Climate equivalence and international trade

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Abstract

This article examines a significant question in navigating trade and climate tension: how to recognise another country as having equivalent climate regulation. Such equivalence forms the foundation of many proposed models of so-called climate clubs. Establishing equivalence between distinct national climate regulation regimes poses a unique challenge that draws upon both trade and environmental international cooperation. Drawing on existing proposals, I examine prospects for country-based cooperation through three models: ETS-linking, benchmarking of shared methods and minimum standards, and benchmarking of outcome duties. The analysis concludes that all models necessitate some trade-offs between the goals of rigorous oversight of climate objectives, inclusivity, and WTO-compliance. Benchmarking of shared methods and minimum standards seems most feasible, and would provide a deeper level of integration between trade and climate cooperation, but necessitates a shift in how countries, particularly the EU, oversee regulatory compliance.

Keywords

Climate Equivalence, Climate Clubs, Border Carbon Adjustment
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1. Introduction

The term ‘climate club’ encompasses various potential forms of international climate cooperation. This article examines prospective clubs in which participating countries facilitate trade with each other and restrict trade with others. Described by Mehling et al. as ‘transformational’, the model is most famously associated with Nordhaus, who proposed in 2015 that members of climate clubs should price carbon at the same level and impose tariffs against countries who do not. Such tariffs, he argued, would aid domestic industries in countries that price carbon, who would otherwise compete with industries in countries which are not imposing commensurate abatement costs (the ‘free rider’ problem). The club motivates higher global climate ambition by creating an economic incentive to join.

Clubs involving trade measures on non-participants have advanced from academic debate to potential policy. In 2021 the EU and US produced a statement agreeing to work toward a ‘Global Arrangement on Sustainable Steel and Aluminium’ (GASSA) which, among other objectives, will restrict market access for non-participants that do not meet standards for low carbon intensity. Germany, as president of the G7, proposed a G7 climate club which might include the imposition of trade measures.

Such proposals have accompanied unilateral proposals to price carbon beyond national borders. The EU’s Carbon Border Adjustment Mechanism (CBAM), examined at more length below, extends EU Emissions Trading Scheme (ETS) prices to imported products in trade exposed sectors. Other countries, including the UK, Canada and the US, also appear to be considering seriously the introduction of such measures, known generically as Border Carbon Adjustments (BCAs). The introduction of BCAs will introduce not only carbon costs but also significant administrative difficulties for exporting firms. It thus further incentivises the introduction of a ‘club’ model in order to alleviate the impacts of such measures.

The rationale for climate allies to mutually waive BCAs seems clear: as well as preventing unnecessary trade barriers, it avoids further atomization of trade and climate negotiations among potential climate allies. Establishing equivalence is a longstanding challenge in trade negotiations on product standards, and climate clubs point to the need to do so in the context of climate regulation.

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3 M. Mehling, H. van Asselt, S. Droege and K Das (2022), ‘The Form and Substance of International Cooperation on Border Carbon Adjustments’, AJIL Unbound, 116, 213-218. The authors also note that ‘any form of international climate cooperation with less than universal participation’ might be designated as a club.


5 Joint EU-US Statement on a Global Arrangement on Sustainable Steel and Aluminium (31.10.21).

6 BMF, AA, BMWi, BMU, BMZ, Steps towards an alliance for climate, competitiveness and industry – building blocks of a cooperation and open climate club.

7 European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism COM(2021) 564 final. At the time of writing the CBAM proposal is being debated, and refined, through the EU Council, Parliament and Commission trilogue process.


10 The State of California already imposes border carbon adjustment on electricity imports from US states outside its emissions trading scheme. The idea of introducing BCA more broadly enjoys some bipartisan support in the US. LPDD, California ETS Border Carbon Adjustment; C Hendersen, A carbon border adjustment is on the negotiating table (republicEn 03.05.22).

through new forms of international cooperation.

Yet a club model potentially exacerbates tensions with countries who do not qualify, such that determining club membership poses a significant diplomatic challenge. Uncertainty remains about criteria for joining and benefits of membership. Questions include: what will countries require to admit others to a climate club? Is having a national carbon price a prerequisite, or would it be possible to argue that domestic industries face equivalent costs due to other types of climate regulation, such as performance standards? Can country-based carbon border tax exemption be reconciled with WTO non-discrimination requirement that ‘like’ products from all WTO Members be treated evenly with respect to taxes and regulations? Finally, how can a club incorporate the Paris Agreement’s central principle of Common but Differentiated Responsibilities and Respective Capacities (CBDR-RC), which recognises that developing countries have less individual responsibility to mitigate climate change, and may struggle more to implement requirements to assess the emissions in their products?¹²

These same questions also point to desired attributes for climate clubs. First, membership criteria should be rigorous enough to ensure that clubs effectively support shared climate objectives, thus upholding their function in overcoming competitive disadvantages from climate regulation. If countries join the club and then neglect to act on commitments, this replicates the free riding problem. Second, to uphold the objective of fairness, clubs should be inclusive. This includes procedural transparency, such that criteria for joining are clear and open to all in principle, as well as inclusivity in the sense of honouring the principle of CBDR-RC. Finally, clubs should be non-discriminatory from a WTO perspective.

In this article, I use these proposed goals to assess three models for determining climate equivalence. The first model, ETS-linking, might also be described as harmonisation, in that countries adopt formally the same regulation. It is inspired by the EU Commission’s CBAM proposal. The second model, benchmarking of shared methods and minimum standards, allows countries to maintain separate regulation but requires that they arrive at a shared approach across these differences. This draws inspiration from the GASSA and German G7 proposals mentioned above. The third model, benchmarking based on outcome duties, might be described as an equivalence model, as it assumes that countries will achieve comparable outcomes if they have the same objectives. It draws inspiration from the EU-UK Trade and Cooperation Agreement as well as elements of the G7 proposal.

These models suggest the existence of key cross-cutting tensions between environmental ambition, WTO-compatibility and inclusiveness. I argue that an approach based on benchmarking of shared methods and minimum standards seems to optimise the most objectives, but would require flexibility from countries in their conformity assessment requirements.

2. **Model 1: ETS linking as equivalence**

As the basis for determining climate club membership, Nordhaus considers two potential approaches. The first is that countries apply carbon duties to imported products, or, in the case of an Emissions Trading Scheme, require that their producers buy emissions permits, that are equivalent to domestic prices for their carbon content. The second, which he considers technically simpler and more effective in inducing other countries to join the club, is that countries in the club apply a low flat-rate tariff across the entire spectrum of goods from non-participants.¹³

The EU CBAM proposal does approximate, to some degree, the first of Nordhaus’s proposals, though it does so unilaterally, rather than through a club model. More specifically, the CBAM will

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¹³ Nordhaus, above n. 4, p. 1341.
impose EU Emissions Trading Scheme (EU ETS) prices onto imported products. After a transition period from 2023-25, in which only reporting will be required, the Commission’s proposal extends prices equivalent to those charged under the EU’s Emissions Trading Scheme to direct emissions from imported products. At the time of writing, the precise scope of sectoral coverage is still being debated, but the Commission has proposed five trade-exposed sectors: electricity, aluminium, cement, steel and fertilisers.

The Commission’s proposal responds to record prices of the EU’s Emissions Trading Scheme, (approximately €95/tonne at the time of writing),\(^{14}\) causing increasing industry outcry from priced sectors that are highly traded.\(^{15}\) At the same time, the current strategy of allocating free allowances\(^ {16}\) is not fully coherent with EU climate ambition.

When examining prospects for climate clubs, the most significant design element of CBAM is the basis upon which the EU exempts countries from charges. Such exemption, if applied to an entire country and combined with a trade partner’s imposition of its own BCA charges, would move CBAM from a unilateral measure to a club.

The current EU Commission proposal requires that, to be exempted on a country-basis, countries must be part of the EU’s carbon pricing mechanism. Outside the EU, only countries that participate in the ETS (EEA countries) or have carbon pricing schemes that are formally linked to the ETS (Switzerland) are exempted altogether. The Commission leaves open the possibility of negotiating sectoral agreements to take account of domestic carbon pricing in other countries. Alternatively, individual exporters can reduce charges on the basis that they pay domestic carbon taxes. However, in order to do so, they must undertake a set of conformity assessment requirements that themselves impose significant compliance costs: being authorised with the so-called CBAM Authority, establishing proof that they have paid for their emissions, and receiving certification from an independent third party.\(^ {17}\) This strongly motivates exporters to seek exemption on a country- rather than just a product-basis.

### 2.1 Analysis

#### 2.1.1 High rigour in achieving climate objectives

The Commission’s proposal to allow exemption from CBAM charges through ETS linking dovetails with EU efforts to link ETS schemes under the Paris Agreement Article 6 negotiations.\(^ {18}\) It also finds support in academic literature; Leal-Arcas’s analysis of WTO-compatible carbon clubs, for example, imagines that linked ETS schemes would form the basis of a climate club.\(^ {19}\) This harmonisation approach ensures that members of a club bear the exact same carbon costs in covered sectors. Thus it provides an approach which is maximally strong in addressing the competitive problem of asymmetry in carbon pricing.

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\(^{14}\) For updated carbon prices, see the Ember carbon price dashboard. Available at: https://ember-climate.org/data/carbon-price-viewer/ (visited 11/01/22).

\(^{15}\) D. Sheppard, H. Dempsey and P. Hollinger, ‘EU industry calls for urgent carbon border tax as prices soar,’ Financial Times, 29 April 2021. Available at: https://www.ft.com/content/17e157b2-21ea-4e22-9278-35f157046e85?sharetype=gift?token=e6ab7f6f-7cd4-4328-b26b-5035b9e0013 (visited 12 June 2022).

\(^{16}\) Allocation to industrial installations. Available at: https://ec.europa.eu/clima/policies/ets/allowances/industrial_en

\(^{17}\) European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism COM(2021) 564 final, Chapter II.


2.1.2 Lack of inclusivity

The significant downsides to the approach come with the difficulty of achieving ETS-linkage. This is readily apparent by examining the EU’s slow progress. Switzerland is the only country that has successfully linked an Emissions Trading Scheme with the EU. The EU ETS has been successful in establishing high carbon prices due in part to its imposition of strong regulatory controls, and the EU must establish that a partner country has a compatible system which is mandatory and has an absolute emissions cap. The time horizon for completing such negotiations, particularly beyond the EU region, is likely incompatible with the speed of action required to form clubs.

The approach also does not provide any means for inclusion for countries that do not have domestic ETS schemes. It precludes participation from countries who apply carbon taxes or require firms to apply strict performance standards (implicit pricing), rather than explicit carbon prices. Further, as the majority of countries that price carbon are in the developed world, it de facto excludes participation from many developing countries. In Africa, while several countries impose carbon taxes, none currently have ETS schemes.

2.1.3 WTO-compliance: rational or rigid?

Nordhaus acknowledges that his climate club proposal would require ‘climate amendments’ to international trade law to forbid tariff retaliation against participants by non-participants. In trade policy literature, Bacchus provides a similar proposal for the introduction of a WTO climate waiver ‘for all trade-restrictive climate response measures that are based on the amount of carbon used or emitted in making a product, and that are taken in furtherance of and in compliance with the Paris Agreement and the UNFCCC.’ Such a waiver could theoretically enable countries to impose border carbon adjustment without fear of legal challenges or tariff retaliation in the WTO.

While such proposals would resolve the potential for conflict, the current stalemate in WTO Doha Development Round negotiations provides little evidence that the WTO Membership are positioned to integrate into the WTO system a climate amendment or waiver.

Examining the WTO-compatibility of prospective regulation is complicated by the disabling of the Appellate Body. The Multi-Party Interim Appeal Arbitration Arrangement (MPIA) which has been designed by some Members to replace it, does not include participation of all WTO Members. The UK, for example, which is considering introduction of BCA, does not participate. WTO panels are ad hoc, increasing legal uncertainty. Parties may also request arbitration after a Panel ruling, but this is voluntary, and an adverse ruling can also be ‘appealed into the void’. Further, the regulatory scenarios being examined are speculative, and the administration of a club in practice would be of much relevance in examining whether the approach was discriminatory. Given these limitations, this remains an incomplete and high-level analysis.

Past disputes suggest very strongly that any climate club that exempts countries as a whole from BCA charges will be incompatible with GATT Article I:1. The Article stipulates that ‘Any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.’

22 Nordhaus, above n. 4, pp. 1348-9.
24 See, eg: https://wtoplurilaterals.info/plural_initiative/the-mpia/ (visited 07/10/22)
25 Dispute settlement without recourse to Panels and the Appellate Body, WTO website. Available at: https://www.wto.org/english/tratop_e/dispu_e/disp_settlement_cbt_e/c8s2p1_e.htm (visited 13/10/22).
26 Marrakesh Agreement Establishing the World Trade Organization, Article 1, 14 April 1994. GATT Secretariat, The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts (Geneva, 1994) at 455.
that policy justification, in this case, the fact that countries being exempted share an ETS scheme, is not relevant when determining compliance with Article I:1. Instead, it is a market-based test based on ascertaining whether there is a negative competitive impact on imported products.\textsuperscript{27} It is difficult to imagine that an exemption of BCA charges for some countries and not others could be positioned as anything other than a negative impact upon conditions of competition for non-exempted countries. As indicated by Nordhaus, that is the explicit intent of a climate club.

This raises the important question of whether the CBAM itself, as envisaged by the EU Commission, is not in conformity with the MFN principle on the basis that it exempts individual countries within the EU from charges and regulatory compliance requirements, as well as EEA countries and Switzerland. The EU, as a contracting party and customs territory in its own right,\textsuperscript{28} might be seen as exempt from extending the treatment provided within the EU to third countries on an MFN basis.\textsuperscript{29} However the exemption of EEA countries and Switzerland, as well as any other countries that link ETS schemes, may be seen as not in conformity with GATT Article I:1.

If a BCA exemption is seen as non-compliant with GATT Article I:1, a WTO panel (or, on appeal, the MPIA) may still consider the reason for the regulation, and whether it can justify the disparate impact on conditions of competition, under the General Exception to the GATT, Article XX. A determination of the legitimacy of exempting some countries and not others, with reference to the regulatory objective, would likely fall under the chapeau, which reads in full:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:…\textsuperscript{30} [specified in the subparagraphs]

The chapeau constitutes an additional discipline on a measure provisionally justified under an Article XX subparagraph.

Case law under the chapeau emphasizes the importance of a clear means-ends relationship between a trade-restrictive regulation and its environmental objective. The Appellate Body concluded that ‘… whether discrimination is arbitrary or unjustifiable usually involves an analysis that relates primarily to the cause or the rationale of the discrimination.’ [emphasis added]. Here, the approach of excluding countries based on failure to link ETS schemes appears robust. The rationale is clear: they do not pose commensurate pricing on domestic producers. The level of shared protection afforded by the regulation is precise, indeed quantitative. The exemption is open in principle to any country who can link its ETS schemes, an element of transparency that also works against a finding of arbitrary or unjustifiable discrimination.\textsuperscript{31}

However, as Vidigal and Venzke point out,\textsuperscript{32} another strand of chapeau case law suggests that imposing the exact same regulation that is appropriate domestically may be discriminatory in some scenarios. In US-Shrimp, the United States required fishermen to utilize the exact same approach, the installation of a Turtle Excluding Device, or TED. The Appellate Body stated:

\textsuperscript{27} WTO Appellate Body Report, European Communities – Measures Prohibiting the Importation and Marketing of Seal Products (EC – Seal Products), WT/DS400/AB/R; WT/DS401/AB/R, adopted 18 June 2014, para. 5.86, 5.95.
\textsuperscript{28} See, eg: The European Union and the WTO, WTO website. Available at : https://www.wto.org/english/thewto_e/countries_e/europe-an_communities_e.htm (visited 13/10/22)
\textsuperscript{29} Though the view that EU Member States have an exceptional status with respect to the WTO MFN principle has been challenged, for example by Bartels in the context of the EU’s mutual recognition principle. L. Bartels (2005) ‘The Legality of the EC Mutual Recognition Clause Under WTO Law,’ Journal of International Economic Law 8(3), 691-720
\textsuperscript{30} Marrakesh Agreement Establishing the World Trade Organization, Article XX, 14 April 1994, GATT Secretariat, The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts (Geneva, 1994).
\textsuperscript{31} WTO Appellate Body Report, Brazil – Measures Affecting Imports of Retreaded Tyres (Brazil – Retreaded Tyres), WT/DS332/AB/R, adopted 3 December 2007, para. 227
\textsuperscript{32} G. Vidigal and I. Venzke (2022), ‘Of false conflicts and real challenges: Trade agreements, climate clubs and border carbon adjustment,’ AJIL Unbound, 116, 240.
[the US regulation] ... imposes a single, rigid and unbending requirement that countries applying for certification ... adopt a comprehensive regulatory program that is essentially the same as the United States' program, without inquiring into the appropriateness of that program for the conditions prevailing in the exporting countries.33

The Appellate Body concluded that the US’s regulation did not take into account different conditions in exporting countries, notably whether endangered turtles swam in the waters of the complaining parties.34

As a global problem, climate change is a ‘condition’ that affects all countries, but there is certainly a possibility that a WTO panel would emphasize the need to examine climate regulation in countries excluded from the club based on their ability to meet comparable objectives, and that requiring ETS linking as the only route for exemption might be seen as excessively rigid. There is also an implied procedural obligation for those that enter into such climate clubs to negotiate with others about their prospective inclusion and take into account how effectively they are addressing climate mitigation goals, even by other means.35 If other countries apply approaches that are equally effective in achieving the objectives of the EU ETS, they could form the basis for a WTO-compatible exemption, an issue considered further in Model 2 below.

3. Model 2: Benchmarking through shared methods/minimum standards

Rather than requiring full harmonisation of carbon pricing through linking ETS schemes, another approach to exemption from BCA charges, and thus club membership, would be based on establishing that the carbon price experienced by each party is equivalent, even if the regulatory system through which it is delivered differs. This would require a shift from simply understanding quantitatively the ETS price paid by each side. Instead, equivalence would need to be established through establishing shared benchmarks. These could take the form of an agreed, and shared, baseline carbon price, or through a move to minimum performance standards rather than pricing, on the basis that emissions-based performance standards impose costs, which are often described as implicit carbon price.

The GASSA and G7 climate club proposals contain elements of benchmarking based on minimum performance standards. Both contain reference to establishing common methods for measuring the emissions embedded in traded products, and setting standards based on these agreed minimums. The GASSA is initially limited to the US and EU, but the proposal states that it is open in principle to ‘like-minded economies’ who will, among other objectives, ‘restrict market access for non-participants that do not meet standards for low carbon intensity’. As part of GASSA, countries agree to set up a working group with the EU to ‘confer on methodologies for calculating steel and aluminium carbon-intensity and share relevant data.’36 While this is unspecified, these methods will presumably lead into a shared understanding of the particular ‘low carbon intensity standards’ with which exporters must comply.

The German G7 proposal, elaborated in most detail in a 2021 position paper, includes a similar approach:

Members will commit to no longer going below a jointly defined minimum price and will agree on a path for the minimum carbon price over time. The goal is the convergence of national carbon prices towards a uniform price. This can happen by means of emissions trading systems and carbon taxes, but also through implicit mechanisms, if they provide a comparable carbon price signal. In order to be able to achieve this goal, the members would as a first step agree on a

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36 Joint EU-US Statement on a Global Arrangement on Sustainable Steel and Aluminium (31.10.21).
common and uniform procedure for calculating their current explicit or implicit carbon prices in the (energy and) industrial sector(s)...

This approach might be seen as somewhere in between harmonization (requiring the exact same systems) and equivalence (allowing for different systems that achieve the same result). On the one hand, it could provide for more heterogeneity: ETS schemes, carbon pricing or performance standards. However, it does require that participating parties agree on common methods for measuring embodied emissions, and that they also develop a shared standard or price. For either standards or pricing, this would likely function as a minimum requirement for market access.

Overcoming discrepancies in measuring embodied emissions is a significant aspect of recognising equivalence between different systems. There is no generally accepted definition of embodied emissions. An analysis by Silverado concludes that a ton of GHG emissions output for California steel is calculated to contain more than triple the emissions of EU steel for purposes of their respective ETS schemes, due to differing methodological assumptions. Certainly, achieving such convergence is a steep challenge, but discussions on convergence are also ongoing in various fora, including the OECD, International Deep Decarbonisation Initiative, World Bank and International Standards Organisation. Such discussions have the potential to aid progress toward climate clubs.

3.1 Analysis

3.1.1 Environmental rigour: challenges to assessing and enforcing compliance

Determining methods and minimum performance standards seems to hold promise of providing a shared understanding of what precisely is required, as outcomes are defined objectively: the level of embedded carbon permitted, and how this will be calculated.

There are other elements of this approach, however, that may undermine its environmental rigour as a club. These include the risk that the agreed minimum standard or price will not be ambitious enough, given that it is a minimum to which all countries, the more ambitious and the less ambitious, agree. Further, the process of calculating embedded emissions and in particular their equivalence with implicit carbon cost is fraught with complexity, as further examined in the context of WTO law, below. This might frustrate attempts to monitor the effectiveness of the approach.

The EU has not indicated that this type of ‘benchmarking’ model will comprise a sufficient basis for waiving CBAM charges. This points to another issue: even if common methods can be established, trust will be required to waive charges and conformity assessment requirements on foreign firms on the basis of different regulatory systems that are not as easily verified.

3.1.2 A more (but not totally) inclusive club

A major benefit of using a benchmarking rather than ETS-linking approach is that it could span a much larger group of countries. Theoretically, any country that considered its climate measures to impose costs on domestic producers would potentially be able to join the club, but in practice, it will depend on its Terms of Reference. The GASSA states that it is open to like-minded countries, an opaque concept, and precise membership criteria remain unspecified. The countries have agreed to ‘confer on entering into discussions on global steel and aluminium arrangements to address both non-market excess capacity as well as the carbon intensity of the steel and aluminium industries.’

This emphasis on non-market excess capacity suggests that the GASSA is intended to exclude non-market excess capacity...
China, for whom meeting a low carbon standard would not be a sufficient condition for membership. Clearly, excluding the world’s largest emitter from any hope of club participation is sub-optimal, and a club that is used primarily to reinforce geopolitical alliances cannot be seen as truly inclusive. This makes the proposal difficult to defend as upholding climate objectives fairly, and undermines its effectiveness in providing a market incentive for low carbon production.

Even if a club has transparent membership criteria that are aimed solely at low-carbon production and are open to all in principle, it will still be more difficult for developing countries to participate. The set of regulatory requirements that accompany a benchmarking approach are intensive and may be more difficult for developing country firms to apply. This might result in perverse incentives for joining if developing country firms stop exporting due to inability to complete the required steps.

3.1.3 WTO compatibility: the devil in the details

Overall, the WTO-compliance of an approach based on benchmarking shared methods/minimum standards will depend on its structure and implementation, but risks of non-compliance result from several factors.

One is that countries would introduce a minimum performance standard that was not imposed domestically. Carbon pricing is based on the premise that firms are allowed to emit, as long as they pay for it. A mandatory minimum standard will be more likely to comply with WTO law if the members of the club change domestic regulation to mirror what it required of imports: introducing performance standards in place of an ETS or domestic carbon price, where this is required of exporters. The counterfactual frustrates the basic logic of the National Treatment principle: extending the same treatment to domestic and imported products. The implication is that such a club would require domestic reforms, through the introduction of a hybrid standards/pricing approach.

This leads to a second area for concern, which is the difficulty of rigorously establishing equivalence between an explicit carbon price and an implicit (standards-based) carbon price, a necessity for extending the club to countries that don’t price carbon. These difficulties are apparent in the US FAIR Transition and Competition Act (2021) proposed by two US Congresspeople. While it was not passed by US Congress it highlights WTO law concerns that will likely emerge from a minimum-standard club.

The pricing structure in the proposed FAIR Act was based on costs imposed by the regulatory requirements for emissions reduction. These are not provided in the proposal itself, which stipulates that the US Government will calculate average regulatory costs of compliance with US climate regulation, including the Clean Air Act and regional carbon pricing. This will then be multiplied by the emissions embodied in the product.

It is difficult to impose an average price that fairly captures the regulatory burden experienced by US producers as it is an extremely heterogeneous regulatory environment. Only Northeast States and California pricing carbon through cap-and-trade systems. If US national averages are used as a basis to impose prices on third countries, exporters from non-club countries will likely be able to identify instances of asymmetric pricing where their producers are expected to pay more than those in the US. The complexity of reducing diverse national approaches to a uniform standard is likely to give rise to numerous opportunities for complaint by non-members about discrimination through unfair implementation.

As above, a final source of potential trade conflict would result from the conflation of climate objectives with other geopolitical aims. Past disputes under GATT Article XX underscore the importance of a clear means-ends relationship between a trade-restrictive regulation and its goal.

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41 Fair, Affordable, Innovative, and Resilient Transition and Competition Act 2021.
42 Ibid, Sections 9902-3.
43 Centre for Climate and Energy Solutions, US State Carbon Pricing Policies.
44 As examined in E Lydgate, Is it Rational and Consistent? The WTO’s Surprising Role in Shaping Domestic Public Policy (2017) 20(3)
The GASSA’s manifold regulatory objectives would frustrate a clear defence of the prospective club as being established to pursue climate-based objectives. Also, its lack of transparency in selection criteria would make defence of the GASSA difficult under GATT Article XX.

4. Model 3: Benchmarking based on outcome duties

A final approach could be based on benchmarking outcomes. The EU has not indicated that the TCA would constitute grounds for a climate club or exempting the UK from BCA charges. Nonetheless it contains provisions which are instructive for thinking through how such a club could be structured. The German G7 proposal also suggests that outcome duties could form at least part of the criteria for climate club membership. This club aims to start with the G7 but then widen membership based on commitment to net zero targets, clear interim targets and shared commitments to limit warming to 1.5°C.45

The TCA reaffirms both Parties’ ambition for ‘economy-wide climate neutrality by 2050.’46 Parties agree to uphold their ‘climate level of protection’ as set out in interim greenhouse gas reduction targets. This includes specific quantitative interim targets that both Parties have committed to in domestic legislation. Integrating quantitative climate benchmarks into an FTA is novel, and the targets are covered by the non-regression requirement, such that, if an arbitral tribunal agrees that regression has occurred, either Party can apply sanctions.47

The Parties also commit to non-regression on upholding an ‘effective system of carbon pricing’. This requirement is also linked to binding dispute settlement. Parties shall ‘give serious consideration’ to pursuing linked ETS schemes. 48

These targets do not reflect both sides’ increased climate ambition after committing to net-zero targets. Thus the 40% reduction by 2030 target has been revised up to 55% in EU and 68% in UK. This reveals a potential downside of benchmarking agreed targets: it is a rigid approach that doesn’t take account of increasing ambition. However, the TCA responds to this issue to some extent through a so-called ‘rebalancing’ mechanism, which specifies that ‘significant divergences in [climate protection] can be capable of impacting trade or investment between the Parties in a manner that changes the circumstances that have formed the basis for the conclusion of this Agreement…. If material impacts on trade or investment between the Parties are arising as a result of significant divergences … either Party may take appropriate rebalancing measures to address the situation’49

This mechanism is accompanied by a bespoke fast-tracked dispute settlement process.

Whilst the non-regression requirements typically focus on preventing the deregulation of current environmental standards, rebalancing addresses divergence in future policies and priorities. This provides a guarantee of continued alignment of environmental ambitions. Rather than continued harmonisation, it functions through the threat of suspension of all or part of the TCA’s trade provision for failure to keep pace.

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45 BMF, AA, BMWi, BMU, BMZ, Steps towards an alliance for climate, competitiveness and industry – building blocks of a cooperation and open climate club.
46 Title XI, Article 355(3).
47 Title XI, Article 390(3), 391.
48 Title XI, Article 392.
49 Title XI, Article 411.
4.1 Analysis

4.1.1 Environmental rigour: challenging to oversee

As set out above, the EU-UK TCA relies on obligations not to regress from agreed outcomes which are set out in interim emissions reduction targets, and to uphold ‘effective’ carbon pricing. As a basis for a carbon club, an outcome duty approach suggests the need for both sides to have faith in the integrity of one another’s regulatory systems, and some tolerance for discrepancies that emerged in the short term. For example, the UK and EU carbon price has tracked fairly closely since the UK left the EU ETS at the end of 2020. However, the carbon price that each side pays is not formally identical, and there are no long term guarantees that it will continue to track; the scope or rigour of the ETS could diverge. Legally, the obligation is to maintain ‘effectiveness’, which appears open to interpretation. It seems unlikely that an outcome duty-based approach would be able to garner sufficient mutual trust if the regulatory starting points diverged greatly.

In the TCA, risks of divergence are minimised through enforcement mechanisms. But there is also a risk that comes with the emphasis on enforcement. Far from providing a basis for cooperation for climate-ambitious countries, it might undermine this cooperation and instead embed further conflict, leading to the opposite of the intended objective: more tariffs, rather than fewer. The novel nature of the TCA provisions, and in particular the Rebalancing mechanism, means that their utilization and interpretation in practice is highly unpredictable. The Rebalancing mechanism, for example, relies upon the interpretation of whether ‘significant divergence’ had a ‘material impact on trade and investment based on reliable evidence and not merely on conjecture or remote possibility.’ The EU would also need to show that its proposed response was ‘strictly necessary and proportionate in order to remedy the situation’, and the tribunal would need to decide what the situation was that required ‘remedy’, but rebalancing measures are not defined. Whilst a full analysis of this provision lies beyond the scope of this particular article, many of the concepts introduced here, notably ‘material impact’, have no precise analogue in existing EU treaties. In the event of a dispute, this means that an arbitral tribunal required to interpret them would hold tremendous influence.

A climate club based on high-level outcome duties also risks attracting Members who have no real commitment to maintaining the aims, but simply wish to avoid fees. In general, there is uncertainty about the effectiveness with which any country will achieve its net-zero targets, making oversight of such a model difficult.

4.1.2 The most inclusive approach

An outcome duty approach has the potential to be the most inclusive of any potential climate club. Indeed, the approach could be based on a more macroscopic understanding of ‘equivalence’: in achieving a shared goal of decarbonisation. In this sense, it has the highest likelihood of including a range of countries, including developing countries.

4.1.3 WTO-compliance: difficult to draw the line

Under such an approach it will be difficult to justify where the line is drawn between participating and non-participating countries. As outlined above, in the context of the ETS-linking approach, WTO panels will seek to assess whether a trade restriction (in this case, imposition of charges on some countries and not others) has a clear rationale and is necessary to achieve a regulatory outcome. Clubs based on outcome duties will make a rigorous assessment of where this line is drawn elusive at best.

50 CCC Report, ibid. p. 73.
5. Synthesis: An optimal approach to climate clubs?

The analysis above suggests core trade-offs. First, the more that high-level shared objectives that underpin club membership, and the more based on trust, the more likely the realization of a bilateral – and eventually plurilateral – climate club. But a climate club that is too open, such as an outcome-duty based climate club, risks replicating a free riding problem, by incentivising countries to set targets they may not intend to uphold. Conversely, a club based on harmonisation in the form of ETS-linking may be slow to form and limited in membership. Benchmarking based on shared methods and minimum standards maintains some rigour while being able to span multiple regulatory approaches.

Second, WTO-compliance is difficult to assess due to factual and legal uncertainty, but it seems likely that all models of club will pose significant challenges with respect to the non-discrimination principles. The less transparent the membership requirements, the more likely they are to be challenged successfully as discriminatory. Club membership must be justified on the basis of clearly-defined climate goals. While this is uncertain, there may be the need to recognise that countries might achieve the same goal through different means. In this respect as well, benchmarking based on shared methods and minimum standards is the most promising approach. Mutual recognition of technical standards, in order to waive conformity assessment requirements, is actively encouraged in the WTO framework.51 In this case, however, recognition of equivalence is linked to waiving of charges, and the legality of such an approach remains uncertain.

However, the approach of benchmarking based on shared methods and minimum standards (as well as an ETS-linking), raise questions about compliance with CBDR-RC, as they would (likely) impose additional costs on exporters in covered sectors that fall into line with countries who price and regulate carbon most heavily. They are thus based on the presumption that all exporters should pay the same carbon prices. Addressing CBDR-RC in such a club may involve integrating differential treatment for developing countries. This could include integrating climate finance or other forms of aid into the club model, perhaps through the revenues that it generates, as well as reducing, phasing in slowly, or even eliminating requirements for some countries based on their level of development.

6. Conclusion

A question that hangs over new climate-related trade restrictions, in particular Border Carbon Adjustment, is the extent to which they can be alleviated through new forms of regulatory coordination and cooperation. Legal innovation appears inevitable, as the EU and other countries who plan to introduce such measures decide who to exempt, and how. Thus climate clubs reinvigorate longstanding environmental debates about how to balance unilateral regulation against cooperative approaches.

This article has advocated an approach based on benchmarking shared methods and agreed minimum standards, combined with flanking measures for developing countries, as optimising the most objectives (though still raising concerns about WTO-compliance). However such an approach would require a larger shift in the way that countries, and notably the EU, oversee regulatory compliance across borders. In this sense, climate clubs also prompt a new look at how countries govern shared regulatory aims.

Climate clubs may demand new forms of governance because they are themselves a hybrid form of trade/environment cooperation, that falls between cooperation on product standards and cooperation on shared climate aims. With respect to intra-EU environmental law, the distinction between product-related and non-product related environmental regulation has salience. Many environmental Directives that focus on national environmental protection – for example, water and air quality, species protection, waste disposal – prescribe a minimum level of protection. This serves

51 If a BCA were to meet established criteria to be classified as ‘technical’, the TBT Agreement would apply; it contains articles that deal explicitly with conformity assessment procedures, and encourage mutual recognition of regulation. However, BCAs (and related climate clubs) involve imposing charges, which clearly falls under the remit of the GATT rather than the TBT Agreement.
to prevent competitive advantages between EU Member States. On the other hand, EU Directives tend to impose total harmonisation, that is, a uniform rule from which derogation is impermissible, with respect to product standards.

This type of unilateral logic that the EU (and other countries) apply to product standards and regulation clearly poses an obstacle to climate clubs: it’s difficult to extend national climate regulation, such as ETS schemes, plurilaterally. Absent domestic environmental enforcement and supervision, climate clubs must to some extent be animated by trust. Absent this trust, climate clubs, even among trade partners with comparable aims and regulation, could easily descend into climate retaliation.

52 The concept of minimum level of environmental protection has been codified as an EU principle in Article 193 TFEU: The protective measures adopted pursuant to Article 192 shall not prevent any Member State from maintaining or introducing more stringent protective measures. European Union, Consolidated version of the Treaty on the Functioning of the European Union, 13 December 2007, 2009/C 115/01.

53 Ibid, Title II.
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