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DEBATE

A Pragmatic Approach to Carbon Border Measures

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Abstract
This article offers the justification for a type of carbon customs union in which countries with a diverse range of high-ambition domestic climate measures would adopt a common external tariff on carbon intensive imports from countries outside the union. We explain why any pragmatic approach to carbon border measures (CBMs) is likely to create problems under prevailing interpretations of the World Trade Organization's (WTO) primary rules. Given the urgency of the climate crisis and the fact that the legality of a CBM – no matter how designed – will be a question of first impression for any WTO dispute panel, WTO consistency should take a backseat to considerations of domestic legal and political feasibility in designing a CBM. Instead of trying to fit a CBM into current understandings of WTO rules, WTO members should renegotiate WTO rules to permit a range of aggressive, but likely trade-restrictive, decarbonization measures. Having said that, we also recognize that WTO negotiations may take longer than optimal from a decarbonization standpoint. We therefore suggest an approach that would allow WTO members to take advantage of flexibilities that existing WTO rules afford.

1. Introduction

The climate crisis is poised to become the most significant trade issue of the next decade. Despite the global slowdown in economic activity due to COVID-19, countries remain well behind the greenhouse gas emissions reductions necessary to meet the 1.5 degree warming target countries set in the Paris Agreement on climate change.[1] As a result, leaders around the world have begun to take more drastic action to address the climate crisis. Although still in its early days, the Biden administration has moved aggressively to put climate at the center of both foreign and economic policymaking in a way that previous administrations have not.[2] The EU has proposed a Green Deal that will expand its efforts to green its economy through sustainable production standards, clean energy initiatives, and measures to protect biodiversity.[3] In 2018, Canada implemented a federal carbon pricing scheme that Canada's Supreme Court recently upheld against a federalism challenge.[4] Japanese Prime Minister Yoshihide Suga has instructed his government to begin plans for a bold carbon pricing scheme, with a goal of making Japan carbon neutral by 2050.[5]

[1]Paris Agreement to the United Nations Framework Convention on Climate Change, 12 December 2015, TIAS 16–1104.
[2]Joseph R. Biden, Jr., 'Executive Order on Tackling the Climate Crisis at Home and Abroad' (27 January 2021), www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/, accessed 28 June 2021.
[3]'The European Green Deal', COM(219) 640 (Communication from the Commission, 11 December 2019), https://ec.europa.eu/info/sites/default/files/european-green-deal-communication_en.pdf, accessed 28 June 2021.
[4]Re: *Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11.
[5]Leika Kihara, 'Japan Advisers Urge Quick Adoption of Carbon Pricing to Hit Emissions Goal', *Reuters* (24 February 2021).

These domestic decarbonization measures face a threat, however. Developed countries' historically low trade barriers, combined with long-term decreases in global transportation costs, mean that companies can locate production in countries without meaningful domestic decarbonization measures and then export their products to countries with tough decarbonization rules, thus evading efforts to address climate change. This process, known as carbon leakage, has two effects.[6] First, it undermines efforts to reduce global carbon emissions. Consumers in developed countries continue to spend on carbon-intensive products; such products are just produced in countries that lack ambitious decarbonization measures.

Second, carbon leakage weakens political support for decarbonization efforts by creating an incentive for jobs to move from developed countries to developing countries. Both the United States under the Biden administration and the EU have linked their climate goals to the development of good, sustainable jobs, especially in local communities and regions that have not historically benefitted from trade liberalization. This linkage is critical to ensuring political support for aggressive decarbonization measures.

Climate change is a slow-moving crisis with enormous costs that are still largely in the future. Building political support to tackle that problem today, when the worst of those costs can still be averted, requires offsetting the costs of decarbonization with other economic benefits. At a minimum, it requires a trade policy that does not penalize countries economically for pursuing decarbonization measures. Trade policy, in other words, must protect domestic decarbonization efforts if those efforts are to be successful.[7]

In a recent paper, we have argued that the solution to this problem is a common carbon tariff among countries with high climate ambitions, combined with flexibility for countries to pursue those ambitions domestically in nationally appropriate ways.[8] From an international trade point of view, goods would move free of the carbon-tariff among countries within the climate club – a sort of carbon customs union – while imports from outside the bloc would face the common tariff. Domestically, countries could choose from a menu of carbon-reducing measures. The EU, for instance, could rely on its Emissions Trading Scheme (ETS).[9] The United States could use the mix of industrial policy and regulations that form the core of the Biden administration's Build Back Better[10] agenda, while relying on Section 232 of the Trade Expansion Act of 1962 to impose the common tariff.[11]

Like-minded countries should create this common carbon tariff gradually through a series of sectoral-specific agreements. This gradual approach, which we propose begin with the steel sector

[6]Most empirical studies of carbon leakage are based on the EU ETS and find little evidence that the ETS has led to significant leakage. E.g., John Ward et al., 'Carbon Leakage: Theory, Evidence, and Policy Design', World Bank Technical Note 11 (October 2015); Stefano F. Verde, 'The Impact of the EU Emissions Trading System on Competitiveness and Carbon Leakage: The Econometric Evidence' (2020) 34 *Journal of Economic Surveys* 320. These studies have significant limitations, though. The most important of these limitations is the ETS itself, which – by giving free emissions allowances to covered sectors – reduces the incentives for leakage at significant cost to the environmental effectiveness of the ETS. These studies thus tell us little about whether carbon leakage would occur in the absence of mechanisms, such as those the EU has implemented, designed to prevent that leakage. Other studies have found greater evidence of carbon leakage, most especially from the United States to China. Tobias Nielsen et al., 'The risk of carbon leakage in global climate agreements' (2021) 21 *International Environmental Agreements: Politics, Law and Economics* 147.

[7]In this way, the climate crisis is also inextricably bound up in the other existential crisis the trade regime faces: competition between market-oriented economies like the United States, the EU, Japan, and Canada, on the one hand, and non-market oriented economies, most notably China, on the other. Shifting production to countries with weak carbon regulations and unfair trade practices risks breaking a domestic political coalition willing to support aggressive climate action while also addressing domestic economic inequality.

[8]Todd N. Tucker and Timothy Meyer, 'A Green Steel Deal: Toward Pro-Jobs, Pro-Climate Transatlantic Cooperation on Carbon Border Measures', Roosevelt Institute (June 2021), https://rooseveltinstitute.org/wp-content/uploads/2021/06/RI_GreenSteelDeal_Working-Paper_202106-1.pdf, accessed 29 June 2021.

[9]Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC.

[10]The White House, 'Build Back Better', www.whitehouse.gov/build-back-better/, accessed 15 July 2021.

[11]Trade Expansion Act of 1962, § 232, codified as amended at 19 United States Code (USC), § 1862.

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(what we term a *Green Steel Deal*), is the most politically feasible approach and allows countries to learn how to handle the complicated technical issues involved in transforming a sector that is highly carbon-intensive and trade-exposed and is already the subject of extensive trade measures. Beginning with the steel sector also allows the United States to resolve its dispute with its climate-friendly allies over the national security tariffs on steel imports by removing them,[12] while replacing the national security tariffs with a carbon tariff on producers operating free of the burden of potentially costly climate regulations.[13]

Carbon border measures (CBMs) generally, and a common CBM specifically, create potential inconsistencies with the World Trade Organization (WTO)'s rules. In this article, we explain why any pragmatic approach to CBMs is likely to create WTO problems. Our view is that, given the urgency of the climate crisis and the fact that the legality of a CBM – no matter how designed – will be a question of first impression for any WTO dispute panel, WTO consistency should take a backseat to considerations of domestic legal and political feasibility in designing a CBM. Instead of trying to fit a CBM into current understandings of WTO rules, WTO members should renegotiate WTO rules to permit a range of aggressive, and potentially trade-restrictive, decarbonization measures. Having said that, we also recognize that WTO negotiations may take longer than optimal from a decarbonization standpoint. We therefore suggest an approach that would allow WTO members to take advantage of the flexibilities that WTO rules afford.

Section 1 explains why domestic legal and political constraints mean that decarbonization efforts are likely to take diverse forms across countries. Section 2 explains why this diversity is a challenge for WTO rules. In short, the most plausible kinds of CBMs, as well as any kind of common CBM, are likely to violate the WTO's primary rules. WTO exceptions offer a path to justifying these measures, but these exceptions have too often been construed in highly technical ways that lack appropriate deference to national regulators pursuing legitimate public policy objectives. We suggest re-construing the exceptions is both defensible and appropriate in light of the urgency of the climate crisis.

2. A Diversity of Approaches to Decarbonization

CBMs are an idea whose time has come. While a candidate in 2020, President Biden proposed a CBM of some kind.[14] More recently, Katherine Tai, the US Trade Representative, and John Kerry, President Biden's climate envoy, have both expressed an openness to the idea.[15] In July, the European Commission unveiled its proposal for a CBM. Their proposal contemplates requiring special emissions trading permits for imports in an attempt to make imported products contend with restrictions domestic producers face under the EU's ETS.[16] Japan is reportedly considering a

[12]Augusta Victoria Saraiva, 'EU Wants US Metal-Duties Halt by Year-End, Ambassador Says, *Bloomberg* (21 June 2021).

[13]Some commentators have argued that instead of a CBM, which raises trade barriers, WTO members should reinvigorate efforts like the Environmental Goods Agreement that would lower trade barriers on environmentally friendly products, defined as 'products that can help achieve environmental and climate protection goals, such as generating clean and renewable energy, improving energy and resource efficiency, controlling air pollution …'. World Trade Organization, 'Environmental Goods Agreement', www.wto.org/english/tratop_e/envir_e/ega_e.htm, accessed 15 July 2021. This argument reflects a category mistake. The EGA would lower trade barriers on products *the use of which* benefits the environment. A CBM would raise trade barriers on products *produced* in a carbon intensive manner. The approaches are thus potentially complementary, although any trade liberalization involving China, such as the EGA, would likely require resolution to concerns about Chinese state support for industry.

[14]Joe Biden, 'Questionnaire for Candidate Joe Biden' United Steelworkers (17 May 2020), www.uswvoices.org/endorsed-candidates/biden/BidenUSWQuestionnaire.pdf, accessed 29 June 2021.

[15]Andrea Shalal, 'USTR Tai calls for bold action to put climate at center of trade policy', Reuters (15 April 2021); Frank Jordans, 'Kerry says US examining carbon border tax, sees risk', Assoc. Press (18 May 2021).

[16]Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (14 July 2021), https://ec.europa.eu/info/sites/default/files/carbon_border_adjustment_mechanism_0.pdf, accessed 15 July 2021.

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carbon border tax.[17] The Canadian government's recently introduced budget suggests Canada will also begin consultations on imposing a carbon border tax.[18]

CBMs are intimately connected with domestic decarbonization measures. As the Canadian budget puts it, CBMs such as carbon tariffs 'level … the playing field, ensure … competitiveness, and protect … our shared environment'.[19] In other words, domestic environmental protection requires a trade policy that ensures that imports are not advantaged via production in ways that deviate from domestic environmental standards. Absent such a trade policy, countries pay an economic cost for their environmental policies, one that likely fractures political coalitions that support those environmental measures.

With so many countries contemplating CBMs, cooperation offers potentially significant benefits. A common CBM would actually allow for trade liberalization among members of the climate club, as they would not impose the measures on each others' imports. In the context of steel specifically, our proposed *Green Steel Deal* would remove a significant diplomatic irritant – the Trump national security tariffs. With respect to those countries outside the club, a common CBM would both prevent a 'divide-and-conquer' diplomatic strategy by countries with poor climate practices, as well as send the clearest signal to producers in those countries about the need to adopt green production methods.

While CBMs are thus a necessary component of an aggressive decarbonization agenda, and coordinating CBMs is feasible, meaningful coordination of domestic decarbonization measures is considerably less so. As the Paris Agreement recognized in its approach to nationally determined contributions, countries require substantial flexibility in choosing appropriate means to pursue decarbonization.[20] This shift recognized that the more top-down approach of the Kyoto Protocol,[21] even with its substantial flexibilities, had proved unworkable. The Paris Agreement thus repeatedly directs countries to fulfill their obligations 'in the light of different national circumstances'.[22] Although this phrase captures differences in national capabilities, it also includes different domestic political and legal constraints that countries face. Those constraints will influence both the form that domestic carbonization measures take, as well as the form and legal basis for any associated CBMs.

To see why a diversity of approaches is virtually assured, consider domestic carbon taxes – the preferred tool of many economists and, as we explain in Section 2, the most straightforward path to a WTO-consistent CBM. Such taxes are unlikely to be widely adopted at this point in time. Although it considered a carbon tax as one way to implement its CBM,[23] the EU had already chosen to base its emissions reductions efforts on an emissions trading scheme– a cap-and-trade system in which industry can buy and sell government-issued emissions permits, which ultimately must be surrendered at an amount sufficient to cover the emissions by facilities in covered economic sectors.[24] In cap-and-trade systems like the ETS, the government chooses the level of emissions via the number of permits issued and the market then sets the price of carbon. By contrast, with a carbon tax the government sets the price via the tax and the market chooses the level of emissions. The EU initially chose the ETS over a carbon tax in part because the latter would require universal assent by EU members, while the former could pass with a qualified majority

[17]Shiho Takezawa, 'Japan mulls carbon border tax for polluters, Nikkei says', Bloomberg Tax (10 February 2021).

[18]Charlie Pinkerton, 'The budget sets the stage for carbon tariffs', iPolitics (20 April 2021).

[19]Ibid.

[20]Paris Agreement to the United Nations Framework Convention on Climate Change (12 December 2015), TIAS 16-1104, art. 4.

[21]Kyoto Protocol to the United Nations Framework Convention on Climate Change (10 December 1997), 37 ILM 22.

[22]E.g., Paris Agreement, arts. 2.2 and 4.3.

[23]'Public Consultation on the Carbon Border Adjustment Mechanism (CBAM)', Ref. Ares(2021)70541 (European Commission Summary Report, 1 May 2021).

[24]Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC.

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under the bloc's rules. Presumably, for the same reason, as well as reasons of path dependence, the Commission's initial proposal for a CBM involves extending part of the logic of its ETS to imports. In the United States, the US Congress would have to approve a nation-wide carbon tax – an unlikely scenario. Other countries' experiences are similar. Australia repealed a carbon tax in 2014 shortly after implementing it,[25] while Swiss voters rejected a similar intiative by referendum in 2021.[26] Meanwhile the Canadian Supreme Court sustained Canada's carbon pricing scheme only after concluding that it was an extension of federal regulations, rather than a tax under Canadian constitutional law.[27] Carbon taxes may thus be an option in some countries – such as Japan, Sweden, and a handful of European countries, all of which have carbon taxes which are often relatively modest[28] – but infeasible in other countries.[29]

Instead, widespread adoption of carbon-reduction measures will depend on regulatory authority in many countries, which is often delegated to executive branch officials and is therefore subject to fewer veto points. But the nature and scope of that regulatory authority is likely to vary across countries. To give but one example, the EU, acting through the European Commission, has authority to act over all areas of environmental policy.[30] In the United States, presidential authority is substantial, but rests on discrete delegations from Congress, such as the Clean Air Act,[31] on which the Obama administration relied to implement the US commitments under the Paris Agreement. As a result, even major regulatory initiatives, such as the creation of a cap-and-trade system, would likely require action from Congress, a more difficult legal and political bar to clear than the EU faces. The primary obstacle is the US Senate, which has been a graveyard for both international climate commitments such as the Kyoto Protocol and aggressive domestic measures, such as the Markey–Waxman bill a decade ago that would have introduced both a federal cap-and-trade system and associated border measures.[32]

The need to rely on preexisting delegations of authority will also shape and constrain border measures in at least some countries, including the United States. While the EU, operating primarily through the European Commission, has exclusive competence over trade policy, the situation in the United States is different. The US Constitution grants control over foreign commerce and taxation exclusively to Congress.[33] The president can thus only set trade policy to the extent that Congress has delegated that authority to him. Currently, no delegations explicitly grant the president the authority to impose a CBM. Several Republican senators have apparently discussed the possibility of a 'carbon border fee',[34] and as this article was going to press, reports surfaced that the Democrats' $3.5 trillion reconciliation bill included a proposal for a 'polluter import fee'.[35] Having said that, the prospects for passing legislation imposing a CBM in the United States remain uncertain. Thus, while congressional involvement would expand the tools at the disposal

[25]Julia Baird, 'A Carbon Tax's Ignoble End', *New York Times* (24 July 2014).

[26]Michel de Rougemont, 'Surprise: Swiss Citizens Repeal a Law on CO2', *European Scientist* (14 June 2021), www.europeanscientist.com/en/features/surprise-swiss-citizens-repeal-a-law-on-co2/, accessed 15 July 2021.

[27]Re: *Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11.

[28]Kazuhiko Shimizu, 'Japan Facing "Drastic" Carbon Tax Increase to Meet Climate Goals' Bloomberg Tax (27 May 2021); Elke Asen, *Carbon Taxes in Europe* (3 June 2021),https://taxfoundation.org/carbon-taxes-in-europe-2021/, accessed 29 June 2021.

[29]For additional reasons why carbon pricing has been ineffective in practice, see D. Cullenwar and D.G. Victor, *Making Climate Policy Work* (Wiley 2020); M. Mildenberger, 'Carbon Captured: How Business and Labor Control Climate Politics' (MIT Press 2020).

[30]Consolidating Version of the Treaty on the Functioning of the European Union, OJ L. 326/47-326/390, arts. 11, 191–193.

[31]Clear Air Act, 42 USC, §§ 7401–7671q.

[32]Bryan Walsh, 'Why the Climate Bill Died', *Time* (26 July 2010).

[33]US Constitution, art. 1, § 8.

[34]Scott Waldman, '4 Senate Republicans in talks about carbon border fee', *ClimateWire* (2 June 2021).

[35]No further details were available. Due to the fluidity of the situation, we assume in this article that the administration will need to have an option for a CBM under executive authority for the reasons discussed above. See Lisa Friedman, 'Democrats Call for a Tax on Imports from Polluting Countries', *New York Times* (14 July 2021).

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of the US in designing a CBM and could also put the CBM on a stronger political footing by insulating it from reversal by future administrations, the Biden administration is likely to have to rely on preexisting delegations of authority to impose a CBM. At a minimum, the realistic possibility of unilateral executive action might encourage Congress to negotiate with the administration on legislation.

While the president has a variety of authorities on which he can rely to raise trade barriers,[36] the most useful for imposing a carbon tariff is Section 232 of the Trade Expansion Act of 1962. Section 232 authorizes the president to 'adjust the imports' of products that he and the Commerce Department determine, following an investigation, threaten 'to impair the national security'.[37] At first glance, a Cold War-era statute dealing with national security might seem an odd fit to deal with climate change in the twenty-first century. And, to be sure, Section 232 has a bad reputation internationally as the basis for the Trump administration's tariffs on steel and aluminum imports (which the Biden administration has thus far continued). For many, it stands for the proposition that 'national security' is a giant loophole in trade rules that must be closed.

In fact, though, Section 232 offers the clearest path to a US CBM, as well as to cooperative action on CBMs. Section 232's grant of authority is not limited to 'national security". understood as military and classic foreign affairs considerations. Rather, Section 232 provides that:

> the President shall … recognize the close relation of the economic welfare of the Nation to our national security, and shall take into consideration the impact of foreign competition on the economic welfare of individual domestic industries; and any substantial unemployment, decrease in revenues of government, loss of skills or investment, or other serious effects resulting from the displacement of any domestic products by excessive imports shall be considered, without excluding other factors, in determining whether such weakening of our internal economy may impair the national security.[38]

In other words, Section 232's text reflects a general grant of authority to the US President to raise trade barriers in response to virtually any threat or harm to the US economy from imports. The disruptions that climate change will cause easily satisfy Section 232's mandate. Competition from carbon-intensive products will threaten the viability of green industries that the Biden administration's Build Back Better program supports, including the decarbonization demonstration projects that the administration has made a central component of both its jobs and climate plans. Efforts to 'green' industry more generally will be accompanied by labor displacement, and potentially associated declines in government tax revenues, if cheap carbon-intensive imports are allowed onto the US market without any adjustment. Section 232 thus plainly authorizes the administration to 'adjust the imports' of carbon-intensive products if it determines that doing so is in the interest of protecting virtually any facet of the nation's economic security.

Additionally, Section 232 is not a purely unilateral mechanism. It authorizes the president to negotiate international agreements governing the imports of covered products, either in addition to or in lieu of other remedies.[39] Section 232 thus provides the legal basis for the Biden administration to join a common carbon tariff scheme. This is no small thing. The Clinton administration could not win Senate approval for the Kyoto Protocol, and the Obama administration crafted

[36]Kathleen Claussen, 'Trade's Security Exceptionalism' (2020) 72 *Stanford Law Review* 1097.

[37]Trade Expansion Act of 1962, § 232, codified as amended at 19 USC, § 1862.

[38]19 USC, § 1862(d).

[39]Section 232 contains virtually no limit on other remedies, leaving it to the president to choose among tariffs, quotas, licenses, or other remedies, and to impose the measures for so long as he determines the threat continues to exist. Indeed, apart from time limits that have to be observed in the course of an investigation, section 232 has few, if any, limitations that would provide the basis for the kind of judicial challenges that have held up major domestic regulatory efforts in the United States. See, e.g., *Universal Steel Products v. United States*, 495 F.Supp.3d 1336 (C.I.T. 2021).

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the Paris Agreement to avoid the need for such approval. Congress's ex ante consent in Section 232 to agreements that regulate imports threatening national security, however, removes the need for ex post congressional approval. While consultation and coordination with Congress remain a wise policy, Congress has already legally signed off.

3. CBMs and the WTO

This variation in domestic authority and the resulting diversity of approaches to decarbonization has two consequences. First, it makes it likely that at least some countries interested in pursuing aggressive *domestic* decarbonization measures will have difficulty doing so in a way that can easily be married to a CBM that complies with the WTO's primary rules. Second, it makes it virtually impossible to have a *common* CBM across countries that complies with those primary rules. The divergence in domestic approaches means that the domestic carbon price – whether explicit or implicit, i.e., calculated from the cost of complying with environmental regulations – will almost surely vary across countries. As a result, barring speedy and successful negotiations, the WTO-consistency of any CBM is likely to hinge on flexibilities, that have not been interpreted in a manner sufficiently deferential to national regulators.

3.1 The GATT's Primary Rules

The GATT, the WTO's chief agreement governing trade in goods, contains three main sets of primary obligations: 1) limits on tariffs; 2) a prohibition on import or export restrictions other than tariffs; and 3) a prohibition on discrimination against imports, a category that contains many permutations.[40] The most blunt forms of a CBM will violate one of the first two sets of rules. A ban on imports from countries with weak climate laws would run afoul of the prohibition on import restrictions. A simple tariff on carbon-intensive products would violate a country's tariff bindings.[41]

What is left are domestic taxes, either assessed on imported products behind the border or 'charge[s on imports] equivalent to an internal tax',[42] and regulations. At first glance, this looks quite promising. In recent years, prominent trade lawyers have argued that a non-discriminatory carbon tax, one applicable to both imports and domestic products, would be consistent with WTO rules.[43] Just as a domestic sales tax or VAT can be assessed on imports consistent with WTO rules, a country with a domestic carbon tax could apply a charge to imports either 'equivalent' to the domestic tax (if the import charge was viewed as a tariff) or not 'in excess of' the domestic tax (if viewed as an internal tax). Similarly, product standards, such as energy efficiency standards, could be applied in a nondiscriminatory fashion to both imports and domestic products. Both President Biden's Build Back Better initiative and the EU's Green Deal are likely to feature new regulations of this kind.

In theory, then, nondiscriminatory taxes and regulations offer a path to WTO-consistent border measures. In reality, this path is more likely a mirage for many countries. As we have explained above, neither a US-wide nor an EU-wide carbon tax is politically feasible. Moreover, as Hillman notes, for any number of reasons governments might prefer taxes (or regulations) on production or the use of inputs, such as taxes on the generation of energy or the use of fossil fuels, to taxes on products.[44] Under WTO rules, only taxes on products (so-called indirect taxes) can be adjusted at the border via nondiscriminatory measures. Deciding whether

[40]See, e.g., GATT arts. I, III, XIII; TBT Agreement art. 2.1.

[41]Either one of these measures could also violate the most-favored nation obligation if high- and low-carbon products from different WTO members were found to be 'like'.

[42]GATT art. II:2.

[43]Jennifer Hillman, 'Changing Climate for Carbon Taxes: Who's Afraid of the WTO?', German Marshall Fund (2013).

[44]Ibid at 7.

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taxes on production processes or inputs are really taxes on products raises a host of novel questions under WTO law.[45]

Even if a CBM qualifies for analysis under nondiscrimination rules, its fate is uncertain at best. The WTO's nondiscrimination rules require that an internal tax on imports be similar to or not in excess of the tax on 'like' domestic products, while regulations must offer imports treatment 'no less favorable' than that afforded 'like' domestic products.[46] In various cases over the years, WTO members and panels have urged that either the standard for 'likeness' or the standard of treatment take into account regulatory purpose of a measure when that purpose is unrelated to national origin.[47] Unfortunately, though, the Appellate Body (AB) declined to adopt such an 'aim and effect' test or anything similar. Instead, the current test for 'like' products focuses on the commercial relationship between products.[48] Otherwise identical products – such as cement, steel, or chemicals – that differ only in the amount of carbon emitted during the production process would probably be found 'like' under this test.

The standard of treatment applicable to regulations covering products determined to be 'like' has a similar commercial flavor. The AB has said that a measure that disrupts the 'equality of competitive opportunities' among like products accords less favorable treatment, even if the distinction among products has nothing to do with national origin and has a legitimate regulatory basis.[49] Because the entire purpose of a CBM is to disadvantage otherwise identical products based on how much carbon is emitted during production, some scholars have argued that a CBM will almost certainly run afoul of GATT nondiscrimination rules.[50]

These core issues present a challenge even to an ideally designed CBM. Government measures are, however, rarely designed on the basis of ideals alone. Instead, they typically include exceptions, variances, or differential treatment designed to ensure sufficient political support for the measure. While a comprehensive examination of all the ways a CBM might violate WTO rules is beyond the scope of this article, suffice it to say that a whole host of more technical, but not less weighty, issues present ripe targets for potential challengers: whether to adjust the price of imports, or also exports; whether to apply the CBM to all countries, or whether to exempt developing countries; whether to apply the CBM to only direct emissions for a given product, or also the indirect emissions that went into making it; and whether to calculate embedded emissions on a shipment-by-shipment level (or more distantly from the widget itself, such as on the basis of country averages).

The EU's latest proposal illustrates some of these problems. First, the European CBM would provide importers a credit for any carbon price paid in their home market. It would not, however, give them credit for the cost of complying with decarbonization regulations in their home market.[51] Two firms that pay equivalent carbon costs – one via an explicit carbon pricing mechanism

[45]Ibid at 7 n. 17.

[46]GATT arts. III:2 and III:4; TBT Agreement art. 2.1.

[47]See, e.g., Panel Report, *United States – Measures Affectiing the Production and Sale of Clove Cigarettes*, WT/DS406/R; Robert E. Hudec, 'GATT/WTO Constraints on National Regulation: Requiem for an "Aim and Effect" Test' (1998) 32 *The International Lawyer* 619.

[48]E.g., Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R, para. 99 ('the word "like" in Artiicle III:4 is to be interepreted to apply to products that are in such a competitive relationship.').

[49]E.g., Appellate Body Report, *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products*, WT/DS400/AB/R, WT/DS401/AB/R, para. 5.108.

[50]Andrei Marcu, Michael Mehling, and Aaron Cosbey, 'Border Carbon Adjustments in the EU: Issues and Options', European Roundtable on Climate change and Sustainable Transition (2020). However, where taxes are concerned, Hillman has argued that a well-designed carbon tax could avoid this problem because it would apply the same way to any category of like products – for example, $100 per ton of carbon emitted during the production process. Hillman, *supra* n. 30, 9.

[51]'The CBAM should favour global cooperation in fighting climate change, and it should avoid situations of double carbon pricing by subjecting goods which have already paid a carbon price outside the EU based on GHG emissions in third

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and the second an implicit price via regulation – are thus treated differently. This is discriminatory, while failing to reward what the European Commission states as the goal of its CBM: global decarbonization.[52] Both the GATT's primary nondiscrimination rules, as well as the nondiscrimination rule applicable to the GATT's general exceptions via the chapeau of article XX, would likely require the EU to take account of the implicit price of carbon in all countries if it does so for one. Doing so would create a significant administrative burden, with no guarantee that any ostensibly neutral formula to evaluate the implicit price of carbon across countries will ultimately hold up under review.[53] Second, EU producers will benefit from the ability to trade emissions permits in private markets, and pay spot prices daily for doing so, while importers will be forced to buy permits from government at averages of past prices.[54] Finally, the details on how verification of emissions will work, and how those procedures compare to the procedures that apply to domestic manufacturers, creates another possible basis for a discrimination complaint.

All of these difficulties apply to any single nation's CBM. A common CBM presents an additional wrinkle. To be consistent with the WTO's primary rules, countries imposing a common CBM would likely have to impose similar carbon costs on domestic producers. For example, the EU's proposal requires importers to purchase permits for the amount of carbon emitted during the production of a product, with the price of the permits tied to the price of such a permit under the ETS. Under WTO rules, the United States could not impose a carbon tariff in the same amount as the EU's price of a permit unless the cost of carbon in the United States were at least as high as the cost of carbon in the EU. Charging a higher tariff than the United States charges on its own domestic products would amount to discrimination. And while this difficulty could in principle be solved by setting the CBM equal to the lowest price charged in any member country, such an approach has several disadvantages. For example, determining those prices in countries, like the United States, that do not have an explicit carbon pricing system is possible but difficult. Worse, a lowest common denominator approach would reduce the environmental effectiveness of the system as a whole. As a result, a common carbon tariff is likely to leave at least some members exposed to claims that the common CBM is more stringent than their domestic decarbonization measures.

3.2 GATT Flexibilities

Given the difficulties of devising a CBM that complies with the WTO's primary rules, let alone a compliant cooperative CBM, a better approach is to adopt greater deference to the decisions of national regulators for climate-related measures. That deference can be achieved in any number

countries to the CBAM. Therefore, the CBAM should be designed in such way that it takes into account climate policies in the form of explicit carbon pricing policies in our trading partner countries. While we recognise that reduction of GHG emissions by countries all over the globe is pursued through regulations other than carbon pricing, due to the conceptual difficulties in determining the equivalence between carbon pricing and non-price regulatory measures, and the fact that, like the EU, most countries will have both pricing and non-pricing approaches to reducing carbon emissions, the CBAM only focuses on carbon pricing.' EC, Commission Staff Working Document, Impact Assessment Report, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (14 July 2021), https://ec.europa.eu/info/sites/default/files/carbon_border_adjustment_mechanism_0.pdf, accessed 15 July 2021, at 26.

[52]To wit, the CBAM's 'aim is purely environmental'. Ibid, 4. The reader has to go deep into the 291-page document before any mention of preservation of jobs is cited, and then, not as the aim of the policy.

[53]The EU currently faces a similar challenge at the WTO to its ostensibly neutral method of determining whether biofuels are produced with an undue risk of deforestation. Because only palm oil-based biodiesel was found to create such a risk, Indonesia and Malaysia have alleged that the regulation is designed to discriminate against palm oil-based biofuels from those countries. *European Union and Certain Member States – Certain measures concerning palm oil and oil palm crop-based biofuels – Request for consultations by Indonesia*, WT/DS593/1; *European Union and Certain Member States – Certain measures concerning palm oil and oil palm crop-based biofuels – Request for consultations by Malaysia*, WT/DS600/1.

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of ways, including through negotiations among WTO members on, for instance, a waiver for climate-related measures or on reinstituting green light subsidies under the SCM Agreement.

The most straightforward way, though, is to make use of the flexibilities that already exist: 1) forbearance in the decision to bring WTO challenges in the first place and 2) recognizing an expanded scope to justify climate-related measures under the GATT exceptions for any cases that are brought.

For instance, WTO members should exercise forbearance in challenging a US CBM that rests on Section 232. The existence of such a statute might well trouble the international community,[55] much as Section 301 of the Trade Act of 1974 has raised concerns about unilateralism among countries.[56] But this specific use of Section 232 – to fight climate change – should not occasion the same angst. Having the United States in the fight against climate change is more important to the world than the title and framing of the domestic statute on which the United States relies to enter that fight.

Objections to the use of Section 232 focus on how expanding the concept of national security may undermine the WTO.[57] This fear is misplaced in this context. The term 'national security' means different things in Section 232 and the national security exceptions in the GATT, GATS, and TRIPS Agreement. As we have explained, Section 232 includes a broad definition of economic security that is absent from the WTO's national security exceptions. Thus, the mere fact of using Section 232 does not necessarily implicate the scope of the WTO's national security exceptions. Indeed, a CBM – even one based on Section 232 – is more naturally justified under GATT article XX(g)'s environmental exception for measures 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption'.[58] Because any CBM is likely to violate GATT primary rules, the EU is also likely to turn to this exception to justify its measure. The Appellate Body long ago recognized the atmosphere as an exhaustible natural resource, so climate change measures would obviously fit within the scope of the exception.[59]

That brings us to the second set of WTO flexibilities, the exceptions themselves. In principle, these exceptions offer countries a way to justify some measure of discrimination in pursuit of saving the planet from climate change. In practice, however, these exceptions have often been construed in an unduly narrow fashion. As US Trade Representative Katherine Tai has said,

> While countries can avail themselves of what amounts to an affirmative defense, that defense has proven difficult to invoke successfully This is part of the reason why, today, the WTO is considered by many as an institution that not only has no solutions to offer on environmental concerns, but is part of the problem.[60]

[55]Indeed, one of us (Meyer) argued unsuccessfully in US federal court that Section 232 violates the US Constitution because of its breadth. In the last few years, though, all three branches of government have reaffirmed Section 232's constitutionality. Presidents Biden and Trump have both assessed duties on steel and aluminum imports under Section 232's authority; while Congress debated reforms to Section 232 during the Trump administration, none of these reforms even made it out of committee; and, while expressing reservations, the courts rejected constitutional challenges to the breadth of the delegation in Section 232.

[56]Section 301 is also a possible basis on which to impose a US CBM. But for proponents of WTO-consistency, it actually presents a worse fit. Section 232 requires an inquiry into whether *products* are a threat, while section 301 asks about *country* policies. The former is preferred under GATT/WTO law.

[57]J. Benton Heath, 'The New National Security Challenge to the Economic Order' (2020) 129 *Yale Law Journal* 1020.

[58]GATT article XX(b) contains another exception that would apply to a CBM, for measures 'necessary to protect human, animal or plant life or health'. However, because 'related to' in article XX(g) is a more lax relationship than 'necessary", any defense of a CBM would probably focus on article XX(g).

[59]Appellate Body Report, *United States – Standards for Reformulated Gasoline*, WT/DS2/AB/R.

[60]'Remarks from Ambassador Katherine Tai on Trade Policy, the Environment and Climate Change (15 April 2021), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/april/remarks-ambassador-katherine-tai-trade-policy-environment-and-climate-change, accessed 1 July 2021.

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A full analysis of how CBMs might be justified, principally under GATT article XX, is beyond the scope of this article.[61] Suffice it to say that the key issue is much the same as under the GATT's primary rules: can discrimination in climate-related measures be justified? GATT article XX(g) requires that any measures justified under the exception be 'in conjunction with' domestic measures on production or consumption. As a matter of text, this standard – 'in conjunction with' – does not necessarily require equivalence in terms of the treatment of imports and domestic products. But how close must the relationship be? In the United States, for instance, domestic climate measures are likely to be a mix of regulatory measures. Demonstrating an implied domestic carbon price on the basis of these regulations on which to base a CBM would be a difficult task.

Beyond these issues, two others lurk. The easier is demonstrating that a CBM is 'related to' the conservation of natural resources under GATT article XX(g) or, alternatively, 'necessary' to the protection of life under GATT article XX(b). The harder is justifying discrimination among countries under the chapeau of article XX. Such discrimination is easy to imagine. Exempting some developing countries from a CBM, an idea endorsed by the European Parliament (though not included in the European Commission's July 14 plan), will result in discrimination among countries that is unrelated to the climate objectives of the border measure. The EU's proposal is also coercive, and hence unjustifiably discriminatory under the chapeau of article XX. The EU's proposal is coercive because it conditions favorable market access on adopting the same kind of domestic decarbonization measures as the EU has adopted, rather than the effectiveness of a nation's domestic decarbonization measures. That favorable market access comes in the form of credit for an explicit carbon price paid in the home market, but no credit for potentially equally effective implicit prices paid to comply with regulations. As far back as the *Shrimp-Turtle* dispute, the Appellate Body has said that 'it is not acceptable … for one WTO member … to require other Members to adopt essentially the same comprehensive regulatory program, to achieve a certain policy goal, as that in force in that Member's territory, without taking into consideration different conditions which may occur in the territories of those other Members'.[62] A common CBM would solve this problem, but it would still discriminate against countries outside the climate club. Existing WTO case law suggests that such discrimination will defeat efforts justify otherwise pragmatic solutions to the climate crisis.

A common CBM across countries would increase the likelihood that these flexibilities would be successful, both as a political and legal matter. A common CBM would be less likely to face a challenge in the first place, both because members would not challenge each other and because outsiders would face a united front. If an outsider did challenge the measure, moreover, WTO panels have often been more deferential to domestic measures based on international standards.[63] Panelists might also consider new approaches to assessing the degree of discrimination justifiable under GATT article XX, such as by adopting a 'predominant motive' test, under which a measure that primarily pursues a legitimate objective is justified.[64] We argue that a reconstruing of countries' understanding of this exception along these lines is justified in light of the climate crisis. This could take the form, in the first instance, of a political declaration to that effect by the US, EU, and likeminded countries.

Alternatively, and this brings us to our third and final point, while a well-designed CBM should be upheld under GATT article XX, at least some countries would almost certainly invoke GATT article XXI, the national security exception, as an alternative basis for justifying their

[61]For a somewhat more extensive treatment, see Timothy Meyer and Todd N. Tucker, 'WTO Legal Issues Arising from Carbon Border Measures: An Introductory Primer' (Social Science Research Network 2021) SSRN Scholarly Paper ID 3882217, https://papers.ssrn.com/abstract=3882217, accessed 15 July 2021.

[62]Appellate Body Report, *United States – Import Prohibition on Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, para. 164.

[63]We recognize, of course, that much of that deference occurs in the context of international agreements that are open to member states generally, while a climate club would have limited membership by design.

[64]See Timothy Meyer, 'A Political Theory of Legal Exceptions', Vanderbilt Law Research Paper 21–18 (5 April 2021).

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measures.[65] Nor would they be mistaken to do so in the case of climate change. Although a CBM is most naturally justified under article XX, it also squarely fits within article XXI, as that article has been interpreted in recent disputes, without needing to stretch the term national security to include as expansive a definition as section 232 includes.

In particular, the threat posed by climate change is 'emergency in international relations'. WTO panels have interpreted that term to apply to situations of 'heightened tension or crisis' that are 'related to [a country's] defense or military interests, or maintenance of law and public order'.[66] Climate change creates security risks, such as climate migration and political instability around the world, as well as direct threats to military forces and capabilities. To give but one small example, the US military spent $67 million in 2020 repairing military facilities from climate change damage.[67]

The fact that climate change is both an environmental and a national security threat does not mean a dispute panel would have to analyze it as both. If a WTO panel upholds a CBM under the GATT's environmental exception, it would not necessarily have to reach the national security exception. The environmental exception is designed for exactly this kind of circumstance. But the fact that the GATT's national security exception has sometimes been invoked in ways difficult to square with the meaning of that text does not reduce the security implications of climate change. Climate change thus could put a WTO panel in the position of having to shift the approach to the chapeau of article XX – according national regulators greater deference than the AB historically recognized under the chapeau – or else analyze a CBM under article XXI, which lacks an analog to article XX's chapeau.

4. Conclusion

Human flourishing in the face of the climate crisis will require thinking outside of traditional boxes. The Paris Agreement recognized this by allowing a diversity of approaches to decarbonization, rather than attempting to constrain the kinds of measures countries might adopt. The trading system now needs to follow suit. As countries devise trade policies to support their decarbonization efforts, successful cooperation will hinge on WTO members granting each other the discretion to use the tools that are reasonably available to each member.

[65]The United States, Japan, Saudi Arabia, and Russia have all invoked the exception in recent disputes.

[66]Panel Report, *Saudi Arabia – Measures Concerning the Protection of Intellectual Property Rights*, WT/DS567/R, para. 7.257. See also Pramila Crivelli and Mona Pinchis-Paulsen, 'Separating the Political from the Economic: The *Russia – Traffic in Transit* Panel Report' (forthcoming 2021), *World Trade Review*.

[67]M. Myers, 'DoD Spends Millions on Protecting Bases from Climate Change but Fails to Track Program Impact, Report Says', *Defense News* (22 December 2020).

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