regulations may specialize in pollution-intensive activities, a phenomenon known as the pollution haven hypothesis).

^{34.} Paul Brenton & Vicky Chemutai, *The Trade and Climate Change Nexus*, WORLD BANK GRP. 8 (2021), https://openknowledge.worldbank.org/server/api/core/bitstreams/5d543ded-1163-5fc6-8fe8-319d913cf269/content.

^{35.} United Nations Treaty Series Marrakesh Declaration, Apr. 15, 1994, 1867 U.N.T.S. 148.

^{36.} *Id.*; "[R]elations in the field of trade and economic endeavor should be conducted with a view to raising standards of living, [...], while seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development." *Agreement Establishing the World Trade Organization*, WTO 1, https://www.wto.org/eng-lish/docs_e/legal_e/04-wto.pdf (last visited Oct. 8, 2023).

^{37.} UNCTAD, supra note 30, at 7, 30.

^{38.} REUTERS, supra note 14.

^{39.} Ia

^{40.} Carbon Border Adjustment Mechanism, supra note 1, at 1.

^{41.} Hannah Ritchie & Pablo Rosado, *Which countries have put a price on carbon?*, OUR WORLD IN DATA 5 (Oct. 14, 2022), https://ourworldindata.org/carbon-pricing.

2022, there are sixty-eight carbon pricing instruments operating in forty-six national jurisdictions, and of these, there are thirty-six carbon tax regimes and thirty-two emissions trading systems in operation.⁴²

Generally, some of the advantages of a well-designed CBAM include reducing greenhouse gas emissions and the corresponding risk of climate change, minimizing the cost of emissions reductions, encouraging innovation of environmentally friendly technologies, levelling the field between domestic and foreign products, raising new public revenues, and incentivizing other countries to implement similar measures.⁴³

Despite these benefits, countries have been slow to implement such measures.⁴⁴ Sometimes, carbon taxes are considered relatively more costly for poorer countries than richer ones.⁴⁵ Poorer countries suffer the most from the increase in the prices that this mechanism can cause due to lack of capital to invest in environmental-friendly technologies.⁴⁶ Other times, it may be politically difficult to impose such taxes because of the pressure that domestic businesses put on the governments,⁴⁷ especially if other trading partners do not apply such a measure. In that scenario, domestic companies would be economically disadvantaged because manufacturers would be incentivized to move the production of the goods out of that country and sell them in the high-emitting countries, thus, creating an adverse internal effect.⁴⁸

Generally, there are three types of Carbon Border Adjustment Mechanisms: Carbon Tax CBAMs, Regulatory Cost CBAMs, and Emission Performance CBAMs.⁴⁹

In theory, a Carbon Tax CBAM imposes a price on the carbon emission of imports from countries without similar domestic carbon emission regulations and with less rigid carbon emission regulations.⁵⁰ If the trading partner applies lower tariffs for carbon emissions, a Carbon Tax CBAM is applied only to the remaining difference.⁵¹ If the trading partner does not have any tariff for carbon emission, their imports will be subject to the same carbon tax as domestic products.⁵² Second, a Regulatory Cost CBAM identifies regulations aiming to reduce carbon

^{42.} Explainer: Which Countries Have Introduced a Carbon Tax, WORLD ECON. F. 3 (July 8, 2022), https://www.weforum.org/agenda/2022/07/carbon-tax-emissions-countries/.

^{43.} Donald B. Marron & Eric J. Toder, *Tax Pol'y Issues Designing Carbon Tax*, 104 Am. ECON. REV. 563 (2014).

^{44.} Roumeen Islam, What a Carbon Tax Can Do and Why It Cannot Do It All, WORLD BANK GRP. BLOG 1 (Jan. 19, 2022), https://blogs.worldbank.org/energy/what-carbon-tax-can-do-and-why-it-cannot-do-it-all.

^{45.} *Id.* at 2.

^{46.} *Id*.

^{47.} *Id.* at 2-3.

^{48.} Erin Campbell et al., Border Carbon Adjustments 101, RES. FOR FUTURE 3 (Nov. 10, 2021), https://media.rff.org/documents/BCA_101_Explainer.pdf.

^{49.} Xan Fishman et al., *Understanding Border Carbon Adjustments: The Pros and Cons of BCA Policy Designs*, BIPARTISAN POL'Y CTR. 1 (Nov. 2022), https://bipartisanpolicy.org/download/?file=/wp-content/up-loads/2022/11/BPC Energy-CBAM-Report Final.pdf [hereinafter Fishman et al.].

^{50.} *Id.* at 3.

^{51.} Id.

^{52.} Id.

emission sector-by-sector, and estimates the additional cost for complying with such regulations.⁵³ The imports of the same sector that do not have equivalent emission-reducing policies will be imposed the exact cost of compliance as a fee.⁵⁴ Thirdly, an emission performance CBAM does not take into consideration any policy, but simply applies a fee on the emission performance.⁵⁵ The EU CBAM falls into the Carbon Tax CBAM because it imposes a carbon price on the emission of imports from countries without similar domestic carbon emission regulation to the EU ETS.⁵⁶

	CARBON TAX BCA	REGULATO	RY COST BCA	EMISSION PER	FORMANCE BCA
		Costs Only	Costs x Emissions	Imports Only	Imports + Domestic
Would it Monetize U.S. Carbon Advantage	?	×			
Is it Politically Feasible in the Near Term?	8	×	8		
Would U.S. Allies and Trading Partners Appro of the Policy?	ove 🗸	8	×	8	
Is it Able to Comply wit International Trade Law					
Does it Incentivize Glob Decarbonization?	al	8			
Does it Prevent Bad Actors From Circumventing the Tari	ff?				
Does it Avoid Burdening Least Developed Economies?	8	×	×	×	×
Does it Adjust for Hard to Abate Emissions?	8		8		

Source: Xan Fishman & Co, Understanding Border Carbon Adjustments - The Pros and Cons of BCA Policy Designs. 57

Beyond these three general types, a CBAM can be applied on a regional and international basis.⁵⁸ A regional CBAM is applied unilaterally from a region (e.g., the European Union CBAM), based on its regional carbon emission policies, and

^{53.} Fishman et al., supra note 49, at 4.

^{54.} *Id*.

^{55.} *Id*.

^{56.} Id. at 3.

^{57.} Fishman et al., supra note 49, at 9.

^{58.} Id. at 1.

is imposed against trade partners of that region.⁵⁹ This unilateral approach may garner opposition from trading partners, as we have seen in the case of the EU CBAM.⁶⁰

However, countries can also put aside their differences and prioritize emissions reductions by establishing a joint CBAM or by harmonizing their domestic carbon taxes. For example, countries can implement an international carbon tax, under which each country pays a tax designed to be proportional to its carbon emissions, perhaps under the auspices of an international agency. This approach will require a framework for reimbursement and clear rules. Separately, countries could create a self-executing international agreement that imposes uniform rules for carbon taxes. This approach would need to be supported by data analyses and scientific research on the adequate rate of an international carbon tax needed to reach Paris Agreement goals.

B. From Idea to Action: Past and Present of EU Carbon Tax

In recent years, the European Union has issued several environmentally-friendly policies that aim to reduce its carbon footprint. ⁶⁶ The EU members have established ambitious goals to reduce a minimum of 55% of greenhouse gas emissions by 2030 and aim to make EU climate neutral by 2050. ⁶⁷ In order to reach these targets, one of the most significant initiatives that EU has implemented is the EU Emission Trading System (EU ETS). ⁶⁸

The EU Emission Trading System (EU ETS), as the cornerstone of EU's green strategy and the world's first emission trading system, works on a "cap and trade" principle.⁶⁹ Under this system, the EU has set a cap on the total amount of certain greenhouse gases that can be emitted by the operators.⁷⁰ Under this cap, operators can buy and receive emission allowances and trade them with each other.⁷¹ If their emission is reduced, they can keep the allowances for next year or

^{59.} Memorandum, Questions and Answers: Carbon Border Adjustment Mechanism (CBAM), EUR. COMM'N 1-2 (Jul. 14, 2023), https://taxation-customs.ec.europa.eu/system/files/2023-07/20230714%20Q%26A%20CBAM_0.pdf [hereinafter CBAM Memo].

^{60.} REUTERS, supra note 14, at 2-3

^{61.} Michael Hoel, Carbon Taxes: Int'l Tax or Harmonized Domestic Taxes, 36 Eur. Econ. Rev. 400, 404 (1992), http://www.sciencedirect.com/science/article/pii/0014-2921(92)90096-F.

^{62.} Id. at 401.

^{63.} Id. at 401-03.

^{64.} Self-executing agreements become judicially enforceable upon their ratification, but non self-executing agreements require legislative implementation in order to become judicially enforceable.

^{65.} Hoel, *supra* note 61, at 405.

^{66.} Sebastion Oberthür & Claire Dupont, Eur. Union's Int'l Climate Leadership: Towards Grand Climate Strategy?, 27 J. Eur. Pub. PoL'y 1095, 1095-96 (2021).

^{67.} Climate Change: What the EU is Doing, Council Eur. Union 1-2, 4 (last visited on Feb. 7, 2023), https://www.consilium.europa.eu/en/policies/climate-change/.

^{68.} EU Emissions Trading System (EU ETS), Eur. Comm'n 1 (last visited Sept. 24, 2023), https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets en.

^{69.} *Id.* at 1-3.

^{70.} Id. at 2.

^{71.} *Id*.

sell them to another operator.⁷² Each year, operators should have sufficient allowances to cover their emissions; otherwise, they face significant fines.⁷³ This has shown to be an effective tool in reducing emissions between 2005 and 2021.⁷⁴

While policies such as EU ETS play a crucial role in reducing emissions for participating economies, they can disadvantage those participants if other trade partners have less rigid climate policies. For example, the ETS could cause "carbon leakage," meaning that operators move their production from the EU to countries with less rigid climate policies, such that more expensive EU products are being replaced by less expensive but more carbon-intensive imports. Furthermore, the ETS could create a disadvantage for EU producers when competing with countries that lack comparable policies. In the event of carbon leakage, the EU's effort to reduce emissions will be unsuccessful because emissions will be shifted outside of the European Union.

In response to carbon leakage and economic disadvantage for EU producers, the European Commission introduced a CBAM by establishing a carbon price for imported products coming from countries with less rigid policies. The aim of this measure was to prevent operators from moving their production to third countries, promote fair competition between EU producers and producers from other countries, and incentivize other nations, especially trading partners, to adopt similar practices. On the countries are considered as a constant of the countries are considered as a constant of the countries are considered as a constant of the countries are constant of the countries are considered as a constant of the countries are consta

The EU's adoption of CBAM took several years, including a rigorous stakeholder and public consultation process through 2020 and a provisional agreement reached in 2022. The Commission had public consultations with stakeholders, NGOs, and business associations in order to get feedback on the CBAM. It finally decided that EU CBAM is the best mechanism to respond to the setbacks of the ETS. In December 2019, the European Commission introduced CBAM, and public consultation took place between July to October 2020. After being reviewed by different committees and amended and supplemented on December

- 72. EU Emissions Trading System, supra note 68, at 3.
- 73. *Id*.
- 74. *Id.* at 4.
- 75. Gary Clyde Hufbauer et al., Can EU Carbon Border Adjustment Measures Propel WTO Climate Talks?, PETERSON INST. FOR INT'L ECON. 1 (Nov. 2021), https://www.piie.com/publications/policy-briefs/caneu-carbon-border-adjustment-measures-propel-wto-climate-talks.
 - 76. Carbon Border Adjustment Mechanism, supra note 1, at 1.
 - 77. Hufbauer et al., supra note 75 at 1.
 - 78. Carbon Border Adjustment Mechanism, supra note 1, at 1.
 - 79. Id.
 - 80. Hufbauer et al., supra note 75 at 1.
- 81. Press Release, Council of the EU, EU Climate Action: Provisional Agreement Reached on Carbon Border Adjustment Mechanism (Dec. 13, 2022), https://www.consilium.europa.eu/en/press/press-releases/2022/12/13/eu-climate-action-provisional-agreement-reached-on-carbon-border-adjustment-mechanism-cbam/.
 - 82. Carbon Border Adjustment Mechanism, supra note 1, at 7.
 - 83. *Id.* at 1.
- 84. Henrique Simões, Carbon Border Adjustment Mechanism as Part of the European Green Deal, EUR. PARLIAMENT, https://www.europarl.europa.eu/legislative-train/package-fit-for-55/file-carbon-border-adjustment-mechanism (last visited Oct. 7, 2023).

2022, a provisional political agreement was reached.⁸⁵ The transitional period of EU CBAM starts from October 2023 until December 2025, and full implementation starts in January 2026.⁸⁶

Initially, the CBAM will apply only to imported goods of six heavy carbon emission sectors: electricity, iron and steel, aluminum, cement, fertilizers, and hydrogen. From October 2023 until the end of 2025, the CBAM will be in a transitional phase, which will allow for a gradual and careful transition for non-EU businesses. During this transitional phase, importers will only have to report greenhouse gas emissions without having to make any financial payments. During this transitional phase the EU will review CBAM's functioning and assess if more sectors should be covered by it. Po

Starting from January 2026, the date of full implementation, all remaining provisions of the EU CBAM will be effective. First, EU-based importers of goods covered by the CBAM will have to register with national authorities, and they will also be able to buy CBAM certificates. The price for the certificates will be calculated depending on the weekly average auction price of EU ETS allowances. Second, each year in May, EU companies that are importing products will have to declare emissions from importing goods in the preceding year and surrender the number of CBAM certificates that correspond to the amount of greenhouse gas emissions declared. Third, if the companies can prove that they have paid a carbon price during the production, the amount that has been paid will be deducted from the final bill. The EU will get the information for registering the emission of goods from the non-EU producers. If such information is not available, EU importers will be able to use default values in order to determine the number of certificates they will need.

C. The Practical Implications of the EU Carbon Tax

Starting from 2026, the EU CBAM is expected to impact exporters to the EU, especially those coming from countries with less rigid or no comparable climate policies. ⁹⁸ Initially, this is expected to have only a short-term impact on trade, since it is still covering only goods from five heavy carbon emission sectors. ⁹⁹ However, as EU CBAM expands to cover other sectors, it will increasingly impact

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85. Id. at 2.
86. Id.
     Carbon Border Adjustment Mechanism, supra note 1, at 1.
88. Id. at 2-3.
89. Id.
90.
     Carbon Border Adjustment Mechanism, supra note 1, at 2-3.
92.
     Id. at 1.
93.
     Id.
94.
      Carbon Border Adjustment Mechanism, supra note 1, at 1.
95.
     CBAM Memo, supra note 59, at 8.
96.
97.
98.
     Hufbauer et al., supra note 75, at 5, 12.
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Id. at 3, 5

the producers in other countries.¹⁰⁰ Countries that are expected to be most affected are Russia, China, Turkey, the United Kingdom, South Korea, India, and Ukraine.¹⁰¹ Of the sectors covered by the CBAM, iron and steel will be hit the hardest, considering they comprise up to two-thirds of EU imports of CBAM products.¹⁰²

Electricity accounts for 30% of the total greenhouse gas emissions, ¹⁰³ and as a result, it falls under the scope of the EU CBAM. ¹⁰⁴ However, applying CBAM to electricity imports is challenging due to the presence of physical interconnectors (i.e., transmission) through which electricity is traded, particularly with non-EU accession countries like Albania, Kosovo, Serbia, whose electricity markets are coupled with that of the EU. ¹⁰⁵ This interconnection complicates the application of the CBAM to electricity because when electricity is traded through these interconnectors, it is difficult to attribute the exact carbon footprint to a specific country of origin. ¹⁰⁶

Despite its significance in emissions, electricity only accounts for 0.2% of the EU total imports. Switzerland and Russia are the primary suppliers, with Switzerland being part of the EU ETS and thus unaffected by the EU CBAM. Russia, on the other hand, is among the five most affected countries affected by the EU CBAM, largely because its electricity is 25% more carbon intensive than the EU average. To mitigate the effects of the CBAM, Russia should seriously consider implementing a domestic emission trading system. Doing so would be crucial for avoiding severe consequences for its electricity exports into the EU market.

We still do not know precisely what the EU CBAM will look like, therefore, we can still not define what would be the implication of this mechanism. Generally, implementation could have both positive and negative effects on the efforts

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100. Id. at 2.
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^{101.} Id.

^{102.} Hufbauer et al., supra note 75, at 5.

^{103.} Id.

^{104.} Carbon Border Adjustment Mechanism, supra note 1, at 1.

^{105.} Karova Rozeta, EU's Carbon Border Adjustment Mechanism Energy and Community: Threat for Electricity Trade or Tool for Raising Climate Ambition and Electricity Market Integration, 2022 CARBON & CLIMATE L. REV. 99, 99, 102 (2022).

^{106.} Id. at 102.

^{107.} Fredrik Erixon, Policy Brief No. 14/2021, Europe's Carbon Border Adjustment Mechanism: Time to Go Back to the Drawing Board, ECIPE 7 (2021), https://ecipe.org/wp-content/up-loads/2021/11/ECI_21_PolicyBrief_14_2021_LY02-

 $^{1.}pdf?_gl=1*136rcvu*_up*MQ..*_ga*MTA4ODE2MzQzNS4xNjk2MjYyMzAz*_ga_T9CCK5HNCL*MTY5NjI2MjMwMi4xLjAuMTY5NjI2MjMwMi4wLjAuMA.$

^{108.} Id.

^{109.} Id. at 9.

^{110.} Sinan Ülgen, *A Political Economy Perspective on the EU's Carbon Border Tax*, CARNEGIE EUR. 2 (May 9, 2023), https://carnegieeurope.eu/2023/05/09/political-economy-perspective-on-eu-s-carbon-border-tax-pub-89706.

^{111.} Jos Delbeke, et al., *Key Issues for the Coming Trade and Climate Debate*, EUI SCH. OF TRANSNAT'L GOVERNANCE 5 (2021), https://cadmus.eui.eu/bitstream/handle/1814/71572/PB_2021_12_STG.pdf?sequence=1&isAllowed=y.

of the EU. On one hand, it could help fulfill the EU's aspirations; on the other hand, it could have unintended consequences and produce counter-effects.

Among its positive impacts, the EU CBAM may encourage environmentally friendly technologies, reduce emissions, prevent carbon leakage, and serve as an incentive for international cooperation on environmental issues. 112

This measure is likely to foster the adoption of environmentally friendly technologies, serving as a powerful incentive for countries and investors to channel resources into research and development of innovative solutions that yield lower carbon emissions during production. By encouraging investment in these sustainable technologies, nations can enhance their competitiveness in the market while simultaneously making substantial progress towards fulfilling their commitments under the Paris Agreement to reduce carbon emissions.

While it has the potential for a positive global impact, the effectiveness of the EU CBAM may be short-lived if it is successfully challenged in the WTO, 113 countries like China and Russia are concerned with the EU's unilateral decision. They accused this measure of being a violation of WTO rules. 114 Russia has been particularly outspoken about the EU's violation of global trade regulations, as the country most heavily impacted by these actions. 115 Both China and Russia are Member Countries of WTO, therefore, it is likely for them to bring a claim in the Dispute Settlement Body. 116 As will be addressed later, EU must amend the CBAM in order to offer differential treatment and avoid any challenges in this ground. 117 However, taking into consideration the latest approaches of the Dispute Settlement Body, the EU may be successful in defending EU CBAM by arguing against likeness based on their method of production and consumer taste. 118

On the other hand, this measure could lead to some companies creating a parallel production of goods with different levels of emission if they consider this method feasible financially; while EU citizens will be produced with low-emission products, other countries without comparable policies will receive goods with higher carbon emission products. However, it is important to take into consideration that this theory depends heavily on the quantity of the products that the foreign company exports to the EU and whether their country of origin has implemented similar policies domestically. If such parallel production of good takes place, the emission within the EU region would reduce, while the emissions in the rest of the world will remain the same. Considering that climate change is a global matter, this will unlikely satisfy the EU's aspiration.

^{112.} Emily Benson et al., *Analyzing the European Union's Carbon Border Adjustment Mechanism*, CSIS (Feb. 17, 2023) https://www.csis.org/analysis/analyzing-european-unions-carbon-border-adjustment-mechanism

^{113.} Delbeke et al., supra note 111, at 6.

^{114.} REUTERS, supra note 14, at 2.

^{115.} Assous et al., supra note 13, at 45.

^{116.} Dispute Settlement Body, WTO (Sept. 19, 2023), https://www.wto.org/eng-lish/tratop_e/dispu_e/dispu_body_e.htm.

^{117.} See Section V.

^{118.} These concepts and the likelihood for EU to defend the CBAM under WTO rules are elaborated later in this paper by taking into consideration precedents of the Dispute Settlement Body.

The practical implications of this measure depend heavily on the response of other prominent players in the global market; therefore, it is crucial to analyze the responses of other players. While this can have a global effect on the market, it could also have an adverse effect if other players do not cooperate, both internationally and through internal measures.

IV. THE CARBON BORDER TAX DIVIDE: WHO IS ON BOARD AND WHO IS PUSHING BACK AGAINST THE EU CBAM?

EU realized that having a domestic scheme for taxing carbon emissions through the EU ETS was not sufficient to achieve its policy aims. ¹¹⁹ Indeed, the EU ETS backfired against the EU economy due to carbon leakage concerns. ¹²⁰ At first, the EU tried to rectify these adverse effects by issuing free emission certificates until it reluctantly admitted that climate change cannot be one region's job. ¹²¹ The EU CBAM was a significant step forward EU's climate goals but surprised many of EU's trade partners, most of which were unhappy with the EU issuing a policy that transcended geographic boundaries in this way, as discussed further below. ¹²² The move was also especially opposed by developing countries because they do not have sufficient resources to implement such a measure on their own. ¹²³

A. The Carbon Tax Shake-up: Where Do the Big Players Stand?

Two-third of global emissions come from top ten GHG emitters, while big trade players such as China, the United States, and India account for 42.6% total emissions. Because they account for most of the emissions, actions to mitigate international trade carbon emissions by these countries would have the most impact. Should these countries institute domestic measures to reduce emissions and offset the impact of the EU CBAM, they would also have to harmonize those measures with the EU ETS. 126

EU trade partners have had various reactions to the CBAM.¹²⁷ The following section begins its analysis with the United States and China as leading international trade players, and then addresses the positions of other countries falling within the top five countries most affected by the EU CBAM.

^{119.} Benson et. al., supra note 112, at 4-5.

^{120.} Id. at 3.

^{121.} Id. at 1-2.

^{122.} REUTERS, supra note 14, at 1.

^{123.} Guilherme Magacho et al., *Impacts of CBAM on EU trade partners: consequences for developing countries*, EDITIONS AFD 3 (Mar. 2022), https://www.afd.fr/en/ressources/impacts-cbam-eu-trade-partners-consequences-developing-countries.

^{124.} Johannes Friedrich et al., *This Interactive Chart Shows Changes in the World's Top 10 Emitters*, WORLD RES. INST. 3 (Mar. 2, 2023), https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters.

^{125.} Id.

^{126.} Carbon Border Adjustment Mechanism, supra note 1, at 1. Initially it will affect only trade of goods from five heavy carbon emission sectors as elaborated above. However, as the EU CBAM expands to cover other sectors, it will affect the producers in other countries by creating a heavy burden on them. *Id.*

^{127.} Ülgen, *supra* note 110, at 6.

1. Is U.S. Following EU's Lead with a Border Carbon Tax?

As the EU announced its plan to put a price on carbon for imported products, the reaction of the United States has been carefully watched. The world was curious to know what will be the U.S.'s position regarding this mechanism. This is no surprise because as the world's largest economy, the U.S. has always played an important role in global trade. Currently, the U.S. neither has a carbon border adjustment nor a domestic carbon price, and while there have been some prior legislative attempts to implement a carbon border adjustment, there are no indications that such a measure will pass Congress.

During the Leaders' Summit on Climate, President Biden announced the target for the U.S. to achieve a 50-52% reduction from 2005 levels in economy-wide net greenhouse gas pollution by 2030.¹³⁴ The U.S. has a long way to go in order to reach these ambitious goals. Currently, the U.S. is ranked second for global emissions and is among the top three GHG emitters, accounting for 42.6% of total emissions.¹³⁵ However, the U.S. is more carbon efficient compared to most of its trading partners. The U.S. is more carbon-efficient than the world average and its key competitors (3x China and 4x India).¹³⁶ The U.S. manufactured goods are 40% more carbon-efficient than the world average.¹³⁷ However, the U.S. imports 75% of its goods from countries less carbon-efficient, and that contributes to U.S. overall carbon emission.¹³⁸

At least one research study shows that a carbon border adjustment would actually favor the U.S. by leveraging its carbon advantage and outcompeting foreign production. The study's authors argue that by imposing a carbon tax on imported products, the U.S. would strengthen its competitive position, encourage other countries to implement comparable policies, and enable greater ambition in

^{128.} Martin Dietrich et al., Event Highlights: Carbon Border Adjustments in the EU, the U.S., and Beyond, COLUM. CTR. ON SUSTAINABLE INV. 3 (Dec. 2021), https://ccsi.columbia.edu/content/event-highlights-carbon-border-adjustments-eu-us-and-beyond.

^{129.} Id. at 10.

^{130.} Economy & Trade, U.S. TRADE REP. 1, https://ustr.gov/issue-areas/economy-trade (last visited Sept. 30, 2023).

^{131.} *Id*.

^{132.} H.R. 4534, 117th Cong. 1 (2021).

^{133.} *Id.*; *FAIR Transition and Competition Act*, CONGRESS, https://www.congress.gov/bill/117th-congress/house-bill/4534/actions (last visited Sept. 30, 2023).

^{134.} FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies, WHITE HOUSE (Apr. 22, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.

^{135.} Friedrich et al., supra note 124, at 4.

^{136.} Catrina Rorke & Greg Bertelsen, *America's Carbon Advantage*, CLIMATE LEADERSHIP COUNCIL 1 (Sept. 2020), https://clcouncil.org/reports/americas-carbon-advantage.pdf.

^{137.} Id.

^{138.} Id. at 1, 6.

^{139.} *Id.* at 1; Carbon Advantage refers to the U.S.'s goods producing less carbon emission compared to comparable goods of other countries. Rorke, *supra* note 136, at 8.

domestic climate action. ¹⁴⁰ For example, considering that most of the imported products come from countries with less rigid policies, a U.S. carbon border adjustment would significantly advantage domestic products by shifting prices in their favor, and reduce reliance on goods imported from those countries. ¹⁴¹ Moreover, the influence of the U.S. and EU both implementing comparable policies to fulfill climate policies would motivate other countries to follow suit and take action to reduce their carbon emissions through similar approaches. ¹⁴² As the authors note, such a policy would also play a significant role in reducing overall carbon emissions and fulfilling the U.S.'s aspiration for a 50-52% reduction of greenhouse gas pollution by 2030. ¹⁴³

There has been some interest in the U.S. Congress in such a mechanism. Some U.S. policymakers have argued that a coordinated Border Carbon Adjustment (BCA) with the U.S. treaty allies could support the U.S. foreign policy and strategy against Russia and other countries who use mineral resources and energy as political weapons. During the recent 117th Congress, several trade policy and carbon emission-related proposals were presented. Some of the proposals would have imposed a tariff on carbon-intensive goods, while some others would have included a domestic carbon price combined with a carbon border adjustment.

For example, on July 2021, Senator Chris Coons and Representative Scott Petters introduced a bill to create a carbon border tax on imported goods as part of the FAIR Transition and Competition Act.¹⁴⁷ Under this proposal, a border tax would be applied to carbon-intensive imported products such as natural gas, coal, petroleum, and products such as aluminum, steel, cement, and iron.¹⁴⁸ Under this proposal, imported products would bear the exact costs for carbon emission, as they would if the products were produced in the U.S.¹⁴⁹ In other words, the U.S. would calculate domestic environmental costs that producers have in order to comply with federal, state, and local laws.¹⁵⁰ Fifty percent of the revenue collected from this mechanism would be distributed as grants to states to support climate

^{140.} Rorke, supra note 136, at 8.

^{141.} Id. at 1, 8.

^{142.} Id. at 8, 10.

^{143.} Id. at 11.

^{144.} Xan Fishman et al., *Understanding Border Carbon Adjustments—THE PROS AND CONS OF BCA POLICY DESIGNS*, BIPARTISAN POL'Y CTR. 2 (Nov. 2022), https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2022/11/BPC_Energy-CBAM-Report_Final.pdf.

^{145.} Tori K. Smith, *U.S. Carbon Border Adjustment Proposals and World Trade Organization Compliance*, Am. Action F. 3 (Feb. 8, 2023), https://www.americanactionforum.org/insight/u-s-carbon-border-adjustment-proposals-and-world-trade-organization-compliance/#_ftn9.

^{146.} Id.

^{147.} H.R. 4534, supra note 132, § 9904(a).

^{148.} Id. § 9901(6), 9904(a).

^{149.} Id. § 9904(a)(1).

^{150.} Id. § 9902.

adoption policies, and the remaining fifty percent would be distributed for research and development on technologies to reduce carbon emissions. ¹⁵¹

While there has been some bipartisan interest in a carbon border adjustment, the main political challenge has been a difference in views on the implementation of a domestic carbon tax together with a carbon border adjustment. Many economists, trade, and legal experts believe that a domestic carbon tax is necessary to ensure that the carbon border adjustment will not be challenged under the GATT rules that form the basis for the WTO. 152 However, some politicians object to a domestic carbon tax on the basis that it would create a burden on domestic producers. 153

In summary, while there appears to be limited Congressional interest in a carbon border adjustment in recent years, the details of how such a mechanism would be implemented in the U.S. are still to be defined.

2. PRC's Position on the EU CBAM

China is currently the EU's biggest trading partner and the world's largest exporting country. In 2020 exports from China to the EU accounted for approximately 15.1% of China's total exports. While China's exports will be subject to the EU CBAM, the four industries affected by CBAM constitute only 1.8% of all EU imported goods from China in 2019. This is because China's exports of these products are destined for the rest of the world. For example, only nine percent of China's aluminum exports go to the EU, and the remaining 91% are destined to other countries. Sandbag's report finds that CBAM will introduce net-costs for China around 150 to 200 million euro, which is only 0.04 to 0.06% of China's total EU exports. Yet, while it seems that the EU CBAM will not

^{151.} Alan H. Price et al., *Democrats Introduce Carbon Border Adjustment Legislation*, WILEY 2 (July 21, 2021), https://www.wiley.law/alert-Democrats-Introduce-Carbon-Border-Adjustment-Legislation.

^{152.} The General Agreement on Tariffs and Trade art. 1-2, Oct. 30, 1947, T.I.A.S. No. 1700, 55 U.N.T.S. 194 [hereinafter GATT]. "The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production." *Id.* at 6.

^{153.} Smith, supra note 145, at 3.

^{154.} Christopher Kardish et al., *The EU Carbon Border Adjustment Mechanism (CBAM) and China: Unpacking Options on Policy Design, Potential Responses, and Possible Impacts*, ADELPHI 19 (2021), https://adelphi.de/en/system/files/mediathek/bilder/20210610%20PolicyPaperCBAM%20China Final.pdf.

¹⁵⁵ *Id*

^{156.} Isabel Hilton, CBAM carbon levy will only hit a fraction of Chinese exports to EU, CHINA DIALOGUE 2 (May 14, 2021), https://chinadialogue.net/en/climate/cbam-carbon-levy-will-only-hit-a-fraction-of-chinese-exports-to-eu/.

^{157.} Chris Busch et al., China and the EU's Carbon Border Adjustment Mechanism: Cultivating Mutual Benefits for the EU and China, ENERGY INNOVATION: POL'Y & TECH. LLC 6 (Apr. 2022), https://energyinnovation.org/wp-content/uploads/2022/04/China-and-the-EUs-Carbon-Border-Adjustment-Mechanism.pdf.

^{158.} Assous et al., supra note 13, at 7.

^{159.} Id. at 9.

have a significant impact on China's overall economy, China is harshly opposed to it. 160

China argues that the EU CBAM does not take into consideration developing countries and it is a unilateral protectionist measure. EU CBAM has not created any exemption for developing countries. Although China is the world's second-largest economy, it still considers itself a developing country because its GDP per capita is only approximately 15% to 30% of advanced economies and China believes that it is not fair for it to be treated in the same way as other developed countries. Secondly, China considers CBAM as a unilateral measure to protect EU producers. In its view, this unilateral measure forces other countries to take action in regard to climate change and carbon emissions against their will, which it believes is inconsistent with the Paris Agreement's purpose of allowing signing Members to choose their own measures to reduce emissions. China also argues that the EU gave very little notice to affected countries about the passage of this measure. On April 2021, at the Summit on Climate, President Xi declared that "China is committed to multilateralism and refrain from creating green barriers for developing countries." 168

While it is very likely that China will challenge this matter at the WTO as a protectionist measure violating the GATT, other potential responses from China include making export policy adjustments, continuing export emission-intensive production to countries with less rigid climate policies while selling less emission intensive products to the EU and expanding its emissions trading system (ETS) in order to match the EU CBAM. ¹⁶⁹

First, China could provide export tariff exemptions to reduce the adverse effects of the EU CBAM in specific sectors. While export tariff exemptions may allow Chinese producers to remain competitive in the market without bearing the costs of EU CBAM, such a policy may be considered a disguised subsidy, and China could be challenged under the WTO's Agreement on Subsidies and Countervailing Measures. ¹⁷¹

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160. Kardish et al., supra note 154, at 18.
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^{161.} *Id*.

^{162.} Lowe, *supra* note 11, at 6.

^{163.} EU-China Roundtable on Carbon Border Adjustment Mechanism, AGORA ENERGIEWENDE 11 (May 26, 2021), https://static.agora-energiewende.de/fileadmin/Projekte/2021/2021-02_EU_Lead_markets/A-EW 222 EU-China CBAM WEB.pdf.

^{164.} Kardish et al., supra note 154, at 20.

^{165.} Id. at 16.

^{166.} *Id*.

^{167.} Id.

^{168.} Kardish et al., supra note 154, at 16.

^{169.} Hilton, supra note 156, at 2.

^{170.} Kardish et al., supra note 154, at 18.

^{171.} Agreement on Subsidies and Countervailing Measures ("SCM Agreement"), WTO 3 (Sept. 28, 2023), https://www.wto.org/english/tratop_e/scm_e/subs_e.htm.

Second, Chinese producers could continue to sell emission-intensive products to countries with less rigid climate policies while selling less emission intensive products to EU countries to reduce the fees that they would pay under the EU CBAM.¹⁷²

Both of these measures would undermine the environmental benefits of EU CBAM, and they are unlikely to help China reach its goals for reducing carbon emissions. China is currently the biggest carbon emitter globally, emitting more greenhouse gas than the entire developed world combined. China has committed to take action in order to achieve Paris Agreement goals and is aspiring to reach peak carbon emissions before 2030 and carbon neutrality by 2060. However, the International Energy Agency noted that China's emissions were relatively flat in 2022, declining only by 0.2%. Moreover, the China Country Climate and Development Report (CCDR) conducted by the World Bank found that without adequate mitigation and adaptation efforts, climate risks will also constrain China's economic development by threatening to reverse its development gains.

Finally, China could expand its national ETS to include EU CBAM requirements. China is implementing a national ETS, which started operation in 2021 and covers around 40% of China's carbon emissions in its initial phase. However, prices in the ETS pilot are significantly lower than those included in the EU ETS. Therefore, most researchers recommend that China adopt this option, as it would exclude China from EU CBAM and, at the same time, help China to reach its climate goals. ¹⁸⁰

3. The Decarbonization Landscape: Perspective from Other Key Players

Apart from China and the U.S., Sandbag reports that the remaining four of the top six countries most affected by the EU CBAM are Russia, Ukraine, Turkey, and South Korea. ¹⁸¹ Each of them has an important perspective in this analysis.

^{172.} Hilton, supra note 156, at 2.

^{173.} *Id.* at 7.

^{174.} Report: China Emissions Exceed All Developed Nations Combined, BBC News 1-2 (May 7, 2021), https://www.bbc.com/news/world-asia-57018837.

^{175.} Id. at 3.

^{176.} CO2 Emissions In 2022, INT'L ENERGY AGENCY 4 (2022), https://iea.blob.core.windows.net/assets/3c8fa115-35c4-4474-b237-1b00424c8844/CO2Emissionsin2022.pdf.

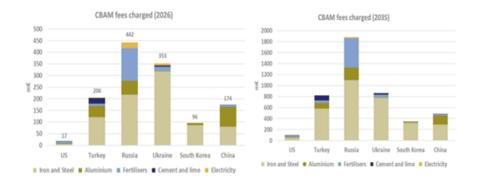
^{177.} Publication: China Country Climate and Development Report, WORLD BANK GRP. 1 (Oct. 2022), https://www.worldbank.org/en/country/china/publication/china-country-climate-and-development-report.

^{178.} Kardish et al., supra note 154, at 14.

^{179.} *Id*.

^{180.} Id. at 18.

^{181.} Assous et al., supra note 13, at 46.



Source: Sandbag Report. 182

First, Russia will be the country most affected by EU CBAM, ¹⁸³ and has opposed this measure by arguing that it violates global trade rules and threatens the safety of energy supplies. ¹⁸⁴ A Russian diplomat from the European Cooperation Department has stated that the CBAM is more about the EU economy and less about environmental protection. ¹⁸⁵ Based on the recent rhetoric, it is very likely that Russia will challenge the CBAM at the WTO. Dispute Settlement Body for violation of GATT provisions ¹⁸⁶ This is unsurprising because Russia does not have any carbon tax or emission trading policies in place, making it even more vulnerable to the CBAM than its trading partners. ¹⁸⁷ In the near term, Russia's decision to act on the EU CBAM is likely impacted by other trade restrictions, including the recent trade restrictions imposed by the EU on Russia in response to its invasion of Ukraine. ¹⁸⁸ For example, importation of Russian steel and iron products is currently banned by the European Union, ¹⁸⁹ and until those trade restrictions are lifted, the EU CBAM is inapplicable to Russian steel and iron. ¹⁹⁰

^{182.} Id. at 45.

^{183.} Id.

^{184.} REUTERS, supra note 14, at 1.

^{185.} Assous et al., supra note 13, at 50.

^{186.} Simola, supra note 16, at 7.

^{187.} Jennifer L., Russia Develops their own Carbon Credit Methodologies, CARBON CREDITS 2 (Mar. 9, 2023) https://carboncredits.com/18-russian-carbon-credits-methodologiesareunderway/#:~:text=As%20Russia%20no%20carbon,8%20billion%20euros%20each%20year; Carbon Pricing in the Russian Federation, OCED (2021) https://www.oecd.org/tax/tax-policy/carbon-pricing-russian-federation.pdf.

^{188.} EU sanctions against Russia explained, CONSILIUM 1, https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/sanctions-against-russia-explained/ (last visited July 27, 2023).

^{189.} Id. at 6-7.

^{190.} Id.

Next, the EU is the most important trade partner for Ukraine. In 2019, Ukraine's exports to the EU reached 41.5% of its total exports. ¹⁹¹ More than one-third of Ukraine's exports are subject to the EU CBAM and as a result, Ukraine is the second most affected country by the EU CBAM. ¹⁹² In 2020, Ukraine's exports to EU accounted for more than 40% of its total trade in goods. ¹⁹³ Following the Russian invasion, Ukraine's exports to the EU have decreased, and while they recovered briefly in the beginning of 2022, they never returned to pre-Russian invasion levels. ¹⁹⁴ Under the EU CBAM, Ukrainian business exporters will be expected to pay more than 1 billion euros in carbon tax. ¹⁹⁵ Ukraine's leaders have expressed concerns over this cost, and they urge the EU to exempt Ukraine from the EU CBAM on two bases: first, Ukraine's current national carbon tax, which is significantly below carbon prices observed in the EU, ¹⁹⁶ and second, the ongoing war with Russia, which has now lasted more than one year. ¹⁹⁷ However, as of the date of publication, the EU has not responded to Ukraine's request.

Turkey is another country that considers the EU as its most important trade partner. EU CBAM's effect on Turkey is expected to be around 690 million Euro or 14% of the total value of the EU CBAM for imports from Turkey, 99 so Turkey considers this measure a significant threat to its economy. Therefore, following the EU's announcement of this measure, Turkey decided to take immediate measures by ratifying the Paris Climate Accord. Turkey's chief negotiator at the COP26 climate summit explained that EU CBAM was a reason for its decision, and announced Turkey's intention to introduce a carbon price to avoid the negative impact of CBAM.

South Korea is the fifth most affected country by the EU CBAM.²⁰³ Currently, South Korea has an Emission Trading Scheme, which covers a range of

tent#:~:text=EU%20CBAM%20can%20promote%20a,for%20the%20affected%20interest%20groups.

- 192. Id.
- 193. Simola, supra note 16, at 9.
- 194. EU Trade with Ukraine Latest Development, EUROSTAT 1 (Aug. 2023), https://ec.europa.eu/eurostat/statistics-explained/index.php?oldid=583762#Latest developments.
 - 195. Holovko et al. supra note 191, at 8.
 - 196. Id. at 5.

- 198. Simola, supra note 16, at 8.
- 199. Id at 10.
- 200. Id

- 202. Id.
- 203. Assous et al., supra note 13, at 44.

^{191.} Iryna Holovko et al., *The Role of the EU CBAM in Raising Climate Policy Ambition in Trade Partners: The Case of Ukraine*, INST. FOR ADVANCED SUSTAINABILITY STUDIES 10 (2021), https://publications.iass-pots-dam.de/rest/items/item_6001279_2/component/file_6001289/con-

^{197.} Ukraine to Discuss Some Rules on CBAM Participation with EU, GMK CTR. 1 (2022), https://gmk.center/en/news/ukraine-intends-to-discuss-with-the-eu-certain-rules-for-its-participation-in-cbam/; "Regarding CBAM and all other mechanisms – (we have) an ongoing discussion with the European Commissioner for the Environment Virginijus Sinkevicius. If I manage to get to Prague for a meeting of all ministers of ecology next Wednesday, July 13, I am sure that one of the cases that we will discuss is some rules for Ukraine's participation in CBAM, given the war." Id.

^{201.} Zia Weise, EU's looming carbon tax nudged Turkey toward Paris climate accord, POLITICO 2 (Nov. 6, 2021, 5:38PM), https://www.politico.eu/article/eu-carbon-border-adjustment-mechanism-turkey-paris-accord-climate-change/.

sectors, and it has declared that they will enter into negotiations with the EU about the CBAM. Specifically, South Korea wants the EU to recognize its scheme as equivalent to EU CBAM and exempt South Korean goods from the CBAM. Because Korea's national carbon tax varies from the EU, it is unlikely that the EU will agree to exclude Korea's production from the CBAM especially when it comes to steel. Currently, the steel industry is subject to free allocation, therefore, as EU reduces the number of industries that are subject to free allocation this will increase export costs of steel. One policy option is for South Korea to gradually reduce the proportion of free allocations and modify its carbon tax in order to make it equivalent to EU ETS. This way, South Korea would take the proceeds from the carbon tax and use them towards supporting its producers in long-term decarbonization efforts.

Although Russia, Ukraine, Turkey, and South Korea are significantly affected by the EU CBAM, they will respond to the measure in different ways. While countries who already have a national carbon tax in place will try to negotiate with the EU to recognize their domestic carbon tax framework and exempt them from CBAM, other countries who do not have such a domestic policy will oppose the EU CBAM by applying counter-measures and challenging the CBAM at the WTO.²⁰⁹ If these strategies are unsuccessful, the next best choice for many of these countries would be to modify their domestic carbon taxes or emission policies in order to achieve EU ETS equivalency.²¹⁰ With those additional domestic revenue, these countries could continue a virtuous cycle by incentivizing environmentally friendly technologies and bringing the world closer to neutralizing carbon emissions.²¹¹

B. Climate Justice for All: Understanding Developing Countries' Concerns

Article 3 of the United Nations Framework Convention on Climate Change (UNFCCC), enshrines the principle of common but differentiated responsibilities.²¹² Under this principle, while all countries have responsibility for protecting the climate, they may have different responsibilities and capabilities.²¹³ The

^{204.} Tomas Gutierrez, South Korea to Negotiate CBAM Recognition, KALLANISH (Oct. 2022), https://www.kallanish.com/en/news/steel/market-reports/article-details/south-korea-to-negotiate-cbam-recognition-1022/

^{205.} Id.

^{206.} *CBAM and Revised EU ETS: Implications for the Steel Industry*, SHERMAN & STERLING 5-6 (Aug. 10, 2021), https://www.shearman.com/en/perspectives/2021/08/cbam-and-revised-eu-ets-implications-for-the-steel-industry.

^{207.} Lee Sulki, Will EU Cham Hurt Korean Mfr? An Empirical Analysis with Implications for Pol'y, 27 KIET INDUS. ECON. REV. 45, 45-54 (Dec. 30, 2022), https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4315042 code5356721.pdf?abstractid=4315042&mirid=1.

^{208.} Id

^{209.} Id.

^{210.} Id. at 2.

^{211.} Sulki, *supra* note 207, at 1.

 $^{212.\,\,}$ United Nations Framework Convention on Climate Change art. 3, May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107.

^{213.} Id. at 4.

UNFCCC divides countries into "developed" and "developing" and gives the leading responsibility on climate change matters to developed countries. Other international agreements and agreements that have developed from the UNFCCC framework include provisions recognizing the needs of developing nations. For example, the Paris Agreement provides that "climate change actions, responses, and impacts have equitable access to sustainable development and eradication of poverty." Similarly, the WTO recognizes under the principle of differentiation that developing countries should receive preferential treatment when implementing measures by taking into consideration their relative lack of infrastructure. 216

Based on these international agreements, developing countries have expressed concern that the EU CBAM does not provide any exemption for them. ²¹⁷ Some of these countries believe failing to include an exemption for developing countries is a violation of GATT. ²¹⁸ Developing nations have argued that the lack of an exemption can further increase the gap between developed and developing countries because they have less access to the financing and technology needed to reduce emissions. ²¹⁹ While most of the developing countries already have domestic carbon taxes or similar policies and will be impacted to a lesser extent, the impact will be significant for developing countries that lack any similar domestic policy. ²²⁰

Even though the EU does not exclude developing nations from the EU CBAM today, two types of differing treatment for developing nations are possible in theory and could be adopted by the EU in the future: excluding developing countries from the EU CBAM altogether, ²²¹ or continue to apply the EU CBAM to developing nations and direct its proceeds to benefit them or offset their costs, e.g., to accelerate the establishment of cleaner technology in developing countries. ²²²

First, the EU could exclude developing countries from EU CBAM altogether. The EU already relies on the WTO's enabling clause to grant some of the developing countries preferential access to its market, and they could exclude the same countries from their CBAM.²²³ At least one report shows that carbon emissions from developing countries' imports only account for a small portion of total imports into the EU.²²⁴ In particular, only 3% of all EU imports for goods initially

- 214. *Id.* at 1.
- 215. Id.
- 216. Paris Agreement, supra note 8, at 1.
- 217. Agreement on Differential and More Favourable Treatment Reciprocity and Fuller Participation of Developing Countries, Nov. 28, 1979, T.R.A. L/4903.
 - 218. Hufbauer et al., supra note 75, at 10.
 - 219. *Id.* at 8.
- 220. Byeongho Lim et al., *Pitfalls of the EU's Carbon Border Adjustment Mechanism*, 14 MDPI: ENERGIES 1, 3 (2021), https://www.mdpi.com/1996-1073/14/21/7303.
 - 221. Id.
 - 222. Lowe, *supra* note 11, at 9-10.
- 223. Sigit Perdana & Marc Vielle, Making EU Carbon Border Adjustment Mechanism Acceptable and Climate Friendly for Least Dev. Countries, 170 ENERGY POL'Y 1, 3 (2022).
 - 224. Lowe, *supra* note 11, at 9.

covered by the CBAM proposal come from least developed countries.²²⁵ Arguably, the exclusion of these countries may not materially undermine the EU's overall carbon reduction efforts.²²⁶ However, from the EU's perspective, excluding developing nations from the CBAM could create an economic advantage for them and would risk production-shifting to countries with less strict domestic greenhouse gas regulations.²²⁷

Second, the EU could continue to apply the EU CBAM towards developing countries but use all or a portion of the revenues to establish a fund dedicated in supporting developing countries in their climate change mitigation efforts. This might be a mutually beneficial solution for all involved because it would further the EU's effort to reduce carbon emissions but would not create an economic advantage for developing countries or risk carbon leakage.²²⁸ On the contrary, this option could help developing countries advance environmentally-friendly technologies and build the infrastructure needed to reduce their carbon emissions, contributing to the overall goals of the Paris Agreement.²²⁹

V. EU CBAM FROM THE GATT POINT OF VIEW

While countries are free to decide which policy measures they will use in the fight against climate change, all WTO members, including the EU, are obliged to abide by its trade rules and principles.²³⁰ The EU argued that it designed the CBAM to comply with the GATT and other WTO agreements.²³¹ However, as discussed above, it is very likely the EU CBAM will be challenged under the WTO rules.²³² The following section discusses potential GATT claims and the EU's potential defenses.

The policy impact that the EU CBAM will have depends on whether it can withstand challenges before the WTO's Dispute Settlement Body (DSB). A successful defense of the EU CBAM would likely encourage other countries, particularly EU's trade partners, to follow suit. However, a negative outcome would require the EU to change its CBAM regulations and potentially undermine its broader policy effort to set stricter rules for carbon emissions. States of the EU to change its CBAM regulations and potentially undermine its broader policy effort to set stricter rules for carbon emissions.

- 225. Perdana & Vielle, supra note 223, at 3.
- 226. Id. at 2.
- 227. Id. at 3.
- 228. Id. at 8.
- 229. Perdana & Vielle, supra note 223, at 6.
- 230. Id. at 9.
- 231. CBAM Memo, supra note 59, at 1.
- 232. Towards a WTO Compatible EU Carbon Border Adjustment, EUR. PARL. (REP A9-0019/2021) 10 (Feb. 15, 2021) https://www.europarl.europa.eu/doceo/document/A-9-2021-0019 EN.html.
- 233. Simola, *supra* note 16, at 7 (taking into consideration that countries as China and Russia opposing this measure on the grounds of GATT violations, they are both WTO Member Countries, we can easily assume that one of them is likely to bring a dispute before Dispute Settlement Body).
- 234. Dispute Settlement Body, supra note 116, at 1 (Dispute Settlement Body has authority to deal with disputes between Member Countries of the WTO).
- 235. *A unique contribution*, WTO, https://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm (last visited Sept. 28, 2023).

WTO members who want to challenge the EU CBAM have several legal options. Some potential claims under the GATT include potential violations of (1) Most-Favored-Nation treatment (Article I), (2) Tariff Schedules (Article II), and (3) National Treatment (Article III). If the DSB finds that the EU has violated any of these provisions, the EU might still seek an exemption or defense for its CBAM measure under GATT's General Exceptions (Article XX) by claiming that EU CBAM is (1) a measure necessary to protect human, animal or plant life or health (Article XX(b)) or (2) relates to the conservation of exhaustible natural resources (Article XX(g)). See National Section 1988.

A. Most-Favored-Nation Treatment

Article I of the GATT enshrined the most-favored-nation principle (MFN).²³⁹ Under this principle, countries should refrain from discriminating among their trading partners.²⁴⁰ Therefore, any advantage given to the imported products of one WTO member must be given immediately and unconditionally to the like products of other WTO members.²⁴¹ Alleged violations of this principle are evaluated under a three-prong test: (1) does this measure confer an advantage upon imported or exported products?²⁴² (2) are the products concerned 'like'? (Japan-Alcoholic Beverages,²⁴³ Spain unroasted coffee)²⁴⁴ and (3) was the same advantage granted 'immediately and unconditionally' to like products concerned? (Canada-Autos²⁴⁵ US Certain EC Products).²⁴⁶ The same three-prong test would be applied to the EU CBAM if challenged.²⁴⁷

Under the first prong of the test, a challenger would have to allege that the EU CBAM imposes an advantage to imported or exported products. The challenger could argue that the EU CBAM has created disparate treatment among contracting members (CM) by implementing varying standards in its application. The EU, on the other hand, could argue that no advantage was conferred because the

^{236.} Id.

^{237.} *Id.* at 1; In the World Trade Organization (WTO), only member countries, which are also known as member states, have the right to bring claims. They can bring claims against other member countries if they believe that their trade rights under the WTO agreements are being violated or if they have disputes related to trade issues. *Whose WTO is it anyway?*, WTO, https://www.wto.org/eng-lish/thewto_e/whatis_e/tif_e/org1_e.htm (last visited Oct. 8, 2023).

^{238.} GATT, supra note 152, at 2-4, 6.

^{239.} Id. at 37-38.

^{240.} Id. at 2.

^{241.} Id.

^{242.} GATT, *supra* note 152, at 2.

^{243.} Appellate Body Report, *European Communities – Regime for the Importation, Sale and Distribution of Bananas*, ¶ 68, 207, WTO Doc. WT/DS27/AB/R (adopted Sept. 25, 1997).

^{244.} Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WTO Doc. WT/DS10/AB/R § H(1)(a), (adopted Nov. 1, 1996).

^{245.} Panel Report, $Spain-Tariff\ Treatment\ of\ Unroasted\ Coffee$, \P 3.4, WTO Doc. BISD/28S/102 (adopted June 11, 1981).

^{246.} Appellate Body Report, Canada – Certain Measures Affecting the Automotive Industry, ¶ 64, WTO Doc. WT/DS139/AB/R (adopted May 31, 2000).

^{247.} Appellate Body Report, *United States – Countervailing Duties on Certain Products from the European Communities*, ¶ 96, WTO Doc. WT/DS212/AB/R (adopted Jan. 8, 2003).

same standards apply to all countries depending on whether they have adopted a measure equivalent to the EU ETS. Panels have given a broad definition to the term 'advantage' by interpreting it to cover a wide variety of measures,²⁴⁸ therefore, it is likely that the Panel will decide that the EU CBAM confers an advantage to particular countries, which are not being subject to the EU CBAM, regardless of whether they have a similar measure domestically.²⁴⁹

One expert, James Bacchus, former chair of the WTO's Appellate Body, has argued recently that the EU, by self-judging other WTO members and deciding which of them will have to buy emissions certificates and how many they will have to buy under, is discriminating among WTO members. Putting aside this individual opinion, the EU has also considered this first prong. Under the briefing prepared upon the request of the European Parliament's Committee on international trade by the police department for external relations, it is said that whatever the classification of the EU CBAM is, it cannot discriminate between like products of different members, e.g., aluminum from the U.S. versus aluminum from Canada or electricity from Russia versus electricity of another WTO member. Leg.

As for the second prong of the test, the WTO Dispute Settlement Body prefers to evaluate "likeness" of products on a case-by-case basis. ²⁵³ In prior cases, some of the elements that have considered in the analysis include the characteristics of the products, their end-uses, and the tariff regimes of other countries. ²⁵⁴ Here, as an example, if the EU treated aluminum from the U.S. versus aluminum from Canada differently on the basis of their carbon intensity, the EU would have to prove that they are not "like" products, in order for its action not to be considered a violation of the MFN principle.

The Center for Strategic and International Studies (CSIS) argues that whether the EU can successfully challenge the likeness of the products may vary by product. For example, CSIS finds that it may be easier for the EU to challenge likeness for a product like steel rather aluminum because the manufacturing processes vary for steel and producers may sometimes use completely different technologies (e.g., some manufacturers may use blast furnaces, which are high-emitting, and

^{248.} Smith, *supra* note 151, at 4.

^{249.} Panel Report, United States – Denial of Most-Favoured-Nation Treatment as to Non-Rubber Footwear from Brazil, \P 6.9, WTO Doc. BISD 39S/128 (adopted June 19, 1992).

^{250.} Appellate Body Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, ¶¶ 3-4, WTO Doc. WT/DS135/AB/R (adopted Mar. 12, 2001) [hereinafter WTO Doc. WT/DS135/AB/R].

^{251.} James Bacchus, Legal Issues with the European Carbon Border Adjustment Mechanism 3, CATO INST. (Aug. 9, 2021), https://www.cato.org/briefing-paper/legal-issues-european-carbon-border-adjustment-mechanism.

^{252.} Id

^{253.} Briefing on Trade Related Aspects of a Carbon Border Adjustment Mechanism – A Legal Assessment, Eur. Parl. Doc. (PE 603.502) 1.2.1 (Apr. 14, 2020), https://www.europarl.europa.eu/cms-data/210514/EXPO BRI(2020)603502 EN.pdf.

^{254.} WTO Doc. BISD/28S/102, *supra* note 245, ¶ 3.5.

^{255.} WTO Doc. WT/DS135/AB/R, supra note 250.

others may use scrap-based electric arc furnaces, which are lower emitting).²⁵⁶ On the other hand, aluminum manufacturing processes are more similar across all producers.²⁵⁷ Such an argument would require the review panel to take into consideration process and production methods when assessing likeness, in addition to other elements that have been taken into consideration in previous cases.

More generally, an industry's process and production methods may make all the difference for its relative impact on climate change. 258 I argue that it is important that the Panel takes into consideration process and production method when deciding likeness. There are already indications from Dispute Settlement Body that process and production methods are indirectly considered in assessing the "likeness."²⁵⁹ One of the elements that is taken into consideration in order to assess if two products are "like" is consumer taste. 260 Today's consumer taste is impacted by the production process, due to their awareness of climate change impacts and customer taste may be an indication that products are not considered "like" when they have different process and production methods.²⁶¹ For example, in the case of EC-Asbestos, the Appellate Body found that the presence of a carcinogen in one of the products will influence consumers' taste, and refused to find the products as "like." 262 Similarly, in the case of Canada – Renewable Energy, the Appellate Body indicated that inputs and process and production methods may be taken into account for assessing the existence of a competitive relationship between products. ²⁶³ While it is difficult to predict whether the Panel would consider different process and production methods in mitigating carbon emissions when evaluating "like" products covered by the EU CBAM, Canada – Renewable Energy suggests that a panel may be willing to consider process and production method when assessing the likeness.

The third test would include assessing whether the advantage has been conferred 'immediately and unconditionally' to other countries. If the Panel finds that the first two elements have been fulfilled by the complainant, they will most likely decide that such advantage has not been given 'immediately and unconditionally' to other countries.

B. Tariff Schedules

Article II of the GATT establishes Tariff Concessions in Schedules, which refers to commitments that Member Countries of WTO made regarding the tariffs that will apply to imported goods.²⁶⁴ Article II attempts to put a ceiling on the

^{256.} Benson et al., supra note 112, at 4.

^{257.} *Id*.

^{258.} Id.

^{259.} Thomas Cottier, *Strengthening the Global Trade and Investment System for Sustainable Development*, INT'L CTR. FOR TRADE AND SUSTAINABLE DEV. 1 (Aug. 2015).

^{260.} Id. at 1.

^{261.} Id. at 4.

^{262.} Id. at 2-3.

^{263.} Cottier, supra note 259, at 3.

^{264.} Appellate Body Report, Canada – Certain Measures Affecting the Renewable Energy Generation Sector, ¶ 5.63, WT/DS412/AB/R (May 6, 2013).

level of customs duties that can be applied to certain products. ²⁶⁵ Every member is bound by a Schedule of Concessions, which is attached as an integral part of the GATT. ²⁶⁶ The EU is also bound to these Schedules, and if the EU CBAM imposes a tariff in excess of the ceiling for the imported goods, it can be challenged as inconsistent with Article II. ²⁶⁷

Bacchus, in his paper about legal issues with the EU CBAM, predicted that the EU will argue that the CBAM is not a border measure but instead an internal measure. However, in anticipation of this argument, he argues that because the EU CBAM is triggered by the *importation* of goods, the EU will have some difficulty claiming that the CBAM is purely a domestic measure. Bacchus's analysis is compelling and if EU CBAM exceeds the ceiling provided in GATT Schedule as per Article II, EU CBAM would likely be considered a violation of the GATT.

C. National Treatment

Next, challengers to the EU CBAM may rely on Article III:4 of the GATT, which provides that WTO Members may not discriminate against imported products once they have entered the domestic market; in other words, imported products may not be treated less favorably than 'like' domestic products.²⁷¹ In order to establish a potential violation of Article III:4, the complainant must meet three-prong test: 1) the measure at issue must be a "law, regulation or requirement affecting their international sale, offering for sale, purchase, transportation, distribution or use" of a particular product, (2) the imported and domestic products at issue must be 'like products,' and (3) the imported products must be given 'less favorable' treatment than that given to domestic products.²⁷²

While the EU attempted to ensure that the EU CBAM is equivalent to EU ETS to establish a case that both domestic and imported products are accorded equal treatment, ²⁷³ complexities may still arise with this argument. For example, the EU may have to explain whether the free emissions allowances that have been issued and will continue to be issued to domestic users violate the National Treatment principle. ²⁷⁴ Arguably, these legacy emission allowances would give EU producers an advantage compared to foreign imported products, likely triggering Article III:4.

Therefore, in order for the EU to avoid violation of Article III:4, EU CBAM should avoid the issuance of the free allowances to the domestic producers once

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265. GATT, supra note 152, 3, 5.
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^{266.} *Id*.

^{267.} Id.

^{268.} Bacchus, supra note 251, at 4.

^{269.} *Id.* at 5 (discussing European businesses concern on higher carbon price in the EU).

^{270.} *Id.* at 5-6.

^{271.} GATT, supra note 152, 6.

^{272.} *Id*.

^{273.} Id

^{274.} Perdana & Vielle, supra note 223, at 2.

CBAM applies to imports; otherwise, it would be according 'less favorable' treatment to like domestic products.²⁷⁵

D. EU's Defenses

While the EU CBAM may be challenged as a violation of Articles I, II, and/or III, the measure can still be excused if the EU can successfully assert the "general exceptions" provided for in GATT Article XX.²⁷⁶ Specifically, the EU could argue that even if the EU CBAM violated other provisions of the GATT, the violations are exempted under Article XX(b) and/or Article XX(g), which provides exceptions for measures which are necessary to protect human, animal, or plant life or health or/and related to the conservation of exhaustible natural resources, respectively.²⁷⁷

First, the EU can claim that the CBAM is necessary to protect human, animal or plant life or health under Article XX(b).²⁷⁸ To successfully make this claim, the EU must establish that the CBAM is designed to protect human, animal or plant life or health; or that the measure is necessary to fulfill the policy objective.²⁷⁹ While the EU can argue that this measure has been taken in response to climate change concerns which endanger humans, animals, and plant life, it may be difficult for the EU to meet the 'necessity' requirement. In the case of Thailand-Cigarettes, for example, the Panel found that a measure is considered necessary only if there are no alternative measures or less inconsistent measures that a member could implement to achieve its objectives.²⁸⁰ Here, Bacchus argues that the EU will not be able to prove that there were no other alternatives because there was at least one other alternative that would be able to reach the EU's desired level of protection, which is a carbon tax. ²⁸¹ While the EU might have had been able to adopt other alternative measures as suggested by Bacchus, EU can still argue that those measures would not achieve the end sought by the EU. In the case of EC-Asbestos, the Appellate Body concluded that while France could have chosen another measure, it would have prevented it from achieving its chosen level of health protection.²⁸² Furthermore, *Korea-Beef* has approached a similar view by taking into consideration whether the alternative measure would contribute to the realization of the end pursued.²⁸³

- 275. Benson et al., supra note 112, at 7.
- 276. Id. at 5.
- 277. GATT, supra note 152, at 55.
- 278. Id. at. 37-38.
- 279. Id. at 37.
- 280. *Id.*; Secretariat Note, *GATT/WTO Dispute Settlement Practice Relating to GATT Article XX, Paragraphs (b), (d), and (g)*, ¶ 13, WTO Doc. WT/CTE/W/203 (Mar. 8, 2002).
- 281. Panel Report, *Thailand Customs and Fiscal Measures on Cigarettes from the Philippines*, WTO Doc. WT/DS371/R (adopted Jul. 15, 2011); Panel Report, *Thailand—Restriction on Importation of and Internal Taxes on Cigarettes*, ¶ 23, WTO Doc. DS10/R-37S/200 (adopted Nov. 7, 1990).
 - 282. Bacchus, supra note 251, at 4.
- 283. WTO Doc. WT/DS135/AB/R, *supra* note 250, ¶ 168. "In this case, the objective pursued by the measure is the preservation of human life and health through the elimination, or reduction, of the well-known, and life-threatening, health risks posed by asbestos fibers. The value pursued is both vital and important in the highest degree. The remaining question, then, is whether there is an alternative measure that would achieve the same end

Second, the EU can argue that the CBAM is related to the conservation of exhaustible natural resources²⁸⁴ if such a measure is made effective in conjunction with restrictions on domestic production or consumption. In order to satisfy this provision, the EU must prove that the measure relates to the conservation of exhaustible natural resources; and is made effective in conjunction with restrictions on domestic production or consumption.²⁸⁵

For the EU to qualify for an exemption under either Article XX(b) or XX(g), it must also meet the tests of the Chapeau of Article XX.²⁸⁶ Under the Chapeau, the EU should prove that the CBAM was not applied in a manner that would constitute arbitrary or unjustifiable discrimination or a disguised restriction on international trade.²⁸⁷ This has historically been a difficult test to meet. In the US-Gasoline case, when assessing if the U.S. has fulfilled the Chapeau with its measures, the Appellate Body found that U.S.'s measure constituted unjustifiable discrimination and disguised restrictions by taking into consideration the lack of cooperation from the U.S.'s side with Venezuela and Brazil.²⁸⁸ The Appellate Body found that discrimination is not only determined by the measure at issue, but also the manner in which it is applied.²⁸⁹ On the *US-Shrimp*,²⁹⁰ the Appellate Body found that while a government can apply a measure to its citizens, it cannot use an economic embargo to require other Members to adopt essentially the same comprehensive regulatory program, to achieve a certain policy goal, as that in force within that Member's territory, without taking into consideration different conditions which may occur in the territories of those other Members. ²⁹¹

In determining whether the application of a measure constitutes an arbitrary or unjustifiable discrimination, it should be assessed if the measure is discriminatory, if the discrimination is arbitrary and unjustifiable, and if it occurs between countries where the same conditions prevail.

and that is less restrictive of trade than a prohibition. . . . In our view, France could not reasonably be expected to employ any alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to "halt". Such an alternative measure would, in effect, prevent France from achieving its chosen level of health protection. On the basis of the scientific evidence before it, the Panel found that, in general, the efficacy of "controlled use" remains to be demonstrated. Moreover, even in cases where "controlled use" practices are applied "with greater certainty", the scientific evidence suggests that the level of exposure can, in some circumstances, still be high enough for there to be a 'significant residual risk of developing asbestos-related diseases.' The Panel found too that the efficacy of 'controlled use' is particularly doubtful for the building industry and for DIY enthusiasts, which are the most important users of cement- based products containing chrysotile asbestos. Given these factual findings by the Panel, we believe that 'con-trolled use' would not allow France to achieve its chosen level of health protection by halting the spread of asbestos- related health risks. 'Controlled use' would, thus, not be an alternative measure that would achieve the end sought by France." *Id.* ¶ 172, 174.

284. Appellate Body Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, ¶ 163, WTO Doc. WT/DS161/AB/R (adopted Jan. 10, 2001).

285. GATT, supra note 159, at 38.

286. Id.

287. Id.

288. WTO rules and environmental policies: GATT exceptions, WTO 1, https://www.wto.org/english/tratop_e/envir_e/envt_rules_exceptions_e.htm (last visited on Oct. 8, 2023) [hereinafter GATT exceptions]. 289. Id.

290. Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, 10, WTO Doc. WT/DS2/9 (adopted May 20, 1996) [hereinafter WTO Doc. WT/DS2/9].

291. Id.

The "arbitrary and unjustifiable discrimination" analysis will depend on several factors. There have been criticisms of the EU CBAM in regard to the EU's lack of effort to engage in a multilateral approach, as well as the EU's attempt to impose ETS regulations on other trade partners. The way EU CBAM is designed, the EU's trade partners would be subject to EU CBAM, even if they have a carbon tax in-house, if the tax system is not equivalent to the EU ETS. Therefore, the challenging countries could argue that the EU is attempting to force other countries to apply the same measures as the EU. The EU, on the other hand, can argue that it has taken all the necessary actions to comply with this provision. The EU announced the measure two years prior to its implementation. Additionally, the measure has a three-year transition period and initially it applies only to some carbon-intensive goods, to be gradually phased in a period of almost ten years.

The second part of the chapeau prevents disguised restrictions on international trade. 298 In *US-Gasoline*, the Panel found that this portion of the chapeau should be read side-by-side with "the arbitrary and unjustifiable discrimination" language. 299 As such, the same criteria would likely apply in finding a disguised restriction. 300

In summary, should the EU CBAM be challenged under WTO rules, two of the most difficult elements for the EU to prove will be the lack of "likeness" of the covered products and the applicability of exclusions under Article XX. The EU may be able to argue that different methods of production for reducing carbon emission have an impact on consumers' tastes, which could be taken into consideration for evaluating "likeness," but it is not a clear case. The exceptions under Article XX will also be challenging to prove based on past precedent like *US-Shrimp* and the restrictive language contained in the chapeau.

Taking into consideration that the Appellate Body in WTO is currently not functional, ³⁰¹ if one of the Member Countries chooses to appeal the decision of the Panel, they would have to resolve their dispute through consultations, arbitration or other alternative mechanisms. ³⁰²

^{292.} United States – Import Prohibition of Certain Shrimp and Shrimp Products, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds58_e.htm (last visited Oct. 8, 2023).

^{293.} GATT exceptions, supra note 288, at 4.

^{294.} Kardish et al., supra note 154, at 16.

^{295.} Id. at 8.

^{296.} Id. at 4.

^{297.} Id.

^{298.} Carbon Border Adjustment Mechanism, supra note 1, at 3.

^{299.} GATT, supra note 152, at 37-38.

^{300.} WTO Doc. WT/DS2/9, supra note 290, at 28.

^{301.} Id. at 25.

^{302.} Dispute Settlement: Appellate Body, WTO 1, https://www.wto.org/english/tratop_e/dispu_e/appellate_body_e.htm (last visited Oct. 8, 2023); DG Azevedo to launch intensive consultations on resolving Appellate Body impasse, WTO 2 (Dec. 9, 2019), https://www.wto.org/english/news_e/news19_e/ge_09dec19_e.htm#:~:text=Director%2DGeneral%20Roberto%20Azevêdo%20told,appointment%20of%20Appellate%20Body%20members.

VI. CONCLUSION

The urgency of addressing climate change necessitates global collaboration, but the lack of such cooperation has led EU members to enact unilateral measures like the EU CBAM. This progressive initiative could inspire other nations to adopt a scheme similar to the EU ETS, which will allow them to pay a comparable tax domestically rather than to the EU institutions. The revenue generated from such taxes can be used to incentivize environmentally friendly technologies and investments and increase the competitiveness of their economy internationally.

Moreover, the EU and other countries, as per their commitments under the Paris Agreement, should aid least developing nations in establishing similar measures. However, the EU CBAM may face WTO challenges, and its success hinges on robust arguments against the "likeness" of products with varying carbon emissions due to different PPMs influencing consumer preferences and that its measure is crucial for health and the environment, with no viable alternatives to achieve the EU's targeted carbon emission reductions. Cooperative efforts with other nations during the transition phase can mitigate potential challenges, while distinguishing between economies and supporting developing nations can further bolster the CBAM's legitimacy. If successfully implemented, the EU's CBAM could catalyze global action on climate change and potentially lead to a harmonized global carbon tax or ETS measures, especially among influential trade players like the U.S. and China. In sum, the EU's proactive stance on climate change through the CBAM has the potential to set a precedent for other nations, instigating a collective response to climate challenges.