



# CARBON TAX AS DISCRIMINATION: REVISITING THE LEGAL STANDARD OF NATIONAL TREATMENT IN WTO LAW

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**Abstract** This paper explores the possibility of an alternative take on the current understanding of the GATT national treatment obligation, especially in the assessment of the possible discriminatory impact of a carbon tax. The traditional legal standard, when applied to an import-adjusted carbon tax measure, may result in a finding of discrimination, despite there being sound economic rationale underlying such a measure. It is proposed that during the analysis of discrimination, comparison between products should also account for emission footprints. Furthermore, to assess the discriminatory impact of a carbon tax, one should not only take into account the tax burden imposed on products, but also the level of pre-existing distortion in the market. This paper finds that while such an alternative approach may be promising, it can, in case of inadequate forethought, run into problems.

## I. INTRODUCTION

Although several years have already passed since the new Paris Agreement on climate change was brought into force, global mitigation commitments fail to be ambitious enough to meet the temperature limitation targets set therein.<sup>1</sup> Moreover, countries have so far failed to operationalise any mutually agreed rules on market-based approaches for mitigation.<sup>2</sup> In this backdrop, the imple-

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<sup>1</sup> According to the latest report by the United Nations, global aggregate emissions show no sign of peaking yet, even though there needs to be a 25% reduction in global emissions by 2030 just to remain within the warming limit of 2°C. At present, implementation of all the mitigation commitments made by the Parties would result in a rise of the global mean temperature by more than 3°C by 2100. See United Nations Environment Programme, Emissions Gap Report 2019 (UNEP 2019) 3–10.

<sup>2</sup> ‘In-Depth Q&A: How ‘Article 6’ Carbon Markets Could ‘Make or Break’ the Paris Agreement’ (Carbon Brief, 29 November 2019) <<https://www.carbonbrief.org/>

mentation of unilateral carbon pricing policies covering domestic products, as well as imports, is only a matter of time.<sup>3</sup> When so done, not only is there a chance that such measures will be challenged at the World Trade Organisation ('WTO'), but also a good probability that they will be found to be discriminatory. This is because the current trade law standard of non-discrimination falls short of according due consideration to the emission footprint as an intrinsic and essential attribute of a product.

Given the growing salience of the issue, this paper seeks to offer some alternative 'food for thought' to further inform the standard of discrimination as understood in international trade regulation. This is done in the context of a proposed carbon tax and its treatment under the national treatment standard contained in Article III of the General Agreement on Tariffs and Trade ('GATT'). In specific terms, it may be possible to make a more informed analysis of the fiscal burden imposed by a carbon tax, when products' emission footprints are duly taken into account. Alongside this, the legally accepted status of climate change as a 'common concern of humankind' can also influence the relevant legal analysis.

While carbon pricing is important, it must equally be emphasised that subjecting developing country exports to additional fiscal burden through a carbon tax is in direct contravention of another foundational climate law principle of 'Common but Differentiated Responsibility and Respective Capabilities'(CBDR). In order to strike a balance, the carbon tax measure proposed here contains a relatively novel component of 'revenue recycling' – a scheme that would utilise a portion of the tax revenue to support the affected developing countries. In this regard, we further explore whether the CBDR principle has any role to play in the traditional non-discrimination analysis.

The following section initiates the discussion by explaining the key concepts and principles used throughout the paper.

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[in-depth-q-and-a-how-article-6-carbon-markets-could-make-or-break-the-paris-agreement](#)> accessed 1 December 2019.

<sup>3</sup> Richard N Cooper and others, 'Why Paris Did Not Solve the Climate Dilemma' in Peter C Cramton, David JC MacKay and Axel Ockenfels (eds), *Global Carbon Pricing: The Path to Climate Cooperation* (MIT Press 2017); European Commission, 'Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal' COM (2019) 640 final. Note the EU plan outlined in the following language: "Should differences in levels of ambition worldwide persist, as the EU increases its climate ambition, the Commission will propose a carbon border adjustment mechanism, for selected sectors, to reduce the risk of carbon leakage. This would ensure that the price of imports reflect more accurately their carbon content. This measure will be designed to comply with World Trade Organization rules and other international obligations of the EU."

## II. CONCEPTUAL BACKGROUND

### A. 'Market Failure' Related to Climate Change

'Market failure' is a situation where free-market exchanges are not the most optimal allocators of resources, as economists traditionally assume.<sup>4</sup> For a market to function efficiently, certain assumptions need to hold, including, *inter alia*, complete property rights and perfect information.<sup>5</sup> Non-existent, or ill-defined, property rights lead to overexploitation of freely available resources, leading to artificial underpricing of outputs made using the same.<sup>6</sup> Market failures are the likely fate of an unregulated public good like the global climate (more specifically, the global carbon budget).<sup>7</sup> Public goods are those that everyone can simultaneously use without facing any competition, or incurring any expense, until these resources deplete.<sup>8</sup> Negative externalities from such exploitative activities, *i.e.*, when a market participant produces or consumes something in a way that affects the public goods (*e.g.* emitting carbon dioxide without suffering consequences) without any replenishment. Production and consumption decisions as such will eventually deplete the stock of public goods to the loss of all stakeholders (*e.g.* irreversible climate change).<sup>9</sup> Unsurprisingly, exchanges between participants in a failed market, though apparently free, do not ensure optimal resource usage.

Market failures can be manifested in two ways with regard to climate change.<sup>10</sup> One is through emission externalities leading to product market failure. As emissions are not priced, final products or processes are guided solely by the cost-minimisation motive, and end up being more polluting than acceptable. This is called 'free-riding', because the producers reap the benefit of unregulated greenhouse gas emission, while the cost thereof is borne by the communities vulnerable to climate change in the form of long-term damages.

<sup>4</sup> Alfred Endres, *Environmental Economics : Theory and Policy* (4th rev edn and extended English edn, Cambridge University Press 2011) 9–14; Hal R Varian, 'Welfare' in Hal R Varian, *Intermediate Microeconomics : A Modern Approach* (9th edn, Norton 2014) ch 34.

<sup>5</sup> Nicholas G Mankiw and Mark P Taylor, *Economics* (4th edn, Cengage Learning 2017) 219–224.

<sup>6</sup> Inge Kaul, Isabelle Grunberg and Marc A Stern, 'Defining Global Public Goods' in Inge Kaul, Isabelle Grunberg and Marc A Stern (eds), *Global Public Goods : International Cooperation in the 21st Century* (Oxford University Press 1999).

<sup>7</sup> Inge Kaul, 'Global Public Goods: Explaining their Underprovision' (2012) 15 *Journal of International Economic Law* 729; Scott Barrett, 'Aggregate Efforts: Global Public Goods that Depend on the Combined Efforts of All States' in Scott Barrett, *Why Cooperate?: The Incentive to Supply Global Public Goods* (Paperback edn, Oxford University Press 2010).

<sup>8</sup> In formal terms, these properties are known as non-excludability and non-rivalrousness. Kaul, Grunberg and Stern (n 6).

<sup>9</sup> Garrett Hardin, 'The Tragedy of the Commons' (1968) 162 *Science* 1243; Barrett (n 7).

<sup>10</sup> Adam B Jaffe, Richard G Newell and Robert N Stavins, 'A Tale of Two Market Failures: Technology and Environmental Policy' (2005) 54 *Ecological Economics* 164; Richard G Newell, 'The Role of Markets and Policies in Delivering Innovation for Climate Change Mitigation' (2010) 26 *Oxford Review of Economic Policy* 253.

The other related failure, that of the innovation and technology market, shows up in the form of innovation disincentives due to lack of return,<sup>11</sup> less access to technological information, and the absence of adequate support systems for the potential firms to adopt better mitigation solutions.<sup>12</sup>

## B. Common Concern of Humankind

From a legal point of view, the driving motivation behind prioritising carbon pricing is that climate change is a common concern of humankind. This is a legal expression that signifies the common interest in effective and meaningful climate action. In terms of meaning, the notion shares common ground with other expressions such as the ‘common heritage of mankind’, although crucial differences exist.<sup>13</sup> Existing scholarly literature overwhelmingly agrees that the designation ‘common concern of humankind’ is a global call for adequate action be taken to address a concern.<sup>14</sup> Not only does it preclude inaction, but also creates a collective responsibility to meaningfully engage internationally to address the identified concerns.<sup>15</sup> The Paris Agreement recently renewed the subscription of the climate regime to this concept in the following terms -

“Acknowledging that *climate change is a common concern of humankind*, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity [...]”<sup>16</sup>

<sup>11</sup> David Popp, ‘Innovation and Climate Policy’ (2010) 2 Annu. Rev. Resour. Econ. 275.

<sup>12</sup> Manish Kumar Shrivastava and Himani Upadhyay, ‘Climate Change and Technology: Perceptions from India’ (2009) The Energy Research Institute/Global Climate Network Discussion Paper TERI/GCN-2009:1, 12–14 <[http://www.teriin.org/events/pdf/technology\\_and\\_low\\_carbon\\_development/1\\_Climate\\_change\\_and\\_technology.pdf](http://www.teriin.org/events/pdf/technology_and_low_carbon_development/1_Climate_change_and_technology.pdf)> accessed 26 October 2017.

<sup>13</sup> The key difference is that the language ‘Common Concern’ avoids the proprietary connotation embedded in the notion of ‘common heritage’. Common Concern, instead, highlights the problem and the need for action. See Jutta Brunnée, ‘Common Areas, Common Heritage, and Common Concern’ in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (1st edn, Oxford University Press 2007).

<sup>14</sup> Frederiech Soltau, ‘Common Concern of Humankind’ in Cinnamon P Carlarne, Kevin R Gray and Richard G Tarasofsky (eds), *The Oxford Handbook of International Climate Change Law* (1st edn, Oxford University Press 2016) 206–207.

<sup>15</sup> Brunnée (n 13) 566–567; Shinya Murase, Second Report on the Protection of Atmosphere – 67th Session of the International Law Commission (2015) A/CN.4/681 para 40.

<sup>16</sup> Preamble, Paris Agreement 2015 (Report of the Conference of the Parties in its Twenty-First Session, Decision 1/CP 21, Annex, FCCC/CP/2015/10/Add1) (emphasis added). For a comprehensive assessment of the evolutionary trajectory of the concept, see Thomas Cottier, ‘The Principle of Common Concern of Humankind’ in Thomas Cottier (ed), *The Prospects of Common Concern of Humankind in International Law* (Cambridge University Press 2020).

On a similar note, the International Law Association provided a contextual, guiding role to common concern of humankind.<sup>17</sup> It was shown that the notion, even if not implementable in itself, brings into practical involvement and application various notions including that of the CBDR.<sup>18</sup>

Some, including this author, subscribe to a doctrinal position that ‘Common Concern’<sup>19</sup> can emerge as a principle that highlights the under provision of global public goods of crucial importance, and suggests appropriate remedial actions to be taken as of obligation in different levels of global and domestic governance. Three avenues of actions are generally foreseen<sup>20</sup> – (i) the responsibility to cooperate internationally, (ii) the taking of effective and adequate action domestically, and (iii) when all else fails, taking unilateral trade countermeasures in appropriate cases.<sup>21</sup> The doctrine of Common Concern has the potential to serve as a normative facet that translates the necessities of addressing public goods problems and resolving market failures into a legal responsibility.<sup>22</sup>

### C. Common but Differentiated Responsibility

Initially anchored in Article 3 of the United Nations Framework Convention on Climate Change, the CBDR principle is another fundamental principle of climate law.<sup>23</sup> The CBDR points to the historic variation among countries in contributing to climate change (hence ‘differentiated responsibility’), as well as the deep inequity in their financial capacities to combat the same (hence

<sup>17</sup> Draft art 2, Shinya Murase and others, Report of the International Law Association’s Committee on Legal Principles Relating to Climate Change: Washington Conference: Legal Principles Relating to Climate Change (2014) 3–4. Note the statement in the commentary – “[T]he idea that climate change is a Common Concern is universally accepted, as is the proposition that all states have a common responsibility to take appropriate measures to address the concern.”

<sup>18</sup> *ibid* 7, 14; See, in particular, para 5 of the commentary to the Draft art 3, and para 2 of the commentary to the Draft art 5. Note the following – “There is general agreement that States share a common responsibility to protect the climate system. There is also general agreement that this responsibility falls differently on different States or groups of States.” See UN General Assembly, *United Nations Framework Convention on Climate Change*, Resolution/Adopted by the General Assembly, 20 January 1994, A/RES/48/189: Preamble, art 3, para 1 and art 4, para 2.

<sup>19</sup> In capital ‘C’s to distinguish from the traditionally accepted connotation of the notion.

<sup>20</sup> Thomas Cottier and others, ‘The Principle of Common Concern and Climate Change’ (2014) 52 *Archiv des Völkerrechts* 293; Cottier (n 16).

<sup>21</sup> Cottier and others (n 20) 318–321; Thomas Cottier, ‘Improving Compliance: Jus Cogens and International Economic Law’ in den Maarten Heijer and Harmen van der Wilt (eds), *Netherlands Yearbook of International Law 2015: Jus Cogens: Quo Vadis?* (TMC Asser Press 2016) 351–352.

<sup>22</sup> Zaker Ahmad, ‘Trade-Related Measures to Spread Low-Carbon Technologies: A Common Concern Based Approach’ in Thomas Cottier (ed), *The Prospects of Common Concern of Humankind in International Law* (Cambridge University Press 2020).

<sup>23</sup> Patricia W Birnie, Alan E Boyle and Catherine Redgwell, *International Law and the Environment* (3rd edn, Oxford University Press 2009) 358–360.

‘respective capabilities’). These dual factors led to the categorisation of developed and developing countries<sup>24</sup> in terms of climate commitments. The essence of the CBDR principle lies in the modulation of the common cooperative effort, highlighted by the Common Concern principle in terms of incurring cost and ability.<sup>25</sup>

While the essence of the CBDR principle has remained unchanged over time, its substantive purport has varied. Under the Paris Agreement, differentiation takes a granular character in the sense that it has been levelled out regarding some aspects, while being kept with respect to other areas.<sup>26</sup> Mitigation commitment is one area in which the differentiation has given way to universal burden-sharing.<sup>27</sup> Notwithstanding this, the developed countries remain under a responsibility to take the lead in making ambitious commitments, as well as in providing necessary support to the developing countries to reach conditional targets.<sup>28</sup> In the case of support measures, be it technology transfer or financial assistance, differentiation in the classic sense is carried into the Paris Agreement.<sup>29</sup>

The existence of the CBDR principle should imply that an origin-neutral trade measure pursuing a climate mitigation objective will fall short of being consistent with it when such measure results in equal costs being borne by the developed and developing countries alike. One illustration of this may be found in the analysis of the European Union’s (EU) Aviation Directive by Scott and Rajamani. The authors held that despite being a beneficial and trendsetting unilateral climate measure, one key shortcoming of the EU effort is the

<sup>24</sup> This is distinguished in the Framework Convention as ‘Annex-I’ parties and others.

<sup>25</sup> Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (1st edn, Oxford University Press 2017) 27–30, 52; See also Preamble, UN General Assembly, *United Nations Framework Convention on Climate Change*, Resolution/Adopted by the General Assembly, 20 January 1994, A/RES/48/189. It is acknowledged that “the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions”.

<sup>26</sup> Lavanya Rajamani, ‘Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics’ (2016) 65 *International and Comparative Law Quarterly* 493; Ralph Bodle and Sebastian Oberthür, ‘Legal Form of the Paris Agreement and Nature of its Obligations’ in Daniel Klein and others (eds), *The Paris Agreement on Climate Change: Analysis and Commentary* (Oxford University Press 2017) 97.

<sup>27</sup> Paris Agreement (n 16), art 4.2. The provision makes the obligation to submit mitigation commitments, and the adoption of appropriate domestic policies in accordance thereof, universal.

<sup>28</sup> Paris Agreement (n 16), art 4.5. It provides that “[s]upport shall be provided to developing country Parties for the implementation of this art, in accordance with arts 9, 10 and 11, recognising that enhanced support for developing country Parties will allow for higher ambition in their actions”.

<sup>29</sup> See, for example, the provisions regarding financial responsibilities in the Paris Agreement (n 16). Art 9.1 holds that “Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.”

insufficient consideration accorded to the principle of differentiated responsibility.<sup>30</sup> We take this into account in outlining an appropriate carbon pricing measure below.

### III. CARBON TAX AND THE WTO LAW: KEY CONTENTIOUS ISSUES

#### A. A Tax-Based Approach to Carbon Pricing

A carbon tax is an efficient way to correct product market failure. Unlike oft-cited examples of carbon pricing through a fiscal charge on fossil fuels,<sup>31</sup> what is proposed here is a tax imposed on the emission footprint (also ‘carbon footprint’) of a product.<sup>32</sup> Calculation of a complete product footprint may be a complicated task, as it would require a full life-cycle analysis of a product, spreading across numerous firms and jurisdictions. Instead, it is suggested that the tax be imposed on a per-unit share of the site carbon footprints. Compared to product footprints, site carbon footprints are easier to establish and implement. It would require an industry activity to be brought under the tax coverage to establish a system boundary,<sup>33</sup> accounting for the emissions within.<sup>34</sup> For any given accounting period, the approximate product footprint would be the per unit share of the site’s carbon footprint. Standards and processes necessary to perform such accounting are publicly available.

In the absence of comparable schemes of pricing adopted by all countries, which is likely to be the case at the outset, a domestically applicable carbon tax should also be imposed upon similar foreign products upon importation. An importing country would then require the foreign exporters to follow a

<sup>30</sup> Joanne Scott and Lavanya Rajamani, ‘EU Climate Change Unilateralism’ (2012) 23 *European Journal of International Law* 469, 481–487.

<sup>31</sup> See generally, Partnership for Market Readiness (PMR), *Carbon Tax Guide: A Handbook for Policy Makers* (World Bank 2017); Ivetta Gerasimchuk and others, ‘Stories from G20 Countries: Shifting Public Money out of Fossil Fuels’ (International Institute for Sustainable Development 2018) <<https://www.iisd.org/sites/default/files/publications/stories-g20-shifting-public-money-out-fossil-fuels-en.pdf>> accessed 15 October 2019.

<sup>32</sup> A dictionary definition of ‘carbon footprint’ is as follows – “the total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide; such an amount associated with a particular entity, such as a nation, community, building, or residence, or a given individual”. See Cutler J Cleveland and Christopher Morris (eds), ‘C’, *Dictionary of Energy* (2nd edn) (Elsevier 2015) 90–91 <<http://www.sciencedirect.com/science/article/pii/B9780080968117500032>> accessed 4 November 2019.

<sup>33</sup> A ‘system boundary’ determines the industrial activities that would count towards the footprint. This boundary is determined by the measurement standard used.

<sup>34</sup> Robin Kent, ‘Ch9 – Carbon Footprinting’ in Robin Kent (ed), *Energy Management in Plastics Processing* (3rd edn) (Elsevier 2018) 390–396 <<http://www.sciencedirect.com/science/article/pii/B978008102507950009X>> accessed 4 November 2019.

comparable foot printing method and declare the values prior to exportation, based on which the tax will be applied.

If a carbon tax is imposed on imports, it may systematically disadvantage the developing countries that are not on the climate technology frontier.<sup>35</sup> To counter this effect, to the extent that a carbon tax introduced by a developed country brings developing country exporters under its coverage, the latter should have access to a portion of the tax revenue to upgrade technologies to achieve reduction in the tax burden. This is a novel proposal, and it is important for two reasons. Recycling of revenue from the developed to the developing countries will, to a large extent, address any related complaints of protectionism.<sup>36</sup> This would also enhance the diffusion of clean technologies, an issue of utmost importance in itself.<sup>37</sup> Most importantly, by assisting the developing countries in technology upgradation, such a measure would also reflect the core climate change regime principle of CBDR,<sup>38</sup> as outlined earlier.

## B. Points of Contention with Trade Rules

A carbon tax of the form prescribed hereinabove comes into potential conflict with the trade rules when the tax is also imposed on similar imports coming into the domestic market – a process known as ‘border adjustment’.<sup>39</sup> A key question, at the very outset, is whether a tax is eligible for adjustments at the border. In simple terms, Article II:2(a) of the GATT allows a charge to be applied at the border on final products, or their inputs; provided the charge

<sup>35</sup> The fear of ‘green protectionism’ is not new, and still remains. Walden Bello, ‘The Threat of Green Protectionism’ (1997) 1 BRIDGES<<https://www.ictsd.org/bridges-news/bridges/news/the-threat-of-green-protectionism>> accessed 4 November 2019; Maria Victoria Lottici, Carlos Galperin and Julia Hoppstock, ‘“Green Trade Protectionism”: An Analysis of Three New Issues That Affect Developing Countries’ (2014) 02 Chinese Journal of Urban and Environmental Studies 1450016; Frank Biermann, ‘The Rising Tide of Green Unilateralism in World Trade Law: Options for Reconciling the Emerging North-South Conflict’ (2001) 35 Journal of World Trade 421.

<sup>36</sup> Environmental protectionism is a long-standing concern expressed by the developing countries at the WTO. See ‘Doha Ministerial Declaration’ (WTO, 2001) WT/MIN(01)/DEC/1 para 35(i).

<sup>37</sup> Author’s forthcoming thesis further elucidates upon these aspects. See Zaker Ahmad, ‘WTO Law and Trade Policy Reform for Low-Carbon Technology Diffusion: Common Concern of Humankind, Carbon Pricing and Export Credit Support’ (PhD Monograph, University of Bern forthcoming).

<sup>38</sup> Anastasios Gourgourinis, ‘Common but Differentiated Responsibilities in Transnational Climate Change Governance and the WTO: A Tale of Two ‘Interconnected Worlds’ or a Tale of Two ‘Crossing Swords’?’ in *Research Handbook on Climate Change and Trade Law* (Edward Elgar 2016) 33–34.

<sup>39</sup> In her book, Kateryna Holzer makes a comprehensive analysis of the border adjustability of a carbon tax. See generally, Kateryna Holzer, *Carbon-Related Border Adjustment and WTO Law* (Edward Elgar 2014); See also, Steve Charnovitz, ‘Border Tax Equalization’ in Jagdish N Bhagwati, Pravin Krishna and Arvind Panagariya (eds), *The World Trade System: Trends and Challenges* (The MIT Press 2016).

is equivalent to the comparable domestic tax so applied.<sup>40</sup> There are opposing views on whether a carbon tax can be covered under this provision. On one hand, some highlight the fact that with carbon pricing, the tax is not on an input that is incorporated into the product, but rather on emission, which is external to it. Moreover, a carbon tax is viewed as borne by producers, and hence not adjustable.<sup>41</sup> On the other hand, it has been argued that a carbon tax maybe viewed as an indirect tax. This means that when imposed, it will pass on to the final consumer.<sup>42</sup> Further, given that indirect taxes such as a Value Added Tax can be border-adjusted,<sup>43</sup> a carbon tax shall also be so applicable at the border.<sup>44</sup> While this paper does not go into the details of the divergent opinions, it subscribes to the latter view, especially given the fact that climate change is a Common Concern, and it would be premature to completely exclude the possibility of adopting a border-adjusted carbon tax.

The focus of this paper lies on the second key question that arises with respect to the assessment of the modulated nature of a carbon tax burden in the eye of the traditional WTO law. As per the dictates of Article II:2(a) mentioned above, the standard of equivalence between a charge imposed at the border and the related domestic tax is guided by the national treatment rule embodied in Article III of the GATT. The traditional wisdom is that as emission footprints are external to the product, a tax that varies based on such footprints would be considered to undergo fluctuations delinked from any inherent product attributes. As a result, it would be seen as discrimination each time the actual final tax burden falls relatively heavily on imports, rather than on the domestic product. We challenge this notion. Before going further, the standard and the related questions are detailed below.

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<sup>40</sup> General Agreement on Tariffs and Trade 1994, April 15 1994, [Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 UNTS 187, 33 ILM 1153 (1994)], art II:2(a). The text provides – “Nothing in this article shall prevent any contracting party from imposing at any time on the importation of any product:

(a) a charge equivalent to an internal tax imposed consistently with the provisions of para 2 of article III\* in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part.”

<sup>41</sup> Frieder Roessler, ‘India – Additional and Extra-Additional Duties on Imports from the United States’ (2010) 9 World Trade Review 265, 271.

<sup>42</sup> Gary Clyde Hufbauer, Steve Charnovitz and Jisun Kim, *Global Warming and the World Trading System* (Peterson Institute for International Economics 2009) 67–69; Charnovitz (n 39) 39.

<sup>43</sup> GATT, *Report by the Working Party on Border Tax Adjustments* (1970) L/3464 3–4.

<sup>44</sup> Joost Pauwelyn, ‘Carbon Leakage Measures and Border Tax Adjustments under WTO Law’ in Geert Van Calster and Denise Prévost (eds), *Research Handbook on Environment, Health and the WTO* (Edward Elgar 2013); Donald Regan, ‘How to Think about PPMs (and Climate Change)’ in Thomas Cottier, Olga Nartova and Sadeq Z Bigdeli (eds), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press 2009).

### C. The Standard of ‘National Treatment’

Article III of the GATT is relevant to the maintenance of the effective equality of competitive opportunities in the market for foreign products as compared to the same category of domestic products.<sup>45</sup> The principal obligation herein is that domestic fiscal and non-fiscal measures “should not be applied to imported or domestic products so as to afford protection to domestic production”. This general discouragement against using internal measures for protectionist purposes is the *telos* of the whole Article.<sup>46</sup> Of relevance to the present discussion is Article III:2, which deals with domestic taxation. The text of this provision<sup>47</sup> constructs a standard of non-discrimination composed of two avenues regulated by the prior decision on the nature of product comparability. If products under consideration are found to be ‘like’, there shall be no ‘excess’ taxation.<sup>48</sup> If products are not ‘like’, but nevertheless ‘directly competitive and substitutable’, applicable taxes maybe dissimilar but may not be applied ‘so as to afford protection’ (SATAP) to the domestic production.<sup>49</sup>

As is well known, an apparent breach of the GATT provision can still be maintained by a Member as long as it can be justified under one of the available carve-outs. Most prominent in this regard is Article XX. The two-tiered structure<sup>50</sup> of the provision requires first that the specific goal sought to be pursued can be brought under the scope of the Article (*i.e.* provisional justification). Among the policy goals listed in Article XX of the GATT, the most relevant in this regard is the opportunity to save measures that protect exhaustible

<sup>45</sup> It was decided from very early on that the purpose of art III was to “protect expectations of the [Members] as to the competitive relationship between their products and those of the other [Members]”. See *United States - Section 337 of the Tariff Act of 1930*[1989] GATT Panel BISD 36S/345 [5.2.2].

<sup>46</sup> Erich Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (Oxford University Press 2009) 191.

<sup>47</sup> General Agreement on Tariffs and Trade 1994(n 40),art III(2): “The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in para 1.”

<sup>48</sup> *Japan – Taxes on Alcoholic Beverages* [1996] Appellate Body Report WT/DS8/AB/R; WT/DS10/AB/R; WT/DS11/AB/R, DSR 1996:1 97 [19–24].

<sup>49</sup> *ibid* 24–25.

<sup>50</sup> *United States – Standards for Reformulated and Conventional Gasoline* [1996] Appellate Body Report WT/DS2/AB/R, DSR 1996:1 3 22; *United States – Import Prohibition of Certain Shrimp and Shrimp Products* [1998] Appellate Body Report WT/DS58/AB/R, DSR 1998:VII 2755 [119–121].

resources,<sup>51</sup> and those that safeguard life and health.<sup>52, 53</sup> The second requirement is that the inconsistent measure be implemented in a fair manner (*i.e.* satisfying the *chapeau* requirement).

#### D. Key Questions Relating to Emission Footprints

The question of the relevance of emission footprints would first arise at the product comparison stage. To determine ‘likeness’ between products as a precursor to the analysis of discriminatory treatment, a Panel would generally look at four categories of product attributes, namely, the physical properties, end usage, consumer preference, and tariff classification.<sup>54</sup> The foremost question would be whether the emission profile of a product can find a place in the above fourfold categories or not. If not, then a related question is, to what extent new product attributes can be included in that list. It is also pertinent to ask how far the overall assessment may reasonably be expected to differ in case products’ emission footprints are taken into account.

With regard to discrimination analysis, the principal question is whether, especially in the context of climate change being a common concern of humankind, it is appropriate to conclude that a well-designed carbon tax will be discriminatory solely due to its varying incidence on different groups of products. This, in turn, would lead to asking whether the meaning of ‘so as to afford protection to domestic production’ in the context of Article III:2 of the GATT could be understood differently or not.

There is already some agreement among scholars that the GATT general exception clause can help maintain climate-motivated trade rules that are WTO-inconsistent, as long as these measures are designed with the provision’s requirements in mind. The paper instead looks at the *chapeau* requirement to implement the important Common but Differentiated Responsibility in relation

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<sup>51</sup> General Agreement on Tariffs and Trade 1994 (n 40), art XX(g): “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption”.

<sup>52</sup> General Agreement on Tariffs and Trade 1994 (n 40), art XX(b): “necessary to protect human, animal or plant life or health”.

<sup>53</sup> Gabrielle Zoe Marceau, ‘The Interface between the Trade Rules and Climate Change Actions’ in Deok-Young Park (ed), *Legal Issues on Climate Change and International Trade Law* (Springer 2016) 13–15; Joel P Trachtman, ‘WTO Law Constraints on Border Tax Adjustment and Tax Credit Mechanisms to Reduce the Competitive Effects of Carbon Taxes’ (Resources for the future (RFF) 2016) 17; Holzer (n 39). Additionally, the public morals carved out in art XX(a) of the GATT could possibly be used.

<sup>54</sup> *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* [2001] Appellate Body Report WT/DS135/AB/R, DSR 2001:VII 3243 [101]. It should be noted that the Appellate Body highlights the “physical” properties as the comparable category, although the source of interpretation *i.e.* the Border Tax Adjustment report from a GATT-era Working Party only mentions a broader category *i.e.* the “properties, nature and quality” of the products. *See* GATT (n 40).

to the trade measure. This raises the question whether this is the optimal method to integrate differentiated responsibility considerations in implementing a carbon tax.

#### IV. THE ROLE OF EMISSION FOOTPRINTS IN PRODUCT COMPARISON

##### A. The Present Approach to Interpreting ‘Likeness’

The present approach to the comparison between domestic and foreign product groups to establish ‘likeness’ is a well-attuned standard that calls for flexible analysis of circumstances. This has been developed by numerous Panels and the Appellate body over several disputes,<sup>55</sup> taking explicit recourse to the Vienna Convention.<sup>56</sup> Below, we summarise the key points of relevance for the paper.

First and foremost, “a determination of ‘likeness’ under Article III:4 is, fundamentally, a determination about the nature and extent of a competitive relationship between and among products”.<sup>57</sup> This guides the overall exercise in which different product attributes are compared to each other.

As a manifestation of effective interpretation,<sup>58</sup> the meaning and scope of ‘likeness’ is congruent across the different places in which it appears. For Article III:2, the specific implication is that the combined scope of the two iterations (*i.e.* like products and directly competitive and substitutable (DCS products) in the provision is similar to that of the single iteration in Article III:4 with respect to national treatment regarding domestic regulations.<sup>59</sup> As a result, under Article III:2, ‘like product’ is given a narrow meaning so as not to encroach upon the latter category of DCS products.<sup>60</sup> We will see later that

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<sup>55</sup> *Japan – Taxes on Alcoholic Beverages* (n 48) 10; *United States – Standards for Reformulated and Conventional Gasoline* (n 50) 17; *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) paras 101–102.

<sup>56</sup> See, particularly, Vienna Convention on the Law of Treaties (United Nations, 1969) 1155 UNTS 331, 8 ILM 679, arts 31, 32.

<sup>57</sup> *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) 99. Arguably, the same standard should be employable for the DCS products.

<sup>58</sup> In *United States – Standards for Reformulated and Conventional Gasoline* (n 50) 23, the principle of effectiveness is described by the Appellate Body as “[...] that interpretation must give meaning and effect to all the terms of the treaty. An interpreter is not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility”. In *Japan – Taxes on Alcoholic Beverages* (n 48) 13, effectiveness is a “fundamental tenet”.

<sup>59</sup> *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) para 99.

<sup>60</sup> The concept of DCS is derived from reading art III:2 of the GATT, along with the interpretative notes. See *Japan – Taxes on Alcoholic Beverages* (n 48) 19–20.

the way the dividing line is drawn has implications for the final verdict regarding a carbon tax.

Further, as already mentioned, with aid<sup>61</sup> from the Border Tax Adjustment (BTA) report,<sup>62</sup> likeness analysis is standardised as a comparison between four categories of attributes of the products. However, it ought also to be remembered that the standardisation arises out of expedience and not out of a treaty provision. In the *EC – Asbestos* case, the Appellate Body was clear that the goal in a ‘like product’ analysis is the assessment of all evidence regarding products in a competitive relationship, irrespective of whether the BTA framework is followed.<sup>63</sup>

## **B. The Role of Emission Footprints**

### ***(a) Admissibility of Emission Footprints as a Considerable Factor***

In case of a carbon tax, the question before the Panel in the likeness determination stage would be whether differences in the size of emission footprints between product sought to be taken into account when the competitive relationship between the misassessed.<sup>64</sup> Operating from the position that emission footprints are not legally prohibited from entering into the comparison process, arguments on behalf of their eligibility for consideration is laid out below.<sup>65</sup>

Depending on the circumstances of the case, emission footprints may fall into one of the standardised categories.<sup>66</sup> The most likely would be consideration under consumer preferences. In the backdrop of growing consumer awareness all across the world,<sup>67</sup> as well as increasing citizens’ movements for better climate action, it is already known that consumer choice is influenced, albeit

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<sup>61</sup> Pursuant to art 31(3)(b) of the Vienna Convention on the Law of Treaties (n 56), a GATT panel initiated the practice that has remained unchallenged since. See *United States – Standards for Reformulated and Conventional Gasoline* [1996] Panel Report WT/DS2/R, DSR 1996:I 29 [6.8].

<sup>62</sup> See (n 53).

<sup>63</sup> *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) 103.

<sup>64</sup> Marceau (n 53) 11–13; Trachtman (n 53) 13.

<sup>65</sup> For more details, see, Ahmad (n 22).

<sup>66</sup> The closest parallel that can be drawn with the available example is that of *EC - Asbestos*, where the Appellate Body found fault with the Panel’s analysis for failing to take into account the health risks (carcinogenicity) associated with the physical properties (asbestos fibres) of one group of products. See *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) paras 114–115.

<sup>67</sup> ‘Act Now’ (Extinction Rebellion) <<https://rebellion.earth/act-now/>> accessed 3 November 2019.

in different degrees, by the emission impact of a product.<sup>68</sup> However, this may vary across products and markets.

It can also be argued that the consideration of only physical properties is too constrained a category, which restricts the discretion of a Panel<sup>69</sup> in making assessments. It has already been noted that the BTA report in the relevant part mentions as a comparator “the properties, nature and the quality of products”,<sup>70</sup> which is read narrowly by the Appellate Body in *EC – Asbestos* as “physical” properties.<sup>71</sup> A wider reading of this category would enable bringing within the scope of comparison analysis, and the understanding of product properties, non-physical attributes such as emission externalities.

Consideration of differences in emission footprints between products while determining likeness is in line with the dictates of effective interpretation. One tenet of the effectiveness principle is to consider a treaty “as a whole and having a meaning and effect”.<sup>72</sup> The refusal to take into account a product’s crucial impact on the environment would frustrate the goal of the Preamble to the Marrakesh Agreement, which seeks to ensure “*optimal* use [of resources] in accordance with the objective of sustainable development”.<sup>73</sup> Therefore, making emission footprints an admissible factor of product comparison would further ensure that due regard is given to the quality and sustainability of long-term economic development.

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<sup>68</sup> Aindrila Biswas and Mousumi Roy, ‘Green Products: An Exploratory Study on the Consumer Behaviour in Emerging Economies of the East’ (2015) 87 *Journal of Cleaner Production* 463; Mayank Bhatia and Amit Jain, ‘Green Marketing: A Study of Consumer Perception and Preferences in India’ (2013) 1 *Electronic Green Journal* <<https://escholarship.org/uc/item/5mc39217>> accessed 3 November 2019; Céline Michaud and Daniel Llerena, ‘Green Consumer Behaviour: An Experimental Analysis of Willingness to Pay for Remanufactured Products’ (2011) 20 *Business Strategy and the Environment* 408.

<sup>69</sup> *Japan – Taxes on Alcoholic Beverages* (n 48) 22. The Appellate Body notes, “[w]e do not agree with the Panel’s observation in para 6.22 of the Panel Report that distinguishing between ‘like products’ and ‘directly competitive or substitutable products’ under art III:2 is ‘an arbitrary decision’. Rather, we think it is a discretionary decision that must be made in considering the various characteristics of products in individual cases.”

<sup>70</sup> GATT (n 40) para 18.

<sup>71</sup> *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (n 54) para 101; Recently, in the dispute *Brazil – Taxation*, the Panel chose to align with the broader BTA category instead of limiting itself to the narrow ‘physical’ properties criteria. See *Brazil – Certain Measures Concerning Taxation and Charges* [2017] Panel Report WT/DS472/R; WT/DS/497/R [7.122].

<sup>72</sup> Isabelle Van Damme, *Treaty Interpretation by the WTO Appellate Body* (Oxford University Press 2009) 279.

<sup>73</sup> Preamble, Marrakesh Agreement Establishing the World Trade Organization 1994, 1867 UNTS 154; 33 ILM 1144, (1994) (emphasis added).

### **(b) Possible Outcome**

With the inclusion of products' emission footprints as one of the considerations in the product comparison stage, the outcome would still depend on the type of products compared, the evidence available, and the nature of the market in each case. In a possible weighing exercise between two otherwise identical products varying only with respect to emission footprints, it could be foreseen that identical end-use and tariff classification of the products would be assessed against their differences in properties and consumer preferences due to embedded emission. One important implication is that such differences would put the compared products beyond the narrow scope of 'like products' under the first sentence of Article III:2 of the GATT.

Charnovitz has drawn attention to the relevance of the Appellate Body reasoning in the *Canada – Renewable Energy* dispute in the above regard.<sup>74</sup> In an attempt to define the relevant market to make a benefit analysis in the context of the WTO Subsidies Agreement, the Appellate Body came to the conclusion that electricity from the renewable resources constituted a different market, and that the prices therein were not comparable to the prices in the wholesale electricity market.<sup>75</sup> It was highlighted that the result of a similar conclusion made in the GATT context would be that products differing in terms of emission footprints would neither be 'like', nor 'directly competitive and substitutable'.<sup>76</sup>

However, it should be recalled that the likeness analysis is purposed to uncover the nature and extent of the competitive relationship between products in a given market. From this point of view, there is little merit in the general argument that due to the differences in emission footprints, the products do not compete at all, or find themselves in different markets.<sup>77</sup> It is particularly manifested when it is considered that the rationale of market failure prevention driving a policymaker to introduce a carbon tax measure is based on the assumption of such competition. The most plausible conclusion would be that similar products with a significant magnitude of difference in emission footprints would be considered 'directly competitive and substitutable'. The importance of emission footprint-related considerations in this stage would lie in bringing products' competitive relationships to the DCS category, which would otherwise be considered 'like' under the Article III:2 of GATT.

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<sup>74</sup> *Canada–Certain Measures Affecting the Renewable Energy Generation Sector/Canada – Measures Relating to the Feed-in Tariff Program* [2013] Appellate Body Report WT/DS412/AB/R; WT/DS426/AB/R, DSR 2013: I 7.

<sup>75</sup> *ibid* 5.177-5.178.

<sup>76</sup> Charnovitz (n 39) 40.

<sup>77</sup> The different markets argument, especially when applied to a product category comprising of items of many different levels of embedded emission, would lead to the absurd conclusion that all these products exist in distinct markets.

Even though it is proposed here to give due consideration to products' emission footprints, the suggestion should not be generalised. This is because any such generalisation would open too widely the door for the admissibility of any non-physical properties into the likeness analysis. This, in turn, would vitiate the protectionism-prevention goal embedded in the non-discrimination obligation. While it is argued here that a non-physical attribute such as the emission footprint is a relevant consideration, it is to be taken into account only in highly deserving circumstances, as part of the weighing exercise of the Panels in dispute settlement. Climate change, being a common concern of humankind, provides any related signifiers exceptional weight in comparison to other non-related product attributes. Unless a non-physical attribute is of as crucial importance as preventing climate change is, it should not be weighed in a similar fashion.

Furthermore, there will be adverse consequences which arise from considering similar products as being not alike at all due to the difference in embedded emissions. This will truncate the discrimination analysis at this stage, and preclude the Panel from the opportunity of tempering the measure with necessary considerations for the developing countries. We return to this point later.

## V. DISCRIMINATION DUE TO VARYING INCIDENCE OF A CARBON TAX

Academics tend to converge on the view that tax distinctions based on grounds that do not qualitatively or characteristically change a product would fail to pass the non-discrimination threshold.<sup>78</sup> Here, we look at each of the two directions discrimination analysis may take depending on the outcome of the likeness assessment. In both cases, however, the Panels will examine the actual tax burdens as applicable on the products, instead of the identical nominal rates of tax.<sup>79</sup>

### A. Tax “in excess”

In case the compared products are found to be ‘like’, any taxation of imports ‘in excess’ of the domestic products will be discriminatory. The understanding of excess taxation under current jurisprudence offers no flexibility. Even a minuscule variation is liable to be found as discriminatory.<sup>80</sup> As a

<sup>78</sup> Trachtman (n 53) 10–13; Marceau (n 53) 11–12.

<sup>79</sup> According to the Panels, it would otherwise open an opportunity to circumvent the non-discrimination obligation through ingenious tax designs. See *Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather* [2001] Panel Report WT/DS155/R, DSR 2001:V 1779 [11.183]; *Thailand – Customs and Fiscal Measures on Cigarettes from the Philippines* [2011] Panel Report WT/DS371/R, DSR 2011:IV 2299 [4.95-4.96].

<sup>80</sup> *Philippines – Taxes on Distilled Spirits* [2012] Panel Report WT/DS396/R, WT/DS403/R, DSR 2012:VIII 4271 [7.152-7.153]; *Chile – Taxes on Alcoholic Beverages* [2000] Panel Report

result, under this path, a carbon tax would surely be in breach of Article III:2 of the GATT, subject to ex-post justification under one of the exception clauses.

## B. [S]o as to afford protection” (SATAP)

Following the above conclusion that, in all probability, products differing only on account of embedded emission would be considered as competing and substitutable, the standard of discrimination in the second sentence is relatively more likely to come into play. Under this provision, the tax burdens on compared products may be dissimilar, even beyond a minimum threshold, subject to fulfilment of the condition that the measure is not applied “so as to afford protection to domestic production”.<sup>81</sup> The standard emerges from the interpretative context of Article III:1.<sup>82</sup> The existence or otherwise of subjective protectionist intent is irrelevant in this regard.<sup>83</sup> Under the SATAP requirement, according to the Appellate Body, protective application of a measure is to be determined through objective analysis on a case-by-case basis.<sup>84</sup> Such an analysis should take into account all relevant facts, including its design, structure, and overall application.<sup>85</sup>

Existing comparable instances of such discrimination findings predominantly involve different domestic taxation schemes for alcoholic beverages. In a variety of WTO disputes where a tax rate was found to be in breach of the SATAP standard, the applicable tax rates varied on either the alcohol content<sup>86</sup> or the ingredients used<sup>87</sup> in each case, resulting in a relatively large share of

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WT/DS87/R, WT/DS110/R, DSR 2000:I 303 [7.90]; *Japan – Taxes on Alcoholic Beverages* (n 49) 24. In the last mentioned dispute, the Appellate Body held that “even the smallest amount of ‘excess’ is too much”.

<sup>81</sup> *Japan – Taxes on Alcoholic Beverages* (n 48) 24.

<sup>82</sup> This applies to the first sentence of art III:2, as well as art III:4, of the GATT; See *Japan – Taxes on Alcoholic Beverages* (n 48) 18; See *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* [2014] Appellate Body Report WT/DS400/AB/R, WT/DS401/AB/R, DSR 2014:I 7 [5.115].

<sup>83</sup> This was the earlier ‘aim and effects’ approach taken by a GATT panel with respect to the determination of likeness in the context of the SATAP standard. The approach was quickly rejected in the WTO era. See *United States – Measures Affecting Alcoholic and Malt Beverages* [1992] GATT Panel DS 23/R-39S/206 [5.24-5.25]; *Japan – Taxes on Alcoholic Beverages* [1996] Panel Report WT/DS8/R; WT/DS10/R; WT/DS11/R, DSR 1996:I 125 [6.16]; Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization : Text, Cases and Materials* (4th edn, Cambridge University Press 2017) 360–362; Robert E Hudec, ‘GATT/WTO Constraints on National Regulation: Requiem for an “Aim and Effects” Test’ (1998) 32 *The International Lawyer* 32.

<sup>84</sup> *Korea – Taxes on Alcoholic Beverages* [1999] Appellate Body Report WT/DS75/AB/R, WT/DS84/AB/R, DSR 1999:I 3 [137].

<sup>85</sup> *Japan – Taxes on Alcoholic Beverages* (n 48) 33.

<sup>86</sup> *Chile – Taxes on Alcoholic Beverages* [2000] Appellate Body Report WT/DS87/AB/R, WT/DS110/AB/R, DSR 2000:I 281 [76].

<sup>87</sup> *Philippines – Taxes on Distilled Spirits* (n 80).

domestic products obtaining the benefit of the low tax burden.<sup>88</sup> In these disputes, the Appellate Body interpreted this requirement as one calling for a case-by-case inspection of the design, structure, and operation of the measure, as well as for a comprehensive and objective analysis of its structure.<sup>89</sup> Even when all domestic and imported DCS products are treated with a common and origin neutral tax standard, the measure in question could be found to be discriminatory if the incidence of the benefit falls upon domestic products.<sup>90</sup>

When the above standard is applied to a carbon tax, the outcome will oscillate unpredictably between discriminatory and otherwise. This is because the finding of discrimination would not only depend on whether the measure is designed to attain its purpose, but also whether the distribution of the final tax burden would lie more heavily on imported products. It also means that the more relatively climate-friendly domestic production processes are compared to those for imports, the greater the plausibility of finding a carbon tax measure discriminatory. Noting that such unpredictability of outcome is discouraging for policymakers, we briefly entertain below the possibility of an alternative assessment.<sup>91</sup>

### **C. Alternative Proposition: Taking Pre-Existing Distortions into Account**

As part of the SATAP analysis, it is possible to closely examine the price distortions in a market under consideration and assess a carbon tax in that context,<sup>92</sup> so that it is not automatically considered to be discriminatory. A carbon tax, when imposed, considers the existing market to be distorted,<sup>93</sup> necessitating intervention to restore an optimal equilibrium. As we see in the context of the national treatment analysis above, such interventions run the risk of being considered discriminatory, as they impose different tax burdens on products traditionally understood as competing with each other. The legal standard, as currently understood, may therefore result in an outcome that is unreasonable from an economic viewpoint, as the standard does not distinguish between measures that distort the market, and those that correct it.

A better understanding of the SATAP requirement is possible if it is recognised that it operates accurately as long as the objective situation it is applied to is not affected by market failures. Recalling that the protective application

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<sup>88</sup> *Chile – Taxes on Alcoholic Beverages* (n 80) para 7.159; *Mexico – Tax Measures on Soft Drinks and Other Beverages* [2006] Panel Report WT/DS308/R, DSR 2006:1 43 [8.95].

<sup>89</sup> *Philippines – Taxes on Distilled Spirits* [2012] Appellate Body Report WT/DS396/AB/R, WT/DS403/AB/R, DSR 2012:VIII 4163 [250]; *Japan – Taxes on Alcoholic Beverages* (n 48) 29.

<sup>90</sup> *Chile – Taxes on Alcoholic Beverages* (n 80) paras 7.140-7.142.

<sup>91</sup> For further details, see, Ahmad (n 22).

<sup>92</sup> Trachtman (n 53) 11–12.

<sup>93</sup> See s II(B) above.

of a trade measure is to be analysed taking all relevant factors into account, the market situation prior to the application of a carbon tax would definitely deserve consideration. In a well-functioning market, different fiscal treatment of like products must not be condoned. In contrast, where there is a situation of manifest market failure resulting in distorted prices of the products, the impact of fiscal interventions should be assessed keeping these distorted prices in mind. To the extent that the measures adopted work towards reinstating an equal competitive condition by accounting for negative externalities and correcting market failure, they should not be considered discriminatory. The notion of Common Concern of humankind indicates that with regard to climate change, such a market failure exists, necessitating appropriate actions in response. A carbon tax is one such action. Therefore, informed by the common concern concept, the SATAP standard can be applied in a way that makes a better assessment of a carbon pricing measure.

The above discussion leans towards the outcome that a WTO Member should have the liberty to correct price distortions in a market through positive interventions, with a view to creating effectively equal competitive opportunities in the market. This is a valid conclusion, which can be supported within the broader logic of the GATT. With respect to manifest distortive pricing practice such as dumping and subsidisation, Article VI of the GATT allows Members to adjust the product prices in question to restore equal competitive conditions. Similarly, to the extent that a group of products receives a price advantage due to uninternalised emission externalities imposed on the climate, a carbon tax corrects the distortion by pricing the negative externality. In this sense, a SATAP test conducted along the proposed lines is justified.

## VI. JUSTIFICATION ANALYSIS

Much has already been written about the possibility of bringing a carbon tax measure under the coverage of the GATT general exception provision. Provisional justification of a climate-motivated measure may not face much of a challenge. While this section nevertheless engages in the provisional justification analysis, the key contribution lies in linking the *chapeau* requirement to the need for respecting the differentiated responsibility principle of the climate regime.

### A. Provisional Justification

#### (a) *Article XX(g) – “relating to the conservation of exhaustible natural resources [...]”*

For the measure to be justified under Article XX(g), firstly, the exhaustible natural resource in question, and the need for protection of the same, must

be identified, and secondly, the ‘relating to’ standard needs to be satisfied. Furthermore, the measure also needs to be implemented in an even handed fashion (*i.e.* imposing similar restrictions on domestic production and consumption as well).

The phrase ‘exhaustible natural resources’ has probably received the most dynamic interpretation by the Appellate Body in the *US – Shrimp* dispute.<sup>94</sup> There, the Appellate Body reflected on the meaning of the term in light of the purpose of the WTO agreement and the subscription to sustainable development in the Preamble. The purpose itself was seen broadly in light of “contemporary concerns facing the community of nations”, and the responses of the international community thereto in different hard and soft law forms.<sup>95</sup> This approach is unique in appearing to suggest that universally accepted concerns (*e.g.* unsustainable use of resources) might allow for interpretative flexibility.<sup>96</sup> Applying the same standard of interpretation in the present case, it may be gathered that, since a long-term habitable climate is considered a global public good,<sup>97</sup> and since inadequate preservation of the same leads to its deterioration, which further makes it a common concern of humankind, it squarely fits the meaning of exhaustible natural resource under Article XX(g).

The rest of the compliance requirement under Article XX(g), namely the ‘relating to’ test and the even handedness requirement, would be met by the carbon tax measure with relative ease. The ‘relating to’ test, which is a laxer version of the necessity test detailed below, calls for a “close and genuine relationship of ends and means”<sup>98</sup> between the policy goal and the measure itself. Even handedness requires that the measure in question be applied to domestic production and consumption in the same manner. The direct relationship of the tax measure to emission regulation, and its design as a domestic tax that is also imposed on imports, would satisfy both these requirements.

**(b) Article XX(b) – “necessary to protect human, animal, plant life or health”**

A carbon tax would be justified under Article XX(b) if it is intended to avoid adverse impact on life and health due to climate change. This is obvious, but the key question here would rather be whether the imposition of a carbon

<sup>94</sup> *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (n 50) paras 129–134.

<sup>95</sup> *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (n 50) 131.

<sup>96</sup> The Panel in *EC-Biotech* also held that recourse to an international instrument to clarify ordinary meaning is not prevented by the fact that a disputing party is not a signatory to that instrument. *European Communities – Measures Affecting the Approval and Marketing of Biotech Products* [2006] Panel Report WT/DS292/R/ WT/DS293/R / Add.1 to Add.9 and Corr.1, DSR 2006:III 847 [7.94].

<sup>97</sup> S II(B) above.

<sup>98</sup> *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (n 50) para 136.

tax on imports for the purpose of climate mitigation and transfer of low-carbon technology can be considered ‘necessary’. According to the Appellate Body, necessity analysis is a “weighing and balancing”<sup>99</sup> exercise evaluating several factors, *i.e.* (i) the relative importance of the goal, (ii) the potential contribution of the measure to the goal, and (iii) the trade distortive impact and the reasonable availability of less distorting alternatives.<sup>100</sup>

Regarding the necessity determination of a carbon tax measure to prevent adverse impacts of climate change, the recognition of climate change as a common concern and the related elaborate rules regime (including the Paris Agreement), would showcase the importance of the policy goal pursued.<sup>101</sup> However, difficulty may arise regarding the determination of whether lesser trade-restrictive options are available or not. It could be argued that while emission mitigation can be in ways that do not affect international trade at all (*e.g.* afforestation), these approaches are not capable of regulating emission that a country ought to be responsible for because of importation. In this regard, a carbon tax remains one of the most efficient ways of regulation.

Under the weighing and balancing approach to determine necessity, the apparent trade restrictiveness of a measure would be balanced against the extent to which the measure is apt to make a material contribution over time to the policy goal, as well as the importance of the policy goal itself.<sup>102</sup> Overall, it remains a holistic exercise of the qualitative and quantitative analysis of all the three categories of factors.<sup>103</sup> Recognition of climate change as a common concern of not only one Member, but of humankind, undoubtedly attaches very high importance to the policy goal. Moreover, the potential of the carbon tax to reduce emissions domestically, as well as abroad, would vouch for its aptness

<sup>99</sup> *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef* [2001] Appellate Body Report WT/DS161/AB/R, WT/DS169/AB/R, DSR 2001:I 5 [159–162].

<sup>100</sup> *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* [2014] Panel Report WT/DS400/R, WT/DS401/R, DSR 2014:II 365 [7.630]; *Canada – Measures Affecting the Export of Civilian Aircraft – Recourse by Brazil to Article 215 of the DSU* [2000] Appellate Body Report WT/DS70/AB/RW, DSR 2000:IX 4299 [156, 178]; *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services* [2005] Appellate Body Report WT/DS285/AB/R, DSR 2005:XII, pp 5663 (Corr.1, DSR 2006: XII, 5475) [309–311].

<sup>101</sup> Actual subscription to the policy goal in an international instrument is not necessary, as the Members remain free to establish a suitable level of protection domestically, as long as the same is implemented evenhandedly. See *United States – Section 337 of the Tariff Act of 1930* (n 45) para 5.26. See also *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef* (n 99) para 176.

<sup>102</sup> *Canada – Measures Affecting the Export of Civilian Aircraft – Recourse by Brazil to Article 21.5 of the DSU* (n 100) paras 150–151; *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* (n 83) para 5.209. In both disputes, it was recognised by the Appellate Body that it is possible to qualitatively assess what a measure is apt to contribute in the long run.

<sup>103</sup> *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* (n 82) paras 5.214–5.215.

for contribution to the climate mitigation goal. In conclusion, a WTO Member should be able to justify imposition of a carbon tax as ‘necessary’.

## B. The Differentiation Requirement Under the Chapeau

The last step of justification analysis is meeting the requirements under the *chapeau*, which ensures that the manner of implementation does not exacerbate the WTO-inconsistency of a trade measure that has been found to be provisionally justifiable. Purposed to prevent misuse of the Article XX carve-outs,<sup>104</sup> the language of the *chapeau* prohibits the application of a measure in a way that - (i) causes “arbitrary or unjustifiable discrimination between countries where the same conditions prevail”, or (ii) acts as “disguised restriction on international trade”. Apart from the seeming difficulty in passing the *chapeau* test,<sup>105</sup> of specific interest here is the requirement to avoid arbitrary or unjustifiable discrimination between countries in similar situations. The requirement is important for several reasons. So far, this has been the only viable step in the WTO consistency analysis of a carbon tax where there is an opportunity to incorporate the dictates of the CBDR principle, which is itself a cornerstone of the international legal framework on climate change. Furthermore, in the absence of such a consideration, a carbon tax can easily serve as a vehicle for protectionism for many countries, especially the rich and technologically advanced ones. This requirement also allows a developing country to claim technology transfer supports to lower the emission footprints of their exports.

The first question would be what “same conditions prevail” would mean with respect to the implementation of a carbon tax, and whether it is possible to assume that same conditions prevail in all countries subject to a carbon tax.<sup>106</sup> Deciding whether “same conditions prevail” is an interpretative exercise, which, according to the Appellate Body, is better fulfilled by understanding the conditions in the context of the specific policy objectives.<sup>107</sup> This absence of consideration of the different conditions results in further discrimination that may be unjustifiable or arbitrary.<sup>108</sup> In the current case, the policy objective behind a carbon tax is the prevention of climate change. Both the trade and climate treaty regimes have widespread membership, and almost all WTO Members are also part of the climate treaty regime (*i.e.* the Framework Convention of 1992 and the 2015 Paris Agreement). Therefore, following the

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<sup>104</sup> *United States – Standards for Reformulated and Conventional Gasoline* (n 50) 22.

<sup>105</sup> Provisionally justified measures were found to be in breach of the *chapeau* requirement in several disputes, namely *US – Gasoline*, *US – Shrimp*, *US – Gambling*, *Brazil – Retreaded Tyres*, and recently, *EC – Seals*.

<sup>106</sup> Thus far, there has been no dispute where it has been found that prevailing conditions between countries are different.

<sup>107</sup> *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* (n 82) paras 5.299-5.303.

<sup>108</sup> *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (n 50) paras 165, 177.

rules of treaty interpretation,<sup>109</sup> the meaning “same conditions prevail” must be understood in the context of the climate responsibility principles. The key principle among these, the CBDR principle, as explained before, points to the historically disproportionate contributions by, and impacts suffered by, different countries, and therefore urges the developed countries (‘Annex I countries’, in the UNFCCC parlance) to assume a greater share of the burden. The general interpretative outcome would probably be that with respect to the mitigation obligations, same conditions do not prevail between developed and developing countries.

The second question is whether, if same conditions do not prevail, a common rate of tax would be unjustifiable. The answer would be yes. While modulating or withdrawing the tax on some parties would be counter-productive due to lower ambition, some form of support is required to appropriately reflect the CBDR approach. In this regard, the revenue recycling suggested earlier has a role to play. It is submitted that the developed countries, in particular, should commit any carbon tax revenue earned from the imports to a common fund, which can be used to support technology upgrades in developing country locations.<sup>110</sup> Experience gained from the Clean Development Mechanism, and from the implementation of the Technology Action Plans under the climate regime, could be fruitful in this regard.

## VII. SUMMARY AND OPEN QUESTIONS

In view of the worsening global climate, the trade regime cannot be expected, or allowed, to remain on the sidelines. It cannot be oblivious to the adverse effects which transboundary economic transactions are causing, especially in terms of emitting harmful greenhouse gases. Accounting for emission footprints is the need of the hour, which can be efficiently catered to with a carbon tax. Nevertheless, there are developmental and distributional questions that would arise with regard to the allocation of the burden of the tax. These questions would characterise and influence the assessment of a carbon tax measure under WTO law.

The paper finds that the evidence relating to emission footprints must be both relevant and admissible in WTO disputes over the breach of national treatment obligations in respect of carbon taxes. While comparing different attributes of the products under scrutiny, emission footprints could potentially be an important product property. It could also potentially influence consumer preference. Such considerations would then place those product groups that may otherwise share similar characteristics, wider apart. It has also been shown that there are convincing reasons to hold that taxes regulating emission

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<sup>109</sup> See, particularly, Vienna Convention on the Law of Treaties (n 56), art 31(3)(c).

<sup>110</sup> See for details, Ahmad (n 22).

footprints ought not to be considered discriminatory. Climate change is a common concern of humankind, and policy interventions to address this concern to restore market equilibrium should not be labelled as discriminatory, even when such intervention imposes different actual tax burdens upon competing products in order to ensure that negative externalities are reflected in the price.

One key problem is that if an analysis at this stage comes to the conclusion that a carbon tax is not discriminatory as it addresses a common concern, the opportunity to further accommodate the differentiated responsibility principle is forfeited. The CBDR is a foundational norm of the climate regime, and every climate-motivated action must take this into account by modulating the cost burden imposed upon developing countries. As the paper shows, currently, the *chapeau* of Article XX is the only provision that incorporates CBDR as a necessary norm in connection with carbon taxes.

Therefore, under the current framework of trade rules, the only way for a climate-motivated trade measure to account for differentiated responsibility is by first being labelled as a breach of rules, then by satisfying the provisional justification, and finally, by passing the *chapeau* test. This is unreasonable because, for instance, this construct does not provide any opportunity to incorporate CBDR considerations in cases where a carbon tax is not found to be discriminatory. It remains an open question how a better balance may be struck. One alternative could arguably be to take greater aid from the doctrinal proposition of Common Concern of Humankind at the stage of discrimination analysis itself, to introduce the necessity of equitable considerations. This paper has not analysed such an alternative.

Overall, it is clear that there still remains scope to further fine-tune the standard of discrimination in WTO law, especially the way in which the modification of the conditions of competition is understood in the context of any given market. This paper has elucidated the same in the scenario of climate change. There may also be a need for greater consideration of equity in making such assessments, and the doctrine of Common Concern of Humankind shows promise in this regard. Nevertheless, there is value in waiting, and hoping, for further positive development.