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Creating a Club of Carbon Markets: Implications of the Trade System

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ABSTRACT

In the wake of the Copenhagen Accord in 2009 and amid frustration with the slow pace of the United Nations Framework Convention on Climate Change (UNFCCC) talks, a number of bilateral and plurilateral efforts and technology initiatives has been launched to deal with international climate policy. Bilateral efforts such as the November 2014 joint announcement between the United States (US) and China have provided welcome momentum. These minilateral efforts, together with the broader multilateral ones, constitute the emerging "regime complex" for climate change. In such a world, ambition in climate action must come from national governments as well as from international agreements. For promoting such ambition, key tools include market-based mechanisms that cap emissions of carbon dioxide and other global warming pollutants, and allow nations and firms that reduce emissions below capped levels to save, sell, and trade surplus units of allowable emissions. Such systems are in effect today in more than 50 countries, states, cities, and provinces where almost a billion people live.

To promote the spread of such policies, ensure their integrity, and drive the deep reductions needed to limit the worst impacts of climate change, this paper proposes the formation of a club of carbon markets (CCM)—a group of jurisdictions that develop harmonized standards for carbon market operations and mutually recognize each other's emission units. A likely feature of such a club would be that members would grant each other exclusive access to their own carbon markets. Excluding emission units from non-members would be crucial to ensuring the environmental integrity of the club's efforts. It would also serve as a powerful incentive for even non-member jurisdictions that only wish to sell offset credits to satisfy the club's requirements for integrity to become members, since satisfying those requirements would be necessary to gain access to members' carbon markets. And such a club could encourage greater breadth and ambition of climate mitigation actions, thereby alleviating real or perceived competitiveness pressures, and consequently damping calls for trade protective measures such as border carbon adjustments. But, in other contexts, the concept of exclusive trading privileges has raised concern about potential conflict with rules of the world trade system. This paper addresses the potential for that conflict to arise in a CCM, arguing that emission units are not "goods" or "services" and World Trade Organization (WTO) disciplines do not necessarily apply in this case.

The interplay of trade rules and the concept of a CCM are crucial because high-integrity carbon markets will be central to the success of emission reduction efforts over the coming decades. If the multilateral climate negotiations are unable to reach an agreement on robust rules for these markets, and if the rule-based framework of the multilateral trade system presents fundamental obstacles to these clubs, the legitimacy of those trade tenets may be questioned. On the other hand, if trade rules and carbon market clubs can coexist, and if the core multilateral rules of trade could provide helpful principles to make carbon market clubs more effective in reducing emissions, then a CCM should consider drawing on those rules by analogy when assembling itself. Finally, the paper compares the potential CCM-UNFCCC relationship with the evolving relationships between regional/plurilateral trade arrangements and the broader WTO. The discussion is meant to initiate an inquiry rather than present an exhaustive analysis, and areas for further research are suggested.

CONTENTS

LIST OF ABBREVIATIONS

CCM	club of carbon markets
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
COP	Conference of the Parties
EEA	European Economic Area
EFTA	European Free Trade Association
ETS	Emissions Trading System
EU	European Union
FTA	free trade area
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	greenhouse gas
HS	Harmonized System
MFN	most-favored-nation
MRV	monitoring, reporting, and verification
ODSs	ozone-depleting substances
SIDS	Small Island Developing States
TBT	Technical Barriers to Trade
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
WTO	World Trade Organization

INTRODUCTION

The last six years have seen a major shift in the landscape of international climate policy. In 2009, expectations were running high for a "global deal" that could be reached at the 15th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Copenhagen. Half a dozen years later, as countries look to COP-21 in Paris, it is clear that the Copenhagen Accord made important progress, notably by breaking down the "Kyoto firewall" that had sharply divided advanced countries (which had emission reductions under the Kyoto Protocol) from developing countries (which did not). But the Accord also dashed hopes that the UNFCCC talks could produce a legally binding treaty to succeed the Kyoto Protocol.

In the wake of the Copenhagen Accord, and amid frustration with the slow pace of the UNFCCC talks, a flotilla of bilateral and plurilateral efforts has set sail—the Major Economies Forum; the Climate and Clean Air Coalition; Small Island Developing States (SIDS) DOCK; the Global Alliance on Climate Smart Agriculture; and any number of technology initiatives. Bilateral efforts such as the November 2014 joint announcement between the United States (US) and China have provided welcome momentum. These minilateral efforts, together with the broader multilateral ones, constitute the emerging "regime complex" for climate change (Keohane and Victor 2011).

In such a world, ambition in climate action must come from national governments as well as from international agreements. For promoting such ambition, key tools include market-based mechanisms that cap emissions of carbon dioxide and other global warming pollutants, and allow nations and firms that reduce emissions below capped levels to save, sell, and trade surplus units of allowable emissions. Such systems are in effect today in more than 50 countries, states, cities, and provinces where almost a billion people live.[1]

To promote the spread of such policies, ensure their integrity, and drive the deep reductions needed to limit the worst impacts of climate change, we propose the formation of a club of carbon markets (CCM)—a group of jurisdictions that develop harmonized standards for carbon market operations and mutually recognize each other's emission units (Keohane et al. forthcoming). (Throughout this paper, we use the term "emission unit" to mean an allowance, permit, offset credit, or other instrument that may be tendered by a covered entity for compliance with its obligations under an emission trading system. Note that we use the term "carbon markets" as shorthand to refer to any emission trading system for greenhouse gases.) A likely feature of such a club would be that members would grant each other exclusive access to their own carbon markets. Excluding emission units from non-members would be crucial to ensuring the environmental integrity of the club's efforts. It would also serve as a powerful incentive for even non-member jurisdictions that only wish to sell offset credits to satisfy the club's requirements for integrity to become members, since satisfying those requirements would be necessary to gain access to members' carbon markets. And such a club could encourage greater breadth and ambition of climate mitigation actions, thereby alleviating real or perceived competitiveness pressures, and consequently damping calls for trade protective measures such as border carbon adjustments. But, in other contexts, the concept of exclusive trading privileges has raised concern about potential conflict with rules of the world trade system. The potential for that conflict to arise in a CCM is the reason for this paper and its focus.

The interplay of trade rules and the concept of a CCM are crucial because high-integrity carbon markets will be central to the success of emission reduction efforts over the coming decades. If the multilateral climate negotiations are unable to reach an agreement on robust rules for these markets; if carbon market clubs represent one of the few possible paths forward; and if the rule-based framework of the multilateral trade system presents fundamental obstacles to these clubs, the legitimacy of those trade tenets may be questioned. On the other hand, if trade rules and carbon market clubs can coexist, and if the core multilateral rules of trade could provide helpful principles to make carbon market clubs more effective in reducing emissions, then a CCM should consider drawing on those rules by analogy when assembling itself.

The rest of the paper proceeds as follows. First, we summarize the CCM proposal. We then examine whether exclusive access to emission units within the CCM would violate World Trade Organization (WTO) rules. We argue that WTO rules should not apply since emission units are not "goods" or "services" and thus not subject to WTO disciplines; in the event they are deemed to be so, however, we identify possible safe harbors for a CCM under WTO rules. Next, we briefly consider possible ways in which a CCM could affect trade in goods and services, and the potential trade ramifications. We also open a conversation about how a CCM, when it assembles itself, might by analogy draw on the principles that undergird the multilateral trade system. Finally, we compare the potential CCM-UNFCCC relationship with the evolving relationships between regional/plurilateral trade arrangements and the broader WTO. Our discussion is meant to initiate an inquiry rather than present an exhaustive analysis. Therefore, various paragraphs and notes suggest areas for further research.

1 That number includes the inhabitants of the European Union (EU) and the three countries of the European Economic Area/European Free Trade Association (EEA/EFTA) that also participate in the EU Emissions Trading System (ETS) (Norway, Lichtenstein, and Iceland); Switzerland; New Zealand; Kazakhstan; Republic of Korea; Quebec; California; the US states in the Regional Greenhouse Gas Initiative; Tokyo; and the seven Chinese cities and provinces with pilot emission trading systems in place.

A CLUB OF CARBON MARKETS

To support the development, harmonization, and increased ambition of their domestic market-based programs, jurisdictions that have adopted, or are considering adopting, domestic carbon markets to cut greenhouse gas (GHG) emissions might create a CCM. The club would establish common standards—or agree to mutually recognize each other's standards—for carbon market infrastructure, accounting, transparency, and environmental integrity. It would guarantee mutual recognition of emission units generated in other participating jurisdictions in conformity with those jurisdictions' laws. It would establish rules to ensure that all units, whether offset credits or allowances, transferred from one jurisdiction to another jurisdiction (and thus added to the latter's quantity of allowable emissions) are at the same time subtracted from the appropriate quantity of allowable emissions in the jurisdiction of origin (or if transferred in secondary markets, from each transferor's emission units account).[2] Club membership would enhance the ability of participating jurisdictions to share experience and gain assistance in building institutional capacity and promote domestic and cross-border investment in low-carbon technologies.

The benefits and challenges of linking carbon markets have been discussed quite usefully in a range of forums (for example, Jegou and Hawkins 2014; Tuerk et al. 2009: 341; Bodansky et al. 2014). Our proposal is premised on the idea that a CCM could serve as a powerful attractive nucleus for broadening the participation of jurisdictions in climate mitigation, much as the General Agreement on Tariffs and Trade (GATT) served as the nucleus for what eventually became a multilateral system of rules governing trade in products and services. We have also suggested that while agreement on a CCM could be reached under the multilateral auspices of the UNFCCC, those auspices are not necessary—a more promising avenue might be to pursue the creation of the CCM in parallel to but outside of the UN climate talks.

A core element of the CCM would be a commitment by members not to accept emission units from, or allow the transfer of units to, any jurisdiction outside of the CCM (unless all CCM members agreed to accept units from that jurisdiction on the basis that the jurisdiction's domestic carbon market program was substantially equivalent to those of CCM members). Such an approach would create strong incentives for jurisdictions with domestic market-based programs to conform to CCM criteria to attract greater interest in linkage and investment from other jurisdictions. Such exclusivity would also be important in ensuring that emission units originating in jurisdictions with weak accounting or transparency, or otherwise having poor environmental integrity, do not debase the sovereign emission units "currency" of club members and thereby undermine their climate mitigation goals. Exclusivity would be essential to the functioning of the CCM; otherwise, influxes of emission units of dubious quality could defeat its object and purpose.[3]

The Montreal Protocol on the Ozone Layer provides a partial model, insofar as the Protocol's Parties have banned trade in ozone-depleting substances (ODSs) with non-Parties unless the non-Parties have adopted comparable measures. We have noted how that provision, often credited with boosting the effectiveness of the Protocol, created market-pull for more ratifications, better transparency, and incentives for innovation in the development of low-ODS alternatives—exactly the dynamic that the CCM would seek to replicate in carbon markets.

It is true, however, that the provision of the Montreal Protocol banning trade with non-Parties is one that, over the years, has sparked some nervousness among trade specialists.[4] There is tension between that provision and long-standing GATT rules, including those that prohibit quantitative restrictions on trade in products and those that bar discrimination between and among trading partners that are Members of the WTO (GATT Articles XI and III).

Of course, the WTO as a club does allow its Members to discriminate against and place quantitative restrictions on imports from nations that are not its members. The exclusivity of WTO benefits has been one of the prime engines for encouraging nations to join that organization. Would it be possible to organize a club of carbon market jurisdictions that uses exclusive market access to encourage nations to join—just as the Montreal Protocol and the WTO use exclusive access to help achieve their goals? We turn to that question now.

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2 Such double-entry bookkeeping is essential to protect environmental integrity by preventing "double-claiming" of emission reductions (otherwise, the jurisdiction of origin could claim that it had made its promised reductions, and the jurisdiction receiving the units could claim that it had kept emissions within its promised levels, even though the same reductions were used by both).

3 The CCM might wish to consider a phasing in of jurisdictions outside the club so as to foster the development of new carbon markets. One analogy could be the association agreements between the EU and candidate countries, where applicants are granted some advantages, including increased market access to the EU, in exchange for gradually aligning their domestic policies and practices to those of the EU. The CCM could decide to provisionally approve emissions units from non-members' programs that substantially meet the environmental integrity requirements for membership, even though the non-members have not yet formally satisfied membership requirements. Such variations of "trade-with-non-party" provisions are found in a number of multilateral environmental agreements where substantial compliance by non-parties is sufficient to allow parties to trade with them even though the agreement formally prohibits trade with non-parties. See Petsonk (1990); Shepherd (2014).

4 See Knox (2004: 11) and sources cited there.

EXCLUSIVE ACCESS TO CLUB MEMBERS' CARBON MARKETS UNDER WTO RULES

DO WTO DISCIPLINES APPLY?

A threshold question in considering whether exclusive access to carbon markets would be permissible under WTO rules is whether those rules apply in the first place. As an initial matter, we suggest that a CCM entails no "product" or "service" as understood under the GATT, the General Agreement on Trade in Services (GATS), or broader trade jurisprudence.

The first basis of our suggestion is an empirical one, drawn from WTO agreements themselves. We have found no WTO agreement that defines tradable emission units as products. Nor have we found any GATS declaration that treats emission units themselves as services. Moreover, while the World Customs Organization's Harmonized System of Nomenclature (HS), which denominates all traded products in the world, has been amended recently to include a number of environment-related products, it has no line entry for emission units.[5]

That the HS has no line entry is not surprising—but also not conclusive. The second basis of our suggestion is one drawn from theory—that trade in emission units is, essentially, trade in an obligation, license, or permission, typically established by governments.[6] Each unit represents a permission to emit one tonne of GHG. That the units are capable of being privately owned and that they are fungible does not automatically transform them into goods or products subject to GATT disciplines, any more than the fungibility of government debentures transforms those into GATT-covered products. In this regard, emission units may be more akin to government-issued currencies, which represent a transactable pledge backed by the full faith and credit of the issuing government. So, for example, an (unadopted) 1985 GATT Panel Report on "Canada – Measures Affecting the Sale of Gold Coins" found that when Canadian Maple Leaf and South African Krugerrand gold coins were traded as investment goods, they were "like products" and measures affecting their sale would be subject to GATT disciplines; but if the coins were utilized as "legal tender," they were a "means of payment" rather than "products."[7]

Indeed, if emission units were products under the GATT, any transferable government-issued permit—to use wireless spectrum, operate a fishing vessel,[8] or any other myriad government-permitted activity—could be subject to WTO disciplines. And, while the services associated with establishing carbon markets, trading emissions units, verifying emissions and reductions, and so on may indeed be services within the ambit of the GATS,[9] that trade in these services could be subject to GATS disciplines does not, of itself, bring the underlying emissions transactions within the scope of the GATS.[10] Presumably for these reasons, we have not been able to find any instance of a GATT or WTO panel finding that Article XI applies to trade in intangibles like emission units.[11]

5 See the website at http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2017-edition.aspx.

6 For an in-depth examination of this line of reasoning, see Deane (2015) at pp. 58–69 (whether emissions units can be characterized as goods) and p. 98 (whether emissions units can be characterized as services). We have been asked to consider whether a CCM could include non-governmental entities, such as private firms and universities, which establish internal carbon markets. While such an approach could temper the GATT considerations even further, at this juncture we can only identify detailed analysis of this question as a topic for further research.

7 See 1985's "Canada – Measures Affecting the Sale of Gold Coins," Panel Report, L/5863, para.51. See also Petsonk (2000: 185), Knox (2004) and sources cited there.

8 For wireless spectrum, see CBC News (2013). According to the Pacific Islands Forum Fisheries Agency (FFA), "The Vessel Day Scheme (VDS) is a scheme where vessel owners can purchase and trade days fishing at sea in places subject to the Parties to the Nauru Agreement (PNA). … The purpose of the VDS is to constrain and reduce catches of target tuna species, and increase the rate of return from fishing activities through access fees paid by Distant Water Fishing Nations (DWFNs). The total allocation of fishing days is set and apportioned between Pacific Island members for one-year periods up to three years in advance" (https://www.ffa.int/taxonomy/term/6).

9 It has been suggested that a CCM decision to accept only members' emissions units might disproportionately affect some carbon market service providers and thereby breach GATS most-favored nation (MFN). We respectfully disagree. If a CCM member nation committed under GATS to liberalize trade in carbon market services, but later decided to discriminate against certain carbon market service providers on the grounds that those providers were not citizens of CCM member states, that might raise a GATS MFN issue. But if a CCM member that subscribes to GATS refuses to accept emissions units from non-CCM members, no GATS issue would arise, so long as the CCM member allowed CCM-citizen and non-citizen carbon market service providers to operate in its jurisdiction, as long as those providers otherwise met the requirements of carbon market service provision in the jurisdiction.

10 The prospect that the services associated with carbon markets would be covered under GATS (even if the emission units themselves were not) raises an interesting question for further research: In order to assure the environmental integrity of carbon market service provision, could CCM members limit the licensing of providers of these services to providers domiciled in, or otherwise subject to, the laws of, each other's jurisdictions?

11 See generally "General Elimination of Quantitative Restrictions" and the cases discussed there; https://www.wto.org/english/res_e/booksp_e/gatt_ai_e/art11_e.pdf.

But what if emission units are deemed to be products or services under the GATT/GATS, or otherwise engage GATT obligations? That is to say, it may be that GATT obligations are triggered even in the absence of a measure explicitly targeting GATT-covered goods, insofar as the measure impinges on trade in those goods. For example, one commentator has suggested that the application of the EU ETS to aviation is inconsistent with the GATT obligation to refrain from quantitative restrictions on trade in goods because the effect of the ETS is to raise the price of goods transported by air. Even though the EU ETS as applied to aviation does not cover any particular good, it covers flights transporting goods as cargo, and therefore raises the price of those goods in comparison with domestically produced goods not transported by air (Bartels 2012).[12] This reasoning, if correct, could apply to a very wide array of regulatory measures, including but not limited to carbon markets. If correct, it could also apply to clubs of carbon markets insofar as market-based measures effectively raise the price of goods produced with carbon emissions. While we respectfully differ with this reasoning,[13] the possibility that it is could be accepted by the WTO invites further consideration of the CCM and GATT rules. To which we now turn.

THE CCM PROPOSAL, PRINCIPLE OF MOST-FAVORED NATION TREATMENT, AND OBLIGATION TO REFRAIN FROM IMPOSING QUANTITATIVE RESTRICTIONS ON TRADE

Among the foundational rules of the WTO and its predecessor, the GATT, is the concept of non-discrimination. A core component of that concept is the commitment by each WTO Member not to discriminate between or among Member trading partners. This commitment is called most-favored-nation (MFN) treatment.[14] As the WTO itself notes, this principle "is so important that it is the first article of the General Agreement on Tariffs and Trade (GATT), which governs trade in goods" (WTO 2005: 11). The instant question is whether a CCM that prohibits its regulated entities from tendering emissions units produced in other jurisdictions to comply with club members' emissions limits would breach the MFN treatment obligation.

The WTO notes that there are exceptions to the MFN obligation.

> For example, countries can set up a free trade agreement that applies only to goods traded within the group—discriminating against goods from outside. … Or a country can raise barriers against products that are considered to be traded unfairly from specific countries. And in services, countries are allowed, in limited circumstances, to discriminate. But the agreements only permit these exceptions under strict conditions. In general, MFN means that every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners—whether rich or poor, weak or strong. (WTO 2005)

Consequently, if trade in emissions units is considered a good or service such that it is subject to the obligation to provide MFN treatment, exclusivity might be in tension with the MFN obligation.

Another important element of core GATT obligations is the prohibition on quantitative restrictions on trade in products (Article XI) and services (GATS Article XVI). If, however, the reasoning outlined above is correct—that any measure that in effect increases the cost of imported goods is tantamount to a quantitative restriction on trade in those goods—then an exclusive CCM might in effect increase the cost of some imported goods if their producers work to reduce emissions but cannot sell any resulting surplus carbon emissions units to CCM members because their host country is not a CCM member. In this reasoning (or more generally, if trade in emissions units is considered a good or service such that this trade is subject to the obligation to refrain from quantitative restrictions), exclusivity might be in tension with GATT Article XI obligations.

Whether the tension arises from MFN or quantitative restrictions, there are three grounds on which a CCM could justify exclusivity. First, CCM members could argue that emission units from jurisdictions that fail to meet standards of integrity are not "like products" when compared with emission units from CCM members. Second, CCM members could form a regional trade agreement for emission units. Third, CCM members could argue that exclusivity is justified under Article XX of the GATT. We turn to each of these in turn.

12 Bartels's analysis goes on to find that although inconsistent, the application of the EU ETS to aviation was nonetheless justifiable under Article XX of the GATT. It is also worth noting that he did not consider the inclusion of aviation in the EU ETS to be a "tax." While some commentators have done so, the European Court of Justice correctly found that it could not be considered a tax, in part because airlines that reduce emissions below cap levels could potentially profit from the sale of surplus allowances. See *Air Transport Association v. Secretary of State for Energy and Climate Change*, Court of Justice of the European Union (Grand Chamber), C-366/10 (2011), paras 141–144.

13 In our view, to conclude that a measure is GATT-inconsistent simply because it raises the price of traded goods risks sweeping into GATT-inconsistency a whole range of such measures—air, road, and rail transport security measures, or communications-related measures, to name a few—that are not product standards (and therefore not governed by the Technical Barriers to Trade [TBT] Agreement), but are simply related to the transport of goods or the communications about such goods, per se (see TBT Article 5.2.5).

14 GATT 1994, Article 1. The second component of non-discrimination, the principle of national treatment, requires each WTO Member to refrain from discriminating between products produced by its domestic producers, on the one hand, and products produced in other Members' jurisdictions, on the other. Because our focus in this paper is on the exclusivity of a CCM vis-à-vis nations that are not members of the CCM (but are members of the WTO), we limit the current inquiry to the MFN principle.

EMISSIONS UNITS AND THE CONCEPT OF 'LIKE PRODUCT'

Central to the principle of non-discrimination is the concept of "like product." Like products are typically defined with respect to the observed physical characteristics of a good, or its competitive relationship to other goods.

In the case of emission units, the competitive relationship to other goods is, by construction, up to the regulator. By this argument, only emission units that are fungible can be considered to be like products. If the regulator in a jurisdiction refuses to accept a particular category of emission units for compliance, that category of unit cannot be a like product. For example, the EU has decided, in Phase III of its ETS, to cease accepting, for compliance purposes, certain categories of Certified Emission Reductions (CERs) generated under the Clean Development Mechanism (CDM), including those produced by reducing the emission of HFC-23—in part out of the concern that such CERs lack environmental integrity.[15]

The logic behind this type of distinction between and among emission units from different jurisdictions and programs is that environmental integrity (or lack thereof) is an integral characteristic of an emission unit. A trade in an emission unit between two parties represents a transfer of authority to emit a tonne of carbon or other GHG. If a party selling an offset credit or emission allowance to emit one tonne has not in fact contributed to one tonne of emissions reductions (either directly, by reducing its own emissions, or indirectly, by participating in a system that reduces overall emissions below their levels in the absence of the cap), the transaction results in a net increase of GHG in the atmosphere. In turn, the responsibility to enforce robust monitoring, reporting, and verification (MRV) of emissions (to ensure the integrity of the resulting allowances) rests on the government regulator.

It follows that whether emission units from two different jurisdictions are like products depends entirely on whether the two jurisdictions have similar standards for accounting, MRV, the quality of offset credits, and so on. This argument provides a second justification for why a CCM member could refuse to recognize an emission unit from a non-member on the grounds that it is not a like product.

A CCM AS A REGIONAL TRADE AGREEMENT

The foregoing suggests that CCM exclusivity could be premised on the ground that emission units are not generically like products from an environmental integrity perspective. An alternative justification could obtain if a CCM were to style itself as a regional trade agreement or free trade area (FTA) among its members for purposes of emission units trade within the group. This approach would fit well with the shift in trade negotiations from multilateral to regional approaches, and might provide the CCM with a degree of safe harbor vis-à-vis MFN and quantitative restriction concerns.[16]

For a CCM to qualify as an FTA, it would need to satisfy the requirement under GATT Article XXIV:5(b) that "the duties and other regulations of commerce maintained in each of the constituent territories and applicable at the formation of such free-trade area … shall not be higher or more restrictive than the corresponding duties and other regulations of commerce existing in the same constituent territories prior to the formation of the free-trade area."[17]

A CCM would meet this condition provided it expanded trade in emission units among its member jurisdictions without imposing any new restrictions on trade in emission units between members and non-members. In effect, the absence of carbon market linkages among CCM members before the formation of the club would be tantamount to very high restrictions on trade in emission units. The club would eliminate those restrictions among members without imposing "higher or more restrictive" regulations than those that existed before it.[18]

THE CCM, EXCLUSIVITY, AND ARTICLE XX

Third, CCM members could defend exclusivity by invoking exceptions under GATT Articles XX(b) (necessary to protect human, animal or plant life or health), or XX(g) (conservation of exhaustible natural resources). To defend the exclusivity of the CCM by invoking GATT Article XX, CCM members

15 Specifically, the EU indicated that crediting the future abatement of these gases risked perversely encouraging greater investment in their production than would have occurred in the absence of such crediting. See "International Carbon Market," http://ec.europa.eu/clima/policies/ets/linking/faq_en.htm.

16 These GATT/GATS provisions might require the CCM to cover substantially all trade in the product or service that is the subject of the FTA. While "substantially all" is undefined, to the extent that past practice indicates it might be around 90 percent, it is quite possible that a CCM that includes each of the major carbon market nations and regions might indeed cover "substantially all" trade in emission units.

17 See generally "The Basic Rules for Goods," https://www.wto.org/english/tratop_e/region_e/regatt_e.htm.

18 One commenter has suggested that a CCM might not qualify as an FTA because the impact of the CCM on trade would be to raise costs for goods from non-participants and this alone should disqualify it. This might indeed be the case if participants and non-participants all faced comparable carbon constraints, and participants enjoyed lower costs of compliance with those constraints because participation generated more internal competition to drive down compliance costs. On the other hand, if CCM participation did reduce compliance costs and thereby encouraged more ambition emission reduction commitments, no such cost differential might occur.

would first need to show that the exclusivity is "necessary" to protect the environment; or that CCM members have adopted exclusivity to protect exhaustible natural resources and that they are imposing the same limitations domestically. Members would then need to show that under the chapeau of Article XX their decision to make their carbon markets club exclusive did not constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.[19]

But what would it really mean to demonstrate that a carbon market club's exclusivity is "necessary" to protect human, animal or plant life or health? We know from various Appellate Body and Panel reports that applying the necessity test to any particular GATT-inconsistent measure entails weighing and balancing such factors as the measure's contribution to the achievement of its objective; the importance of the interests at stake; how trade restrictive the measure is; and whether there are less trade-restrictive alternatives that could enable the achievement of the objective. It would not be sufficient for CCM members to point to the important contributions carbon markets can make to the objective of reducing GHG emissions at least cost. Rather, CCM members would need to demonstrate the climate-protecting contribution of the measure at issue—exclusivity. To do so, they could point to the possibility that allowing their emitters to offset emissions increases using emission units that do not meet their rigorous standards might actually make the climate problem worse. If they do not apply exclusivity, less than a tonne of reductions could be used to offset a tonne of emissions increase. Members could argue that while exclusivity is indeed fully trade restrictive with regard to sub-standard emission units, any jurisdiction willing to meet the club's integrity standards could gain acceptance of its units—and therefore the CCM approach is actually the least trade restrictive of any of a number of options available.[20]

Turning to the chapeau of Article XX, how might CCM members demonstrate that their club's exclusivity does not constitute "arbitrary" or "unjustifiable" discrimination or a disguised restriction on trade? Again, they could point to the scientific basis for their restrictions on imports of emission units from jurisdictions that do not meet CCM standards for environmental integrity and transparency. They could underscore the atmospheric importance of their rules for discriminating against emission reductions that are double-claimed. They could emphasize their openness to emission units from nations that while not formally CCM members, in effect meet the CCM criteria. And, sensitive to a concern of the Appellate Body in the Shrimp-Turtle case, they could point to the flexibility in the CCM for members to design their own carbon market programs, covering sectors of their own choosing in accordance with their national circumstances, while observing the common CCM rules needed for high-integrity carbon market linkages.

To strengthen their defense against charges that their exclusivity constitutes arbitrary and unjustifiable discrimination, they could point to their many years of engaging in serious across-the-board negotiations with all nations with the objective of concluding a multilateral agreement on carbon markets. In the Shrimp-Turtle case, the WTO Appellate Body found that it was the failure of the US to engage in serious negotiations across the board—with all WTO Members exporting shrimp to the US—with the objective of concluding international agreements for the protection and conservation of sea turtles that rendered the US import ban "arbitrary." The Appellate Body found that before enforcing the import ban, the US negotiated with some of its trading partners, but failed to with others. That no agreement was reached is not determinative—only whether the Parties instituting the GATT-inconsistent measures undertook serious efforts.

Of course, to ensure that they do not run afoul of the "disguised restriction on trade" language of the chapeau, CCM members would need to take care to establish carbon unit import restrictions strictly on the basis of environmental integrity, rather than with reference to particular emission reduction technologies or other methods used to "produce" surplus emission units.

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19 Bartels notes the WTO Appellate Body found that this order reflects the fundamental structure and logic of Article XX of the GATT 1994 (US – Shrimp, or the Shrimp-Turtle Case, Appellate Body Report, para. 119). The Appellate Body in the Shrimp-Turtle case concluded that a Panel should always start the analysis with the particular Article XX sub-paragraph exceptions, and only after the measure at issue has been determined to fall within the scope of any particular sub-paragraph exception should the Panel consider whether the Chapeau of Article XX has been satisfied (EC – Asbestos, Panel Report, para. 6.20; Shrimp-Turtle Appellate Body Report). See Bartels (2012).

20 An alternative approach would be to apply a discount to emissions units imported from non-members. While discounting might address some concerns for environmental integrity, it would not provide an environmentally satisfactory outcome in the case of badly flawed emissions units. In principle, assuming high overall integrity of offset credits (credible baseline, clear additionality, transparent measurement, no leakage, and so on), appropriate discounting can achieve a net decrease of emissions from offsets (Lazarus et al. 2013). However, that rationale for discounting does not hold if the offset credits do not represent actual emissions reductions below business as usual in the uncapped sector. In that case, accepting such units (even if discounted) could result in emissions going up, not down—undermining the integrity of the CCM. Less of a bad thing does not necessarily make it a good thing.

21 Shrimp-Turtle Appellate Body Report, paras. 134, pp. 166–72.

TRADE RULES, BY ANALOGY: HOW A CCM MIGHT DRAW ON TRADE PRINCIPLES

A goal of the E15 is to ensure that the trade system is conducive to climate action. In the context of this paper, one way of exploring that question is to consider how principles that undergird the multilateral trade system might usefully inform the development of parallel rules on which to found a CCM, including rules governing carbon trade relations between and among members. We provide a few examples and invite readers to develop others.

NON-DISCRIMINATION

- Arguably, the efficient operation of carbon markets linked between and among CCM members would be enhanced if members reduce barriers to carbon trade with one another. To that extent, the trade principles of MFN treatment and national treatment might be useful bulwarks against discrimination between and among emission units originating in various member jurisdictions of the CCM.

- On the other hand, what if some members object to emission units sourced from particular activities (for example, replacing fossil fuel-powered electricity with nuclear power)? Under a principle of non-discrimination, should the members that object to emissions reductions obtained by switching to nuclear power be prohibited from closing their markets to such reductions earned in other members' jurisdictions? Would their objection need to be grounded in the kind of scientific justification required under the WTO Sanitary and Phytosanitary Standards agreement?

- Would a CCM need an Article XX-type provision pertaining to arbitrary or unjustifiable discrimination? Would the fact that one jurisdiction authorized nuclear power generation while another prohibited all nuclear power generation be relevant to an Article XX-type determination about whether the "same conditions prevail"?

QUANTITATIVE RESTRICTION, LOCAL CONTENT, AND GOVERNMENT PROCUREMENT CONSIDERATIONS

- For various reasons, individual CCM members may wish to impose quantitative restrictions on the amount of non-domestic emission units that their regulated entities could tender for compliance purposes.

- For example, members wishing to encourage inward domestic investment in low-carbon development, or inward investment in renewable energy technology innovation, may wish to restrict the amount of "foreign" emission units their regulated entities could tender.

- Smaller nations that have felt crowded out of the Kyoto Protocol's CDM because of their inability to offer economies of scale for emission reduction projects may wish to institute local content-type requirements by mandating that companies undertaking emission-regulated activities such as mining and power generation within their borders must source emissions offsets locally.

- Would such "buy local" requirements be more palatable if applied to governmental and quasi-governmental actors via a CCM government procurement code?

SAFEGUARDS

- An interesting area for further research is the possibility that a CCM may need a safeguard mechanism like that in Article XIX of the GATT 1994 to permit a member to restrict trade in emission units temporarily to relieve pressure on its market.

While it is beyond the scope of this paper to undertake a comprehensive exploration of the extent to which these and other principles of the multilateral trading system might be relevant by analogy to the internal operation of a CCM, we raise these questions to invite further consideration of how the trade system might, by offering analogies premised on the logic of its rule-based framework, support and strengthen climate action.

CONCLUSION

In the context of the emerging decentralized regime complex of climate change, a CCM could be a powerful driver for greater ambition in national climate action. Such a minilateral approach could draw usefully on experiences in the evolution of international trade, from the formation of the GATT (which itself originated as an informal "club" of 23 countries in the absence of multilateral agreement) to the more recent emergence of regional and plurilateral trade agreements. It is thus ironic that one potential obstacle to the formation of a CCM is lack of clarity on how it would interact with the trade regime (Deane 2015). Uncertainty about whether WTO rules might apply to trade in carbon emission units, a core feature of carbon market clubs, could cast a shadow over the club approach. Climate policymakers are not typically trade experts and might well be reluctant to take what they perceive as a risk of violating the trade system.

This paper seeks to dispel such uncertainty. We see no evidence of a conflict between WTO rules and a decision by members of a CCM to exclude emission units from non-members. As a threshold question, emission units do not appear to be goods or services, so WTO disciplines should not apply. And if they did apply, CCM members have several grounds on which to justify exclusivity and to style their club as a plurilateral trade agreement fully consonant with both WTO rules and emerging trends in global trade. We conclude that trade concerns should not be an obstacle for the formation of a CCM.

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