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CLEANING UP OUR ACT: USING THE AGREEMENT ON CLIMATE CHANGE TRADE AND SUSTAINABILITY TO CLARIFY WORLD TRADE ORGANIZATION RULES ON PROCESS AND PRODUCTION METHODS

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Contents

Abstract

This paper observes that uncertainty in the application of World Trade Organization (WTO) rules on 'like products' has prevented States from using trade measures that distinguish products by their levels of embedded carbon as part of their toolkit to support the adoption of more sustainable, low carbon production and processing measures (PPMs). It argues that there is potential for the environmental and trade impact of the Agreement on Climate Change, Trade and Sustainability (ACCTS) to be increased by broadening the scope of the environmental goods negotiations to provide tariff preferences for 'environmentally preferable products' with carbon footprints below a benchmark. Doing so could also enhance legal certainty as there is a low risk of a WTO Panel finding that ACCTS tariff preferences for 'environmentally preferable products' discriminated against 'like products' in breach of General Agreement on Tariffs and Trade (GATT) Article I.1. This is because the ACCTS participating countries' intend to extend the negotiated tariff preferences to all other WTO Members on an 'most-favoured-nation' (MFN) basis, and otherwise-identical products produced using less climate-friendly means could still be imported attracting the usual applied tariff rates. Though there are practical and implementation challenges that would need to be overcome during negotiations, agreeing tariff preferences for 'environmentally preferable products' in ACCTS would break new ground and serve as a lightning rod to normalise the adoption of trade measures to incentivise the transition to low carbon PPMs.

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Subjects and Topics

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I. INTRODUCTION

As multilateral trade negotiations at the World Trade Organization (WTO) have stalled in recent years, many States have resorted to developing new international trade rules through the negotiation of sectoral, bilateral or plurilateral trade agreements. One such initiative is the negotiation of an Agreement on Climate Change, Trade and Sustainability (ACCTS). Launched in September 2019 by the governments of Costa Rica, Fiji, Iceland, New Zealand, and Norway at the United Nations in New York, these negotiations aim to deliver a "first-of-its-kind agreement that will use trade rules to tackle climate change and other environmental issues".[1] Switzerland announced it had joined the initiative in January 2020.[2] These negotiations will address three key elements: the removal of tariffs on environmental goods and new and binding commitments for environmental services; disciplines to eliminate harmful fossil fuel subsidies; and the development of guidelines to inform the development and implementation of voluntary eco-labelling programmes and associated mechanisms to encourage their promotion and application.[3] Five Rounds of negotiations for the ACCTS have now occurred[4] and a ministerial-level meeting was held on 6 October 2021 to review progress.[5]

The environmental goods element of the ACCTS negotiation takes place against a backdrop of numerous prior attempts to negotiate tariff reductions for environmental goods.[6] In general, the modality for such negotiations is that trading partners agree a list of

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1 Rt Hon Jacinda Ardern "New Zealand leading trade agreement driving action on climate change and the environment" (press release, 26 September 2019).

2 New Zealand Ministry of Foreign Affairs and Trade "Trade ministers express support for the Agreement on Climate Change, Trade and Sustainability at the World Economic Forum, Davos 2020" (press release, 24 January 2020) <www.mfat.govt.nz/en/media-and-resources/trade-ministers-express-support-for-the-agreement-on-climate-change-trade-and-sustainability-at-the-world-economic-forum-davos-2020/>.

3 "Agreement on Climate Change, Trade and Sustainability (ACCTS) negotiations" New Zealand Foreign Affairs and Trade <www.mfat.govt.nz/en/trade/free-trade-agreements/climate/agreement-on-climate-change-trade-and-sustainability-accts-negotiations/>.

4 "ACCTS negotiating rounds" New Zealand Ministry of Foreign Affairs and Trade <www.mfat.govt.nz/en/trade/free-trade-agreements/trade-and-climate/accts-negotiating-rounds/>.

5 "Joint statement: Agreement on Climate Change, Trade and Sustainability (ACCTS) Trade Ministers' meeting" (6 October 2021) Beehive.govt.nz <www.beehive.govt.nz/release/joint-statement-agreement-climate-change-trade-and-sustainability-accts-trade-ministers>.

6 For a summary on WTO environmental goods negotiations, see Jaime de Melo *Negotiations for an Agreement on Trade, Climate Change and Sustainability: An Opportunity for Collective Action* (International Economics, 10 April 2020) <www.tradeeconomics.com/wp-content/uploads/2020/04/JDM-ACCTS-2.pdf> at 11. See also Asia Pacific Economic Cooperation

environmental goods to which tariff reduction or elimination is applied. In practice, this is not straightforward, and previous negotiations have either concluded on the basis of limited outcomes or have failed to conclude at all. Nonetheless, the ACCTS Environmental Goods Working Group appears to be following the well-trodden path of developing short- and long-lists of product nominations with the aim of building a consensus list of environmental goods. According to the New Zealand Ministry of Foreign Affairs and Trade:[7]

> Nominations are informed by existing work on environmental goods, including the list of 54 environmental goods agreed by APEC and work done under the (stalled) WTO Environmental Goods Agreement negotiations.

It has been noted, with some optimism, that the sensitivities that have derailed other environmental negotiations may be absent from ACCTS.[8] This could potentially mean that the negotiations can be concluded swiftly and "result in a removal of tariffs for a large list of environmental goods."[9] In theory, successful negotiations within the ACCTS to remove tariffs on environmental goods will have a positive impact on the environment:[10]

> Removing tariffs on environmental goods can support the global expansion of renewable energy, recycling, organic agriculture and other green activities. … For consumers, lower tariffs reduce prices, while for exporters they open up new markets and increase access to more innovative and cost-effective suppliers.

Doubts have, however, been cast on how effective the environmental goods component of ACCTS can be in terms of its environmental and trade impacts. The scale of the ACCTS negotiations is an obvious limitation as all of the participating countries are small economies with small populations,[11] though future accessions to the ACCTS should be

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[APEC] Committee on Trade and Investment "APEC Cuts Environmental Goods Tariffs" (press release, 28 January 2016) <www.apec.org/Press/News-Releases/2016/0128_EG.aspx>.

7 "ACCTS negotiating rounds", above n4.

8 De Melo, above n6, at 6.

9 At 6.

10 The Economist Intelligence Unit *Climate Change and Trade Agreements: friends of foes?* (International Chamber of Commerce World Trade Agenda, Report, 2019) at 21.

11 De Melo, above n6, at 4.

possible.[12] and the United Kingdom is already considering joining.[13] Also, applied tariffs on many manufactured goods in Iceland, New Zealand and Norway are already low.[14] This means the practical effect of the current ACCTS members lowering their applied tariffs through the environmental goods negotiations is likely to be negligible.

A further constraint, however, is that only a limited range of products are usually considered within the scope of environmental goods negotiations. Past negotiations have been guided by an Organisation for Economic Co-operation and Development (OECD) definition of environmental goods, which is focused on products that "measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems".[15] This limits the scope of negotiations to products that have a direct effect on the preservation of the environment when used.[16] For example, the APEC Environmental Goods initiative, which New Zealand has already implemented, resulted in tariff reductions to 5% or less on a most-favoured-nation (MFN) basis on only 54 environmental goods.[17] Analysis by de Melo based on the list of 411 environmental goods submitted for inclusion during the WTO Doha Round environmental goods

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12 "Joint Leaders' Statement on the launch of the 'Agreement on Climate Change, Trade and Sustainability' initiative" (25 September 2019) Beehive.govt.nz <www.beehive.govt.nz/sites/default/files/2019-09/ACCTS joint leaders statement.pdf>.

13 Hansard - UK Parliament (Monday 11 January 2021) <hansard.parliament.uk/Lords/2021-01-11/debates/EB7AC813-0961-48D3-B3C3-453D7AE89FCB/AgreementOnClimateChangeTradeAndSustainability> (Question to the Minister of State, Department for Business, Energy and Industrial Strategy and Department for International Trade, Lord Grimstone of Boscobel - Agreement on Climate Change, Trade and Sustainability).

14 Ronald Steenblik and Susanne Droege *Time to ACCTS? Five countries announce new initiative on trade and climate change* (International Institute for Sustainable Development, Blog, 25 September 2019) <www.iisd.org/articles/time-accts-five-countries-announce-new-initiative-trade-and-climate-change>. New Zealand's average applied tariff in 2017 was just 1.4%. "Tariff rate, applied, weighted mean, all products (%) – New Zealand" World Bank World Integrated Trade Solution Database <https://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS?locations=NZ>.

15 *Interim definition and classification of the environment industry prepared in conjunction with OECD/EUROSTAT* (OECD Informal Working Group on the Environment Industry, OCDE/GD(96)117, 1996).

16 The use of the term 'minimise' in the OECD definition, above n15, arguably brings in PPMs as a relevant consideration: for example, arguments that paper bags should be included because incentivising their use through lower tariffs may reduce reliance on plastic bags, a less environmentally-friendly alternative. However, the term is probably best understood in the context of products which directly reduce environmental harm, such as air filtration units to reduce soot.

17 APEC Committee on Trade and Investment, above n6.

negotiations indicates that "only Costa Rica and Fiji would have [tariff] reductions for about 10 products".[18]

There is potential for the environmental, trade and legal impact of the ACCTS to be increased by broadening the scope of the environmental goods negotiations to cover tariff preferences for 'environmentally preferable products'. These are "products which cause significantly less environmental harm at some stage of their life cycle (production/processing, consumption, waste disposal) than alternative products that serve the same purpose".[19] The ACCTS participating countries could negotiate rules to distinguish between products produced using low carbon production and processing measures (PPMs) that would be eligible for tariff preferences, and otherwise identical products produced via less climate-friendly means that would attract the usual applied tariff rate.

Section II of this paper summarises how trade measures, including tariff preferences, form a valuable part of the policy toolkit to support the adoption of more sustainable, low carbon PPMs. Section III discusses the uncertainty in the application of WTO rules on 'like products' to environmental PPM-based trade measures that has hindered States from implementing measures that distinguish products by their levels of embedded carbon. Section IV identifies the pathways by which legal certainty could be increased. It concludes that including tariff preferences for 'environmentally preferable products' in the ACCTS could be the most effective route available in the short-term, as features of the ACCTS reduce the risk of a successful challenge through WTO dispute settlement,[20] and increase the likelihood of the low carbon PPMs receiving acceptance by the WTO membership. Section V acknowledges the obstacles to negotiating rules low carbon PPM that would

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18 De Melo, above n6, at 6.

19 *Environmentally preferable products (EPPs) as a trade opportunity for developing countries* (United Nations Conference on Trade and Development (UNCTAD) Secretariat, UNCTAD/COM/70, 19 December 1995) at 7.

20 It should be noted that at the time of writing, the WTO Appellate Body is unable to hear appeals due to "ongoing vacancies". "Appellate Body Members" World Trade Organization <www.wto.org/english/tratop_e/dispu_e/ab_members_descrp_e.htm>. All ACCTS countries except Fiji have agreed that disputes between them could be appealed to the multi-party interim arbitration arrangement. New Zealand Ministry of Foreign Affairs and Trade "New Zealander appointed to WTO interim appeals arrangement" (press release, 4 August 2020) <www.mfat.govt.nz/en/media-and-resources/news/new-zealander-appointed-to-wto-interim-appeals-arrangement/>. All WTO Members remain able to request the establishment of panels to consider disputes and to raise trade concerns in the WTO Council for Trade in Goods. "GATT and the Goods Council" World Trade Organization <www.wto.org/english/tratop_e/gatt_e/gatt_e.htm>.

need to overcome during negotiations, and includes suggestions for how ACCTS participating countries could overcome them in order to unleash the ACCTS' potential to help us clean up our act for the future.

II. THE IMPORTANCE OF TRADE MEASURES TO INCENTIVISE LOW CARBON PRODUCTION AND PROCESSING METHODS

In 1992, States acknowledged the need to transition the global economy away from unsustainable patterns of production and consumption in Principle 8 of the United Nations Rio Declaration on Environment and Development:[21]

> To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption…

Almost 30 years later, in the context of New Zealand and at least 38 other countries declaring a 'climate emergency', this need is greater than ever.[22]

The global trading system has a crucial role to play in the green transition and the fight against climate change.[23] Under 'business as usual' settings, international trade is a contributor to global warming,[24] through the transportation between countries of products utilising natural resources, polluting end products, and goods with energy-intensive production.[25]

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21 United Nations Rio Declaration on Environment and Development (13 June 1992) (1992) 31 I.L.M. 874.

22 Fiona Harvey "UN secretary general urges all countries to declare climate emergencies" *The Guardian* (online ed, international, 12 December 2020). New Zealand's declaration of climate emergency was made by parliamentary motion: Hansard – New Zealand Parliament (2 December 2020) 749 NZPD (Motions – Climate Change – Declaration of Emergency).

23 Ricardo Melendez-Ortiz "Foreword" in James Bacchus *Triggering the Trade Transition: The G20's Role in Reconciling Rules for Trade and Climate Change* (International Centre for Trade and Sustainable Development, White Paper, 2018).

24 Robert Ireland "Global Warming, International Trade, and the Quantification of Carbon Emissions: Production-Based and Consumption-Based Accounting" WCO Policy Research Paper No. 38 (October 2016) <www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/research-paper-series/38_ireland_carbon_consumption_based_accounting.pdf?la=en>.

25 Barbara Cooreman *Global Environmental Protection through Trade* (Edward Elgar Publishing, Cheltenham UK, 2017) at 20.

Yet, international trade is also an intrinsic component in the many solutions that exist to solve the planet's climate woes.[26] Brandi notes that international trade flows are central for fostering the availability of climate-friendly technologies and products with lower levels of embedded carbon at competitive costs and at larger scale.[27] International trade can also "help compensate for or adjust to altered productive capacities caused by climate change, for example to ensure access to food or to support economic diversification."[28]

Interest in PPMs has been rekindled in the context of transition to a green economy in order to prevent devastating climate change from occurring. Though all goods to some degree cause environmental harm or affect the climate,[29] the carbon footprint[30] of a product can shed light on the extent to which that product is part of the problem – or the solution – to climate change. Carbon footprinting considers carbon emissions throughout a product's lifecycle, including its components or materials, the manufacturing process, packaging, transportation, use and disposal.[31]

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26 Ireland, above n24.

27 Clara Brandi *Trade Elements in Countries' Climate Contributions under the Paris Agreement* (International Centre for Trade and Sustainable Development, Issue Paper, March 2017) at 1.

28 At 1.

29 ZhongXiang Zhang *Trade in Environmental Goods, with Focus on Climate-Friendly Goods and Technologies* (East-West Centre, Working Papers: Economic Series No. 120, October 2011) at 3.

30 A 'carbon footprint' is defined in Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (International Organization for Standardization, Standard No. 14067, 2018) [ISO 14067] as the:

> … sum of greenhouse gas emissions and greenhouse gas removals in a product system, expressed as CO2 equivalents and based on a life cycle assessment using the single impact category of climate change. The CO2 equivalent of a specific amount of a greenhouse gas is calculated as the mass of a given greenhouse gas multiplied by its global warming potential.

31 Carbon foot-printing is based on Lifecycle Assessments, which assess the environmental aspects and potential impacts associated with a product, considering resource use, human health, and ecological consequences. 'Lifecycle Assessment' is defined in Environmental management — Life cycle assessment — Principles and framework (International Organization for Standardization, Standard No. 14040, 2006) [ISO 14067] as:

> … a technique for assessing the environmental aspects and potential impacts associated with a product, by:
> - compiling an inventory of relevant inputs and outputs of a product system;
> - evaluating the potential environmental impacts associated with those inputs and outputs;
> - interpreting the results of the inventory analysis and impact assessment phases in relation to the objectives of the study.

Trade measures are one of the policy levers available to governments to incentivise the transition to a green economy. Howse and Regan identify four reasons why States might consider imposing trade measures based on PPMs.[32] Firstly, a State might hope that foreign producers will be motivated to change their production techniques in order to gain access to its market. Secondly, the importing country may seek to reduce the market demand originating within its own borders for an environmentally unsound product, thereby reducing the global intensity of the environmental harm. PPM-based measures imposed by smaller countries are unlikely to have these effects, but if imposed by a powerful economy they could inflict considerable costs on exporting countries, which would need to invest in new technologies and develop higher standards to continue exporting their products.[33] This is the reason PPM-based measures have been criticised as "an intrusion into the business practices and policies of other countries"[34] and "a tool of eco-imperialism".[35] The perspective that rich country users of PPMs are coercing poorer countries into placing a higher value on the environment than it would otherwise consider appropriate has frequently resulted in resistance to PPMs in trade circles, especially by developing countries.[36] In response to arguments about the inherent extraterritorial effect of PPMs,[37] however, Howse and Regan observe that "nothing that has happened outside the border attracts, by itself, any criminal or civil sanction. Foreign producers can use whatever processes they want, and use them with impunity."[38] They go further to assert:[39]

> … if 'sovereignty' is the issue, one could as well say that to deny the importing country the right to exclude [a product produced] by a method it abhors would be an invasion of its sovereignty.

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32 Robert Howse and Donald Regan "The Product/Process Distinction – An Illusory Basis for Disciplining 'Unilateralism' in Trade Policy" (2000) 11(2) EJIL 249 at 274-275.

33 Thomas Cottier and others *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement* (World Trade Institute, Legal Opinion for the Swiss Federal Finance Administration, Swiss Federal Office of Energy and State Secretariat for Economic Affairs, 18 April 2014) at 31-32.

34 At 31.

35 Steve Charnovitz "The Law of Environmental PPMs in the WTO: Debunking the Myth of Illegality" (2002) 27(1) Yale J Intl L 59 at 62-63.

36 Thomas Cottier and others, above n33, at 31-32.

37 Thomas Cottier *The Role of PPMs in Extractive Industries* E15Initiative. International Centre for Trade and Sustainable Development and World Economic Forum (March 2016) at 3.

38 Howse and Regan, above n32, at 274.

39 At 275.

Thirdly, even if a PPM-based measure will not affect foreign producers' behaviour or make a meaningful contribution to addressing the global environmental harm, an importing country may nonetheless choose to impose it because it wants nothing to do with the results of an environmentally unsound manufacturing process: "some people do not want to benefit from or be associated with what they regard as wickedness even if they are unable to prevent it."[40] Fourthly, where similar standards for PPMs are being imposed on domestic producers, an importing State may seek to impose analogous measures on importers to 'level the playing field'. Howse and Regan note that this fourth reason "is the justification which suggests to many people that such restrictions are protectionist."[41]

The demonstration effect is a further reason that can be added to Howse and Regan's list: that an importing country may hope to encourage and legitimise similar regulatory steps being taken by other countries, particularly where such policies would assist addressing a global environmental challenge such as climate change.

States have been slow to realise the potential to utilise trade policy measures in support of the green transition to PPMs with lower carbon footprints. While some economies fear that the imposition of PPM-based trade measures to achieve non-trade concerns will lead to green protectionism, constrain economic development and threaten the multilateral trading system,[42] the prevailing anti-PPM rationale in at the WTO Geneva has grown out of sync with market and environmental realities.[43] International trade law will need to adapt to avoid a collision with measures taken to combat climate change, and "to provide space and clarity for countries to implement bold climate measures"[44] to implement the Paris Agreement to the United Nations Framework Convention on Climate Change.[45]

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40 Howse and Regan, above n32, at 275.

41 At 275.

42 Cooreman, above n25, at 21.

43 Robert Howse and Petrus van Bork *Options for Liberalising Trade in Environmental Goods in the Doha Round* (International Centre for Trade and Sustainable Development, Trade and Environment Series Issue Paper No. 2, 2006) at 11, citing Monica Araya "WTO Negotiations on Environmental Goods and Services: Maximising Opportunities?" (Yale Center for Environmental Law and Policy, Global Environment & Trade Study, 2003).

44 Melendez-Ortiz, above n23.

45 <https://treaties.un.org/doc/Treaties/2016/02/20160215%06-03%PM/Ch_XXVII-7-d.pdf> (opened for signature 16 February 2016, entered into force 4 November 2016).

III. THE CHILLING EFFECT OF UNCERTAINTY IN THE WTO'S 'LIKE PRODUCT' JURISPRUDENCE

One of the contributing factors to the slow uptake on low carbon PPM-based trade measures has been a lack of "legal certainty in the trade system for countries to administer climate measures that distinguish products based on their embedded carbon."[46] Early cases under the General Agreement on Tariffs and Trade[47] raised questions about the extent to which unilateral trade measures could be used to accomplish transboundary and extrajudicial environmental objectives.[48] This has prompted extensive debate on PPMs in the WTO. No doubt influenced by these early cases, Renato Ruggiero, then WTO Director-General, asserted in 1997 that PPM measures were not permissible due to their extra-territorial reach:[49]

> What a country cannot do under WTO rules, however, is apply trade restrictions to attempt to change the process and production methods – or other policies – of its trading partners. Why? Basically because the issue of production and process methods lies within the sovereign jurisdiction of each country.

The WTO Secretariat has since walked back this blanket statement, recognising that there are circumstances where States do need to distinguish between otherwise identical products by regulating their PPMs and that this is in fact reflected in the WTO rules, including the GATT Article XX exception and the Agreement on Technical Barriers to Trade[50] (TBT Agreement). Examples of the legitimate public policy reasons for States to utilise PPM measures range from ensuring food products are fit for human consumption by requiring certain cleaning and sanitising processes to be undertake during manufacture, to preventing

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46 Brandi, above n27, at 5.

47 General Agreement on Tariffs and Trade 1947 55 UNTS 194 (opened for signature 30 October 1947, provisionally entered into force 1 January 1948) [GATT 1947]. GATT 1947 is now incorporated in General Agreement on Tariffs and Trade 1994 1867 UNTS 190 (opened for signature 15 April 1994, entered into force 1 January 1995) (GATT 1994).

48 *United States – Restrictions on Imports of Tuna (Mexico)* GATT BISD, 39S/155, 3 September 1991 (Report of the Panel Unadopted) [*US – Tuna (Mexico)*] and *United States – Restrictions on Imports of Tuna* DS29/R, 16 June 1994, (Report of the Panel Unadopted) [*US – Tuna (EEC)*].

49 Renato Ruggiero "A Shared Responsibility: Global Policy Coherence for our Global Age" (speech to Conference on Globalisation as a Challenge for German Business: Export Opportunities for Small and Medium-Sized Companies in the Environmental Field, Bonn, 9 December 1997).

50 Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

individuals from profiting from unethical labour practices by prohibiting child or prison labour. According to the WTO Secretariat:[51]

> WTO Members agree that countries are within their rights under WTO rules to set criteria for the way products are produced, if the production method leaves a trace in the final product.

The debate continues, however, with respect to PPMs that are "without consequence and any bearing on the final quality of the product"[52] – known as non-product related- PPMs (NPR-PPMs). Since environmental measures are often aimed at the production process rather than at the product itself,[53] and are unremarkable in the finished product unless reflected in product labelling, they generally fall in the NPR-PPM category. For PPM measures based on levels of embedded carbon, this is always the case.

The crux of the issue lies in the WTO's non-discrimination principle that 'like products' should be treated alike regardless of their origin. This principle has been described by the WTO Appellate Body as "a cornerstone of the WTO and one of the pillars of the WTO trading system"[54] and is enshrined in core WTO disciplines, notably MFN in GATT Article I and national treatment in GATT Article III. Whether two products are in fact 'like' in any given case concerning MFN and national treatment has been pronounced "one of the most controversial issues" of WTO law.[55]

As there have been no Panel or Appellate Body reports directly addressing the consistency of low carbon PPM-based trade measures with WTO rules,[56] WTO Members have to

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51 "Environment: Issues: Labelling" World Trade Organization <www.wto.org/english/tratop_e/envir_e/labelling_e.htm>.

52 Cottier, above n37, at 4.

53 Cooreman, above n25, at 19.

54 *European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries*, WT/DS246/AB/R, 20 April 2004 (Report of the Appellate Body) at [101].

55 David Sifonios *Environmental Process and Production Methods (PPMs) in WTO Law* (Springer, Switzerland, 2018) at 97.

56 Christian Häberli *Potential conflicts between agricultural trade rules and climate change treaty commitments* (FAO, The State of Agricultural Commodity Markets (SOCO) Background Paper, 2018). This situation may change given upcoming WTO cases concerning palm oil. See discussion in Section IV below of *European Union - Certain Measures concerning Palm Oil and Oil Palm Crop-Based Biofuels* WT/DS593/1, 9 December 2019 (Request for Consultations by Indonesia) [*EU – Palm Oil (Indonesia)*], and *European Union and Certain Member States – Certain Measures Concerning*

extrapolate the likely position a Panel would take from existing case law. This is challenging for four main reasons.

A Early environmental PPM cases did not involve 'like product' analysis

The first disputes involving environmental PPMs were the *US -Tuna (Mexico)* and *US-Tuna (EEC)* cases, which both concerned an import prohibition on tuna caught in a way that injured dolphins.[57] Under the United States' measure, countries were able to seek certification to export tuna only if they could demonstrate that their dolphin kill rates did not exceed that of the United States' fleet by a given margin. A key point at issue in the cases was whether the measure should be considered against the national treatment rule in GATT 1947 Article III or the prohibition on quantitative restrictions in GATT 1947 Article XI. If Article III were applicable, the United States would have had the opportunity to argue that the method of production rendered the resulting products 'unlike', whereas the terms of Article XI precludes this line of argument. In both cases, the Panel ruled that Article III did not apply because the United States' regulation did not directly regulate or tax the product "as such", only their production processes.[58] In doing so, the Panel relied heavily on the use of the phrase "as such" in Article III and consideration of the physical characteristics of tuna products, declining to conduct a full 'like product' analysis[59] yet still pronouncing that the required PPM could not "have any impact on the inherent character of tuna as a product."[60] Sifonios criticises the panel for taking a "strict, and arguably too narrow, textual reading of Article III" which would not have been supported had the Panel examined the object and purpose of the provision as required by the customary rules of interpretation.[61]

The *United States – Import Prohibition of Certain Shrimp and Shrimp Products* cases after the formation of the WTO were the next to consider an environmental PPM-based environmental measure, namely an import prohibition for shrimp from countries not certified as using particular nets that prevented turtle bycatch.[62] Again, a 'like product'

Palm oil and Oil palm crop-based Biofuels WT/DS600, 19 January 2021 (Request for Consultations by Malaysia) [*EU – Palm Oil (Malaysia)*].

57 Above n48.

58 *US – Tuna (Mexico)*, above n48, at [5.11] and *US – Tuna (EEC)*, above n48, at [5.8].

59 See discussion in Section III.C below.

60 *US – Tuna (EEC)* at [5.9]. See also *US – Tuna (Mexico)* at [5.10] and [5.15].

61 Sifonios, above n55, at 93.

62 *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, 6 November 1998 (Report of the Appellate Body) [*US – Shrimp*] and *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by* Malaysia

analysis under GATT 1994 Article III was not conducted by the panel, as the complainants did not seek to argue the measure was inconsistent with that provision.[63] These cases nonetheless represented an important jurisprudential development. The Appellate Body's finding[64] that it was possible to justify an environmental NPR-PPM measure in accordance with GATT 1994 Article XX served to focus debate not on consistency with the underlying WTO rules, but on the suitability of Article XX to 'save' environmental protection measures from WTO inconsistency. Many States are already reluctant to take measures that are solely reliant on exceptions for their legality under WTO rules. Critics feared that the Appellate Body had made the standard so high that this would deter States from adopting trade measures aimed at the implementation of environmental principles.[65] This is not least because of the general principle of interpretation that exceptions to international treaties should be construed narrowly.[66] This has prompted some commentators to assert that Article XX cannot capture all of the areas for legitimate non-discriminatory regulatory intervention, and argue that some breathing space has to be created through judicial interpretation of the rules that will allow governments to intervene in order to pursue goals not explicitly mentioned in Article XX.[67] The WTO has started down this path through confirming that the exception must be read "in light of contemporary concerns of the community of nations about the protection and conservation of the environment."[68] The confirmation that clean air is an "exhaustible natural resource" within the scope of Article XX(g) is a clear example of this.[69] But whether States can take sufficient comfort from the Article XX exception when implementing environmental PPM measures is still unpredictable, and highly dependent on the choices WTO members make in terms of the

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WT/DS58/AB/RW, 21 November 2001 (Report of the Appellate Body) [*US – Shrimp Article 21.5 (Malaysia)*].

63 The complainants India, Malaysia, Pakistan and Thailand alleged breaches of GATT Articles I, XI and XIII, as well nullification and impairment of benefits.

64 *US – Shrimp*, above n62, at [146] and *US – Shrimp Article 21.5 (Malaysia)*, above n62, at [152].

65 Robert Howse "The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate" (2002) 27 Colum J Envtl L 489 at 493, and Sifonios, above n55, at 153.

66 Robert Jennings and Arthur Watts (eds) *Oppenheim's International Law Vol 1 Peace* (9th ed, Oxford University Press, Oxford, 2008) at 1279.

67 Petros C Mavroidis "Like Products": Some Thoughts at the Positive and Normative Level" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010) at 130.

68 *US – Shrimp* at [129].

69 *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, WT/DS2/AB/R, 20 May 1996 (Panel Report, as modified by Appellate Body Report) at 8. [*US – Gasoline*]

cases they bring to the WTO Dispute Settlement Body, as well as the decisions of individual panels.

B The product-related/non-product-related distinction is overly simplistic

As a consequence of the Panels in both the *US – Tuna* and *US – Shrimp* cases not having the opportunity to analyse the type of PPM at issue closely, WTO jurisprudence has not considered the implications for WTO consistency of different types of PPM measure. Instead there has been a focus in determining consistency with WTO rules based on whether the PPM at issue is product-related or non-product-related. Howse and Regan consider this unhelpful: [70]

> The product/process distinction has particularly little to recommend it as a bright-line rule for the world trading system. It would risk infecting the jurisprudence of GATT with arbitrariness and incoherence at a point where there are highly visible effects on domestic policies, and the legitimacy of the trading system itself is therefore very much at stake.

There are in fact a variety of ways that NPR-PPM-based trade measures can be structured. Charnovitz identifies three different categories of NPR-PPM measure, and argues that the WTO consistency of each type varies accordingly. [71] Firstly, there are 'government-policy' PPM standards which specify "laws or regulations of a foreign government regarding the production process, or its enforcement of them". An example is the Kimberley Process to prevent the revenue from diamond sales financing authoritarian regimes, oppression and conflict, for which a WTO waiver was required because it allowed importers to deny MFN market access rights to blood diamonds, thereby overtly discriminating based on the country of origin. [72] The *US – Tuna* cases also concerned this type of PPM since the measure at issue focused on the government policies in place in the country of origin. [73] It was argued that this type of measure did not provide an opportunity for affected producers to demonstrate if they were in fact using production techniques that would minimise injuring and killing dolphins. [74] So too did the *US-Shrimp* cases, which prohibited imports unless the country of origin either had a fishing environment that did not pose a threat of

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70 Howse and Regan, above n32, at 289.

71 Charnovitz, above n35, at 67.

72 *Extension of Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds*, WT/L/1039, 26 July 2018 (Waiver Decision). See discussion at Section IV below.

73 *US – Tuna (Mexico)*, above n48, at [2.8].

74 *US – Tuna (EEC)*, above n48, at [4.1] (Submissions of Interested Third Party - Australia).

the incidental taking of sea turtles in the course of shrimp harvesting, or it had been certified as having a regulatory programme comparable to the United States.[75] Charnovitz's second category encompasses "producer-characteristics" PPM standards, which set conditions for specific entities that manufacture or import goods. These are considered likely to constitute de facto[76] discrimination based on origin[77] because, even though the measure on its face is origin-neutral, the actual effect may be "to impose differentially disadvantageous consequences on certain parties" which are wrong or unjustifiable.[78] Finally, Charnovitz identifies a category of 'how produced' PPM standards, which contain specifications controlling the method of processing used for making the product. An example in the climate change context would be specifying benchmark for a product's carbon footprint which should not be exceeded. 'How produced' PPM standards are considered preferable to 'government policy' and 'producer-characteristics' PPM standards as they are more likely to be consistent with the WTO's non-discrimination rules.[79] Accordingly, the WTO's focus on the product-related/non-product related distinction has erroneously led to a finding of inconsistency of one type of PPM measure – government policy PPMs – being extrapolated as applicable to all types of PPM measure, however structured.[80]

C There is no definition of 'like product' and the WTO's analytical approaches have evolved

The drafters of the GATT failed to include a precise definition of the phrase 'like product' despite it appearing in GATT Articles I, II, III, VI, IX, XI, XVI and XIX, as well as the TBT Agreement, the Agreement on the Application of Sanitary and Phytosanitary

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75 *US – Shrimp*, above n62, at [3]-[4].

76 The Appellate Body has confirmed that GATT Article I and III both cover direct and indirect origin-based discrimination. *Canada – Certain Measures Affecting the Automotive Industry* WT/DS31/AB/R, 30 July 1997 (Report of the Appellate Body) at [78].

77 Charnovitz, above n35, at 107, considers that producer characteristics standards "… should be disfavoured because such a standard is too easy to tilt against foreign producers." Charnovitz also notes, at 91, that producer characteristics standards were found to violate GATT Article III in the decisions *United States – Measures Affecting Alcoholic and Malt Beverages,* GATT BISD, 39S/206 (Report of the Panel Adopted on 19 June 1992); *US – Gasoline*, above n69; and *Indonesia – Certain Measures Affecting the Automobile Industry* WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, 23 July 1998 (Report of the Panel) [*Indonesia – Autos*].

78 *Canada – Patent Protection of Pharmaceutical Products* WT/DS114/R, 7 April 2000 (Report of the Panel) at [7.101].

79 Charnovitz, above n35, at 68.

80 Charnovitz states, at 66, that "the debate on PPMs has made little progress in ten years because it conflates too many different types of measures."

Measures,[81] the Agreement on Safeguards,[82] and the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994.[83].[84] While Article 2.6 of the Anti-Dumping Agreement does contain a definition of "like product" based on physical characteristics, its application is expressly limited to that Agreement.[85]

In the absence of a definition of 'like product', successive WTO Panels have had to develop a framework for their analysis when they are called upon to determine the 'likeness' of two products under GATT Article I and GATT Article III. They routinely consider the four general elements mentioned in a 1970 report of the Working Party on Border Tax Adjustments, namely:[86]

i. the properties, nature and quality of the products (the physical properties of the product);
ii. the end-uses of the products (the extent to which the products are capable of serving the same or similar end uses);
iii. consumers' tastes and habits – more comprehensively termed consumers' perceptions and behaviour – in respect of the products (the extent to which consumers perceive and treat the products as alternative means of performing a particular function in order to satisfy a particular want or demand); and
iv. the tariff classification of the products.

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81 Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995) [SPS Agreement].

82 Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

83 Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995) [Anti-Dumping Agreement].

84 *Japan-Taxes on Alcoholic Beverages* WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, 1 November 1996 (Report of the Appellate Body) at 21 [*Japan – Alcoholic Beverages II*].

85 The Anti-Dumping Agreement, art 2.6, provides:

> Throughout this Agreement the term "like product" ("produit similaire") shall be interpreted to mean a product which is identical, i.e. alike in all respects to the product under consideration, or in the absence of such a product, another product which, although not alike in all respects, has characteristics closely resembling those of the product under consideration.

86 Sifonios, above n55, at 99.

Although these four factors have been considered in most Panel reports considering 'like products', the relative weight each is given has evolved over time as the right balance is sought between disciplining inappropriate market access barriers and safeguarding WTO Members' regulatory autonomy.[87] The Appellate Body has famously said: [88]

> The concept of 'likeness' is a relative one that evokes the image of an accordion. The accordion of 'likeness' stretches and squeezes in different places as different provisions of the WTO Agreement are applied. The width of the accordion in any one of those places must be determined by the particular provision in which the term 'like' is encountered as well as by the context and the circumstances that prevail in any given case to which that provision may apply.

Accordingly, it is well-established that the likeness of two products must always be determined on a case-by-case basis,[89] interpreted in light of the way the phrase is used in the Article in question.

The result of this case-by-case approach has, however, been considerable uncertainty for States about whether two particular products are considered 'like products'. Sifonios makes sense of the conflicting jurisprudence by drawing out three different theoretical approaches to 'like product' analysis that have developed over time: objective, economic and subjective.[90]

1 Objective approach to 'like product' analysis

The 'objective approach' concentrates on a product's objective features such as physical characteristics and tariff classifications, and is reflected in early GATT cases considering 'like products'. These early cases found that physical differences between products were not necessarily sufficient to render products 'unlike', as to accept this would undermine negotiated tariff commitments. This resulted in GATT panels finding that groups of products that consumers would likely differentiate between were nonetheless 'like products'. An example is the *Spain – Tariff Treatment of Unroasted Coffee* case, where the

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87 Sifonios, above n55, at 100.

88 *Japan – Alcoholic Beverages* II, above n84, at 21.

89 *United States – Certain Measures Affecting Imports of Poultry from China*, WT/DS392/R, 25 October 2010 (Report of the Panel) at [7.424] [*US – Poultry (China)*].

90 Sifonios, above n55, at 100. It should be noted that Sifonios' analysis is conducted in the context of GATT Article III, but the same considerations for 'like products' under Article III:2 apply to Article I. See *Indonesia –Autos*, above n77, at [14.141].

Panel considered different types of coffee beans to be 'like', despite organoleptic differences resulting from geographical factors, cultivation methods, the processing of beans, genetic factors, taste and aromas.[91] In the *Japan – Customs Duties, Taxes and Labelling Practices on Imported Wines and Alcoholic Beverages* case, products such as vodka, whiskey, grape brandy, other fruit brandy, still wine and sparkling wine were all determined to be 'like products' despite "minor differences in taste, colour and other properties".[92] In *US – Tuna (EEC)*, the physical characteristics of the products were again emphasised, with the panel finding that "none of the practices, policies and methods concerning the harvesting of tuna 'could have any impact on the inherent character of tuna as a product'."[93]

2 Economic approach to 'like product' analysis

Subsequent WTO cases have placed greater emphasis on the competitive relationship between products on the market when determining 'likeness', which Sifonios terms an 'economic approach'.[94] One possible reason for this change in approach is as:[95]

> … a reaction to the product-process distinction applied in the *US – Tuna* cases and an attempt, more generally, to interpret ['like product'] in a more deferent way for cases of *de facto* discrimination.

Initially, this was done in the context of considering the physical characteristics of the products. In *Mexico – Taxes on Soft Drinks and Other Beverages*, for example, beet sugar

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91 *Spain – Tariff Treatment of Unroasted Coffee*, L/5135 (Report of the Panel Adopted on 10 June 1981) at [4.6] [*Spain – Unroasted Coffee*]. William Davey "Chapter III: Most-Favoured-Nation Treatment" in *Non-Discrimination in the World Trade Organization: The Rules and Exceptions* (Online, 2012) notes, at 80, that the Panel's analysis was rather brief and considers:

> In today's world of ubiquitous coffee shops, the conclusion that coffee is a single product seems a bit odd. … Today, a Panel would be expected to make a more careful examination of the like product issue.

92 L/6216 (Report of the Panel Adopted on 10 November 1987) at [5.6] [*Japan – Alcoholic Beverages I*].

93 *US – Tuna (EEC)*, above n48, at [5.9]. It is important to note, however, that the *US –Tuna (EEC)* and *US – Tuna (Mexico)*, above n48, panel reports were never adopted. Unadopted panel reports have no legal status in the GATT or WTO systems, though the Appellate Body has also stated that the reasoning in such reports could still contain 'useful guidance' for subsequent panels. Sifonios, above n55, at 103, citing *Japan – Alcoholic Beverages II*, above n84, at 16.

94 Sifonios, above n55, at 108.

95 At 128.

and cane sugar were considered to be 'like' because of an identical molecular structure, same end uses and consumers' perceptions that both products were almost identical and under the same tariff classification.[96] More recently, the Appellate Body stated in *Philippines – Taxes on Distilled Spirits* that the physical characteristics and other criteria are examined "in order to make a determination about the nature and extent of a competitive relationship between and among products".[97] This means that products with very similar physical characteristics may not be 'like' if their competitiveness or substitutability is low, while products with physical differences may still be considered 'like' if those differences have a limited impact on the competitive relationship between them.[98]

It is important to note, however, that:[99]

> … the Appellate Body has not endorsed a purely economic approach based on econometric instruments, which means that the analysis of whether two products are like or directly competitive or substitutable is largely left to the discretion of panels and to their overall assessment of the relevant factors.

An example is *European Communities – Measures Affecting Asbestos and Asbestos Containing Products*,[100] where the Appellate Body was persuaded that evidence relating to consumers' tastes and habits would establish that the health risks associated with a highly carcinogenic product influenced consumers' behaviour, although it did not rely on empirical econometric studies.[101] Cottier observes that in the *EC – Asbestos* case "there was a direct link between products and their health effects" and asserts that this approach is less likely to be applicable to low carbon PPM-based measures since the negative effects of climate unfriendly products are less tangible to consumers.[102] However:[103]

> …the focus on the consumers' perspective logically means that products with different PPMs could be regarded as unlike if consumers treat them as unlike… even though it is also often pointed out that there would probably be few situations

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96 Sifonios, above n55, at 110, citing *Mexico – Taxes on Soft Drinks and Other Beverages* WT/DS/308/R, 7 October 2005 (Report of the Panel) at [8.27]-[8.36].

97 *Philippines – Taxes on Distilled Spirits*, WT/DS396/AB/R, WT/DS403/AB/R, 20 January 2012 (Report of the Appellate Body) at [119].

98 Sifonios, above n55, at 110-111.

99 At 112-113.

100 WT/DS135/AB/R, 5 April 2001 (Report of the Appellate Body) [*EC – Asbestos*].

101 Sifonios, above n55, at 114, citing *EC – Asbestos*, above n100, at [122].

102 Cottier and others, above n33, at 32.

103 Sifonios, above n55, at 115.

> in which enough consumers would indeed distinguish physically identical products on the basis of their PPM to make them 'unlike'.

One recent case may lend support for climate considerations supporting the differentiation of products in the market through the course of government regulation. Although *Canada – Measures Relating to the Feed-in Tariff Program* concerned subsidies rather than discriminatory treatment between products, in it the Appellate Body found that conventional and renewable energy production do not pertain to the same market.[104] Though the product in this case, electricity, is the same regardless of how it is generated, the Appellate Body looked at the different types of consumer contracts, the size of the customers and the type of electricity generated (base-load versus peak-load) as bases for differentiation of the electricity market, but the main justification for its findings was that "supply-side factors suggest that windpower and solar [photovoltaic (PV)] producers of electricity cannot compete with other electricity producers because of differences in cost structures and operating costs and characteristics."[105] Accordingly "markets for wind- and solar PV-generated electricity can only come into existence as a matter of government regulation."[106]

Despite the Appellate Body's apparent willingness to 'do the right thing' for renewable energy in *Canada – FIT Program*, reliance on consumer preferences would not guarantee an environmentally-friendlier outcome in every 'like product' analysis. Cooreman observes that "[n]otwithstanding good intentions, in most markets consumers are primarily guided by the price of products and less by, for instance, the environmental considerations of production" making it unlikely that sufficiently large group of consumers would change their preferences purely on environmental grounds.[107]

3 Subjective approach to 'like product' analysis

The subjective, or 'aims and effects' approach looks at the regulatory purpose of the measure in question and asserts that "two products are like if the regulatory measure distinguishing between them pursues protectionist intent and results in protectionist effects."[108] This approach arose in the context of textual analysis of GATT Article III,

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104 *Canada – Measures Relating to the Feed-in Tariff Program*, WT/DS412/AB/R, WT/DS426/AB/R, 24 May 2013 (Report of the Appellate Body) at [5.178] [*Canada – FIT Program*].

105 At [5.174].

106 At [5.175].

107 Cooreman, above n25, at 35.

108 Sifonios, above n55, at 105.

specifically the phrase "so as to afford protection to domestic production" in GATT Article III.1, which immediately raises questions for the extent to which it would be applicable in the context of other GATT Articles where that phrase is not used. Applying this approach in the context of GATT Article I would mean that tariff distinctions should only be prohibited if they discriminate between products for a protectionist purpose, that is as a means of avoiding negotiated tariff commitments. By contrast, measures that distinguished between products for legitimate non-protectionist reasons, such as the environmental impact of a product, would be permissible.[109] Opponents of the 'aims and effects' test fear that this would "render the exhaustive list of the general exceptions of Article XX inutile" and "could jeopardise the fundamental objective of the GATT to counter protectionist measures unrelated to any environmental concerns".[110] Such arguments are reminiscent of Bhagwati's 'slippery slope' argument where he asked how a line could be drawn between legitimate and protectionist PPM measures where there is no consensus on the ethical or moral value at stake.[111]

The Appellate Body ostensibly rejected the subjective approach in the *Japan – Alcoholic Beverages II* case when they stated:[112]

> It is not necessary for a panel to sort through the many reasons legislators and regulators often have for what they do and weigh the relative significance of those reasons to establish legislative or regulatory intent. … it does not matter that there may not have been any desire to engage in protectionism in the minds of the legislators or the regulators who imposed the measure.

The Appellate Body in *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* has also confirmed that "[a] panel is not required… to examine whether the detrimental impact of a measure on competitive opportunities for like imported products stems exclusively from a legitimate regulatory distinction."[113]

Some commentators disagree that a subjective approach has been completely ruled out, however. Howse and Regan consider that the Appellate Body's finding in the *Japan –*

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109 At 118.

110 At 123-124.

111 Jagdish Bhagwati "On Thinking Clearly About the Linkage Between Trade and the Environment" (2000) 5(4) Environment and Development Economics 483 at 491.

112 *Japan – Alcoholic Beverages II*, above n84, at 27.

113 WT/DS400/AB/R, WT/DS401/AB/R, 18 June 2014 (Report of the Appellate Body) at [5.93] [*EC – Seal Products*].

Alcoholic Beverages II case needs to be seen in the context of the arguments Japan was making about the interpretation of the phrase "so as to afford protection" in GATT Article III:[114]

> … what the Appellate Body is doing here is rejecting an argument made by Japan, that the panel is *legally required* to consider 'aims and effects' before finding that a measure 'affords protection'. … [T]he Appellate Body can be interpreted, at a minimum, as saying that in order to find that a measure 'affords protection', it is not necessary that there be a 'smoking gun' in the form of an explicit assertion of protectionist purpose by some legislator or government official.

Reading the Appellate Body's finding in this way would not necessarily preclude considering the 'aims and effects' of a tariff distinction in the context of determining whether such a distinction constituted de facto origin-based discrimination within the scope of GATT Article I. Similarly, Cooreman emphasises with regard to the *EC – Seal Products*[115] finding that the Appellate Body's instruction was that Panels are 'not required to' take the regulatory purpose into account, rather than that they 'should not' or 'cannot' do so.[116]

Others consider that the Appellate Body does in fact take the regulatory purpose of the measure into account in its jurisprudence on GATT Article I. Considering the findings in the *Spain – Unroasted Coffee* case,[117] it seems likely that the findings of 'likeness' may have been prompted by the lack of a rational explanation – other than discriminatory intent - for the need to distinguish between the products at issue. To permit the country in question to distinguish between those particular products with no apparent policy justification for doing so would have undermined the MFN tariff rates that had been negotiated by that country.[118]

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114 Howse and Regan, above n32, at 264-265.

115 *EC – Seal Products*, above n113.

116 Cooreman, above n25, at 42.

117 *Spain – Unroasted Coffee*, above n 91.

118 Robert E Hudec "Like Product": The Differences in Meaning in GATT Articles I and III" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010) at 115.

Howse and Regan consider it appropriate to examine the policy rationale that lies behind a measure:[119]

> Even where there are bindings, a commitment to limit the tariff on tuna, say, does not, absent special circumstances, seem like a commitment not to regulate on the basis of a new, non-protectionist policy to reduce dolphin mortality, when that problem comes to legislators' attention.

They illustrate this point using a hypothetical case of two complicated chemical molecules where a difference of only one atom results in one being harmless and the other "a dangerous explosive or a hideous neurotoxin".[120] The hypothetical chemicals would have greater physical similarity than vodka and shochu, two of the 'like products' in *Japan – Alcoholic Beverages II*,[121] but there would be a clear justification for different regulation. Howse and Regan conclude therefore that:[122]

> Regulatory distinctions must have a rational relation to some non-protectionist regulatory purpose; … therefore products must be treated the same … if they do not differ in any respect relevant to an actual non-protectionist regulatory policy.

The *EC – Asbestos* case[123] also demonstrates a willingness of the Appellate Body to view competition as a "normative question about whether consumers ought to look at two products as substitutable given their preferences and needs, rather than as an empirical economic question about revealed consumer behaviour",[124] thus taking into account the regulatory (public health) interest in imposing the measure.[125] In that case, the Appellate Body assumed that consumers preferred asbestos-free products without reference to evidence that was in fact the case, stating "[w]e are very much of the view that evidence relating to the health risks associated with a product may be pertinent in an examination of 'likeness'… ."[126] Sifonios agrees that following the *EC – Asbestos* case "social concerns about, for instance, health or environmental protection could indirectly be taken into account through such 'reasonable consumer test'."[127] He goes on to assert, however, that,

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119 Above n32, at 263.

120 At 260.

121 Above n 84.

122 Above n32, at 260.

123 *EC –Asbestos*, above n100.

124 Sifonios, above n55, at 120.

125 *EC – Asbestos*, above n100, at [113].

126 Cottier and others, above n33, at 32.

127 Sifonios, above n55, at 128.

if consumers do in fact differentiate between two products based on their PPMs, the rationale for the State entrenching the distinction in regulation is undermined:[128]

> It is rather when the market does not differentiate between two products that should be distinguished from an environmental viewpoint, i.e. when a market failure exists, that state intervention is required.

Consideration of a measure's 'aims and effects' would clearly provide WTO Members with greater ability to make distinctions between products "on the basis of legitimate reasons, including the cases in which the PPMs used by a set of similar products have a different environmental impact."[129] Howse and Regan assert that:[130]

> If the Appellate Body enforced any test that truly foreclosed consideration of aims and effects, it would do so only at a cost to its own legitimacy and the legitimacy of the treaty.

It should be noted here that as low carbon PPMs could be expected to reduce the global emissions of greenhouse gases, this would constitute an additional, non-protectionist justification for the measures.[131]

In summary, given the wide variety of fact scenarios that arise in practice and the evolution of approach, it is likely that States will have avoided implementing PPM-based trade measures due to the inherent unpredictability whether a 'like product' analysis will result in a finding of WTO consistency.

D The textual context is not always considered in 'like product' analysis

As noted above, the Appellate Body has confirmed that the textual context of the phrase 'like products' impacts on the 'like product' analysis.[132] Most case law on 'like product' is, however, focused on national treatment under GATT Article III, and the findings are usually extrapolated out to 'like product' analysis under GATT Article I. Recent judicial consideration of 'like products' in the context of MFN in GATT Article I is limited, which

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128 At 129.

129 At 123.

130 Howse and Regan, above n32, at 268.

131 Donald Regan "How to think about PPMs (and climate change)" in Thomas Cottier, Olga Nartova and Sadeq Bigdeli (eds) *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, Cambridge, 2009) at 99.

132 See discussion in Section III.C above.

presents difficulties for States considering applying different tariffs to products based on their carbon footprints.

GATT Article I provides:[133]

> 1. *With respect to customs duties* and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, *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.

It sets out four limbs that must be satisfied in order for a measure to be considered inconsistent with GATT Article I:[134]

i. That the measure at issue falls within the scope of application of Article I.1
ii. That the imported products are 'like' within the meaning of Article I.1;
iii. That the measure at issue confers an 'advantage, favour, privilege, or immunity' on a product originating in the territory of any country; and
iv. That the advantage is not extended "immediately and unconditionally" to all 'like products' originating in the territory of another WTO member.

Hudec argues that "the term "like product" in GATT Article I:1 should be interpreted to allow rather fine distinctions between products when it applied to product distinctions made by tariffs, but that the "like product" terms should not allow such fine distinctions when being applied to product distinctions made by internal taxes and internal regulations."[135] He observes that the policy goal of GATT Article III is to prevent States from employing

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133 (emphasis added, footnotes omitted).

134 *EC – Seal Products*, above n113, at [5.86]. Note that this paper focusses on the second limb due to constraints of the word limit. For discussion of the fourth limb in conjunction with 'like product' analysis, see William J Davey and Joost Pauwelyn "MFN Unconditionality: A Legal Analysis of the Concept in View of its Evolution in the GATT/WTO Jurisprudence with Particular Reference to the Issue of "Like Product"" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010).

135 Hudec, above n118, at 102.

internal measures to give protection to domestic industry as, from an economic perspective, this distorts the market.[136] By contrast "the GATT policy of allowing governments to maintain tariffs is a policy to allow a market distortion".[137] In this context, GATT Article I is "merely the orderly management of protection in order to contain its effects and remove its unnecessary evils."[138] The Panel in the *Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather*[139] and the Appellate Body in the *Chile – Price Band System and Safeguard Measures Relating to Certain Agricultural Products*[140] cases have confirmed that:[141]

> …a WTO member has considerable scope to determine how it decides its applied rate of tariff, provided that the applied rate does not exceed the MFN bound rate and provided that it does not discriminate between products originating in different WTO Member countries…

This is because:[142]

> … governments managing a policy of tariff protection need to be able to draw lines between products in order to confine protection to those imports which do in fact threaten domestic producers, and also to confine tariff liberalisation to those products for which the removal of protection will be found acceptable to domestic interests.

This means that "… the factors to be taken into account in determining applied rates below the MFN rates need not have anything to do with the physical characteristics of the product."[143] Viewed in this context, the objective approach taken in early cases such as *Spanish - Coffee*[144] where significant physical differences between products were discounted makes greater sense, though Hudec still argues that this case:[145]

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136 At 104.

137 At108.

138 At 108.

139 WT/DS155/R, 16 February 2001 (Report of the Panel).

140 WT/DS207/AB/R, 23 October 2002 (Report of the Appellate Body)

141 Howse and van Bork, above n43, at 21.

142 Hudec, above n118, at 108-109.

143 Howse and van Bork, above n43, at 21-22 (footnote omitted).

144 Above n91.

145 Hudec, above n118, at 116.

> … has to be viewed as a very strained reading of the 'like product' concept as it is normally applied to tariffs – inconsistent with normal GATT practice toward tariff distinctions and quite possibly even inconsistent with the broader sort of interpretation one could hope to see under a more general, competition-oriented interpretation. …one could view it as a distinctive response to a distinctive set of policy concerns peculiar to the specific type of discrimination involved in that case.

A contrasting approach was taken by the Panel in *Germany – Treatment of Imports of Sardines*.[146] where arguments were made that Germany's application of different tariff rates to three species of sardines were inconsistent with GATT Article I. The Panel observed that the difference of treatment was not based on the origin of the goods, despite the species at issue being located in different geographic areas, and proceeded to dismiss the GATT Article I claim on the assumption that the three species were not "like products" within the terms of GATT Article I.[147] In doing so, the Panel relied heavily on there being a distinction in GATT Article I between "like products" and "directly competitive or substitutable products", observing that the MFN treatment clause was limited to "like products".[148] The Panel then, however, proceeded to consider Norway's claim against Germany on what Hudec considers the "considerably less solid legal concept of non-violation nullification and impairment".[149] He observes:[150]

> The surmise that the Article I claim was not valid – that these three types of sardines were not "like products" – would be consistent with the thesis that GATT tariff practice treats such fine product distinctions as perfectly normal, and legal, tariff behaviour.

The influence of GATT Article III jurisprudence on more recent Panels is demonstrated in *Indonesia –Autos*, where the Panel declined to reprise its 'like product' analysis, having already concluded for the purposes of GATT Article III.2 that certain imported motor vehicles from Korea were like the Indonesian National Car.[151] In subsequent cases where discrimination based on origin has been apparent on the face of a measure, Panels have also tended to assume the 'likeness' of the products at issue without conducting a full 'like

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146 GATT BISD, G/26 - 1S/53 (Report of the Panel Adopted on 31 October 1952) [*Germany – Sardines*]

147 At [11].

148 At [12].

149 Hudec, above n118, at 16.

150 At 16.

151 Above n77.

product' analysis.[152] One particular example of note in the PPMs context is *US –Poultry (China)*,[153] where the United States sought to rely on *EU – Asbestos*[154] to argue that product safety had an impact on the 'like products' analysis.[155] The basis of their argument was that it could not be assumed that poultry from China was 'like' poultry from other WTO members on the basis of the differing safety levels of poultry from China vis-à-vis other WTO Members. Essentially, this argument relies on the measure at issue containing an invisible 'government policy' PPM, which according to Charnovitz would still have been discriminatory under GATT Article I but might have perhaps been saved in accordance with GATT Article XX(b) had the United States provided specific evidence of the existence of different safety levels. In the absence of such evidence being presented, the Panel proceeded with its hypothetical 'like product' analysis based on an assumption of 'likeness' to consider whether the alleged 'like products' were distinguished solely because of their origin.[156]

IV. PATHWAYS TO CERTAINTY ON THE LEGALITY OF LOW CARBON PRODUCTION AND PROCESSING METHODS

The upshot of the WTO's evolving approach to 'like product' determinations and the need to extrapolate from the few judicial findings in relation to environmental PPMs is considerable uncertainty for States that considering adopting low carbon PPM trade measures. While such approach might offer space for dynamic interpretation of WTO rules, States do have obligation to abide by their Treaty commitments in good faith,[157] and are generally unwilling to put in place measures that could be vulnerable to legal challenge. Overall, this has been to the detriment of the transition to a low carbon economy. As Bacchus notes, "[t]he policy space reserved for WTO members in WTO rules is of little use to them if they are hesitant to act because of legal uncertainty."[158]

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152 See *Colombia – Indicative Prices and Restrictions on Ports of Entry*, WT/DS366/R and Corr.1, 20 May 2009, (Report of the Panel) at [7.355] [*Colombia – Ports of Entry*]; and *US – Poultry (China)*, above n89, at [7.427].

153 Above n89.

154 Above n100.

155 *US – Poultry (China)*, above n89, at [4.60].

156 At [7.429].

157 Vienna Convention on the Law of Treaties 1155 U.N.T.S. 331 (opened for signature 23 May 1969, entered into force 27 Jan. 1980), art 26.

158 James Bacchus *Triggering the Trade Transition: The G20's Role in Reconciling Rules for Trade and Climate Change* (International Centre for Trade and Sustainable Development, White Paper, 2018) at 11.

There are three ways that the uncertainty in the WTO's 'like product' jurisprudence with respect to PPM-based trade measures could be resolved. A first option would be to seek to change the existing WTO rules, for example by adding a new provision that excluded climate-friendly PPM measures, or amending GATT Articles I and III to include a definition of 'like product'. Bacchus explores the idea of redefining 'like product' but concludes that, as the likeness test was developed through "seven decades of discernment by WTO jurists", reopening it to introduce the ability to distinguish between products on the basis of the amount of carbon used or emitted in their making would again raise concerns over Bhagwati's 'slippery slope':[159]

> … that an open-ended grant of exception on values-related PPMs could lead to a slippery slope and to a flood of exclusions that could not be challenged as countries passed unilateral legislation and executive orders that asserted moral objection to a practice that they did not like and denied others market access.

In Bacchus' view:[160]

> A solution to the approaching collision between trade and climate change that redefined a "like product" could have the unfortunate result of causing only more collisions between trade and other societal concerns in WTO dispute settlement.

It should be noted that a solution that required the creation or amendment of WTO rules would require the consensus of the entire WTO membership, which has proven a challenging proposition in recent times.

A second idea is to seek a waiver to exempt WTO Members from complying with specific WTO rules and obligations when implementing climate change obligations. One example often cited as a precedent is the 2006 Kimberley Waiver from MFN obligations for 'blood diamonds'.[161] Häberli and Bacchus argue that waivers are more frequent and somewhat easier to obtain than amendments, but they must still find unanimous support within the WTO membership, which, as noted above, is a high threshold to meet.[162] It seems unlikely that waivers could deliver sufficient certainty for the WTO membership, however, as they are subject to time limits, and each extension must again be justified and find consensus

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159 At 10 (citation omitted).

160 At 11.

161 James Bacchus, above n158, at 13. See also Häberli, above n56, at 15.

162 Häberli, above n56, at 15-16.

among WTO Members.[163] Given the 'eco-imperialism' arguments that have been made,[164] it is likely that at least some WTO members would require clear evidence of inconsistency with WTO rules before they could be convinced to support a climate change waiver from WTO rules.

With negotiated solutions in the WTO unlikely to yield results, a third option is to wait for judicial clarification of the existing rules. This would require a WTO member to enact a climate PPM-based trade measure involving a sufficiently large trade or a systemic interest such that another WTO member was motivated to challenge its legality in the WTO. It would also require the Appellate Body to provide a report that established with certainty that climate PPM-based trade measures were permissible.

The recent initiation of WTO dispute settlement cases by Indonesia and Malaysia concerning measures on palm oil and oil palm crop-based biofuels by the European Union, Lithuania and France is cause for hope that some clarity may be on the horizon.[165] Under the Renewable Energy Directive II, the EU's use of palm oil from biofuels will be phased out from 2023 and completely halted by 2030 because of high indirect land use change costs that raise the carbon footprint of palm oil in relation to other vegetable oils. It appears that the complainants Indonesia and Malaysia intend to argue that the measures at issue confer unfair benefits to EU domestic producers of certain biofuel feedstocks, such as rapeseed oil and soy, and the biofuels produced therefrom, at the expense of palm oil and oil palm crop-based biofuels from Indonesia and Malaysia (a breach of "national treatment") as well as discriminating against Indonesian and Malaysian palm oil and oil palm crop-based biofuels in favour of 'like products' from third countries (a breach of MFN).

Unfortunately, there will be significant delays while the WTO's judicial processes are in train. The latest communication in *EU — Palm Oil (Indonesia)* indicates that the Panel expects to deliver its report in quarter 2 of 2022,[166] following which either of the disputing Parties may opt to appeal the Panel's findings.[167] Furthermore, there is a risk that as these

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163 At 15.

164 See Section II above.

165 *EU – Palm Oil (Indonesia)*, above n56, and *EU –Palm oil (Malaysia)*, above n56.

166 *European Union - Certain Measures concerning Palm Oil and Oil Palm Crop-Based Biofuels* WT/DS593/11, 10 June 2021, (Communication from the Panel).

167 Understanding on Rules and Procedures Governing the Settlement of Disputes Annex 2 to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995), art 16.4.

cases concern products that are physically distinguishable (palm oil and other vegetable oils) the Panel's findings on 'like product' may not serve to clarify the situation with respect to physically indistinguishable products with differences in their carbon footprint arising solely from processing and manufacture. Another – faster - route is needed to provide the certainty States need to act to prevent catastrophic climate change using all of the measures in their tool kit.

A ACCTS: a pathway to certainty?

The negotiation of new legal rules through the ACCTS environmental goods negotiations could be a speedier route to normalise the use of low carbon PPM trade measures. The ACCTS parties could broaden the scope of their environmental goods negotiations to include tariff preferences for some 'environmentally preferable products'. These are "products which cause significantly less environmental harm at some stage of their life cycle (production/processing, consumption, waste disposal) than alternative products that serve the same purpose".[168] Negotiators would draw a distinction between goods produced using low carbon PPMs that would be eligible for tariff preferences, and otherwise-identical goods produced via less climate-friendly means that would attract the usual tariff rate applied by each ACCTS participating country. By including such products within the scope of the ACCTS environmental goods negotiation, the environmental and trade impacts of the ACCTs would be enhanced while delivering on the participating countries' ambition to "demonstrate in practical terms how trade rules can support climate and broader environmental objectives".[169]

It is important to state the limitations of this approach. Josef L Kunz notes that the principle of effectiveness means that valid new international law can only be created within the framework of existing international law. Accordingly, new treaty law that conflicts with existing rules will "need a healing of the illegality in order to become valid international law, as by general recognition" or a decision of an organ of international law.[170] A number of features of the ACCTS negotiations increase the likelihood tariff preferences for products utilising low carbon PPMs would receive that recognition, either through tacit acceptance by the WTO membership, or through WTO dispute settlement.

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168 *Environmentally preferable products (EPPs) as a trade opportunity for developing countries*, above n19, at 7.

169 "Agreement on Climate Change, Trade and Sustainability (ACCTS) negotiations", above n3.

170 Josef L Kunz "Revolutionary Creation of Norms of International Law" (1947) 41(1) AJIL 119-126 at 126.

Firstly, as has already been noted,[171] tariffs are accepted as an inherently protectionist measure and the WTO "has always recognized the possibility of different members choosing to maintain higher rates of protection in specific sectors".[172] Accordingly, WTO Members retain the prerogative to adopt tariff distinctions provided that they do so consistently with other WTO rules. In particular, they must not raise tariffs above their negotiated commitments in breach of GATT Article II, or do so in a discriminatory way in breach of GATT Articles I and III. Products which did not meet the carbon footprint standard for tariff preference in ACCTS would still be able to be legally imported and sold on the domestic markets of ACCTS participating countries, albeit at a likely higher cost to consumers in order to cover the additional cost to the importer of the usual applied tariff rate.[173] Accordingly, it would be unlikely that a prospective complainant could establish that breaches of either GATT Articles II or III had occurred. This would mean that the scope of legal issues under contention would be limited to GATT Article I, offering an opportunity for judicial clarification of the 'like product' analysis as it relates to low carbon PPM-based tariff preferences.

Secondly, it seems unlikely that a breach of GATT Article I could be easily established in respect of low carbon PPM-based tariff preferences in ACCTS. "The ACCTS countries have already indicated that they plan to extend their concessions on environmental goods and services to all WTO members, that is to say, on a [MFN] basis."[174] This means there will be no de jure breach of GATT Article I because the ACCTS tariff benefits for low carbon products will be accessible to producers in all WTO members who can establish that their products met the criteria for tariff preference. It should be noted extending tariff concessions on an MFN basis is a novel approach for binding plurilateral trade agreements, which would usually seek to limit benefits to the members of such agreements in order to avoid the "free rider problem".[175] This approach is necessary, however, as the ACCTS would not be likely to qualify for the MFN exception contained in GATT

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171 See Section III.D above.

172 Davey, above n91, at 84-85.

173 See Regan, above n131, at 99.

174 Steenblik and Droege, above n14.

175 Above n14. It should be noted that the APEC Environmental Goods tariff reductions are also applied on an MFN basis, although the outcome of that negotiation, as with all APEC initiatives, is non-legally binding. "APEC - A Multilateral Economic Forum" APEC Secretariat <www.apec.org/About-Us/How-APEC-Operates>.

Article XXIV.5(b) as it only covers a limited range of products and therefore could not be considered a "free trade area" pursuant to GATT Article XXIV.8(b).[176]

Since the ACCTS tariff distinction would be de jure origin-neutral, any claim of a breach of GATT Article I would need to be based on arguments that the measure constituted de facto origin-discrimination. This is where an origin-neutral measure can nonetheless be found to be discriminatory if "its actual effect is to impose differentially disadvantageous consequences on certain parties, and because those differential effects are found to be wrong or unjustifiable."[177] This potentially opens the door for a WTO member exclusively making products that were ineligible for the tariff preference to seek to argue that the tariff advantage being granted by ACCTS members to products from some countries should "immediately and unconditionally" be granted to the "like products" from their territory, carbon footprints being an insufficient basis upon which to distinguish between such products.

This may be difficult for a complainant to establish if the Appellate Body continues to interpret 'like product' in a more deferent way for cases of de facto discrimination and accepted that a 'how-produced' PPM which quantified the amount of carbon emissions could be released in the production process in order to qualify for a tariff preference did not "abrogate the object and purpose of the non-discrimination provisions of the MFN principle."[178] To do so would be supported by the introduction of sustainability as a concept in the Preamble of the Marrakesh Agreement Establishing the World Trade Organization.[179] A challenge may, however, stand greater chances of success if it involved a particular product produced in developing countries using PPMs involving high carbon emissions but produced exclusively in developed countries using low carbon PPMs, since this scenario would pit the values of sustainability and non-discrimination against direct competition with one another.

Even in this scenario, Howse and Regan still sound a cautious note of optimism, based on the underlying economic rationale for preventing discrimination based on origin:[180]

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176 GATT Article XXIV.8(b) requires that "the duties and other restrictive regulations of commerce … are eliminated on substantially all trade between the constituent territories in products originating in such territories."

177 *Canada – Patent Protection of Pharmaceutical Products*, above n78, at [7.101].

178 Charles Benoit "Picking Tariff Winners: Non-Product Related PPMs and DSB Interpretations of Unconditionality within Article I:1" (2011) 42(2) Geo J Intl L 583, at 602.

179 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

180 Howse and Regan, above n 32, at 270.

> "…distinctions based on nationality are irrelevant to economic efficiency. Products which differ only in their nationality should have the same competitive opportunities. In contrast, differences in processing may be very relevant to efficiency."

Furthermore, the involvement of two developing countries, Costa Rica and Fiji, in the ACCTS negotiations may assist in debunking any perception that tariff preferences for environmentally preferable products were unfairly targeted at developing countries.

Thirdly, there may be strength in numbers, both in terms of increasing the appetite of ACCTS participating countries to collectively take on the risk of legal challenge, and in deterring other WTO members from taking a case to the WTO. ACCTS participating countries would have a systemic interest in collaborating with each other to defend against a legal challenge in the WTO, enabling the smaller countries to pool their resources. Furthermore, Steenblik and Droege note that:[181]

> … setting binding ceilings on the potential tariffs they could levy on environmental goods imports would send an important signal: that these countries are willing to limit their policy space in exchange for giving environmental goods procedures and exporters in the ACCTS countries the certainty they need to make long-term business decisions.

This signalling effect may encourage other countries to follow suit with their own initiatives to "harness trade policy to advance climate change, trade, environmental and sustainable development agendas."[182]

V. OBSTACLES IN THE PATHWAY TO INCLUDING ENVIRONMENTALLY PREFERABLE PRODUCTS IN ACCTS

The practical challenges associated with broadening the definition of environmental goods to include environmentally preferable products in the ACCTS negotiations must, however, be acknowledged.

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181 Steenblik and Droege, above n14.

182 "Joint statement: Agreement on Climate Change, Trade and Sustainability (ACCTS) Trade Ministers' meeting", above n5.

A Reaching consensus despite mixed motivations for negotiating

Firstly, it should be recognised that some States engage in environmental goods negotiations with the intention of benefiting the environment through lowering tariffs to incentivise trade in environmental goods, while others engage with the primary objective to pursue or protect their trade interests. In past environmental goods negotiations this has resulted in some negotiators proposing goods for inclusion that their country has a comparative advantage in producing regardless of their environmental credentials, or opposing goods they fear would have a negative impact on their own markets.[183] Under such circumstances, previous negotiations have been criticised as failing to "display any interest in preserving the environment" or have been unsuccessful due to there being "too much divergence in interests across members."[184] Even successful environmental goods negotiations have tended to result in very limited lists of goods subject to tariff reductions: as already noted, the APEC environmental goods list includes only 54 products.[185]

Mixed motivations may be a smaller challenge to overcome for the small group of ACCTS participating countries given their clear mandate from Leaders to consider trade rules that can support sustainability and address climate change.[186] The inclusion of environmental cooperation and assistance provisions for developing countries in ACCTS could also aid green transition in these countries and may also entice other developing countries to consider seeking membership of the ACCTS in future. There is a risk, however, that developing countries Costa Rica and Fiji may be reluctant to negotiate tariff preferences for environmentally preferable products given the broader ramifications for the use of PPM-based trade measures to advance other interests such as improving labour standards.[187]

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183 De Melo, above n6, at 4, footnote 11, notes the example of bicycles in the failed WTO Environmental Goods Agreement negotiations, which was proposed by China and opposed by the EU because of fears that China would inundate the market. A further example is Indonesia's attempts to include rubber and palm oil in the APEC Environmental Goods list: "Editorial: Damaging our green campaign" The Jakarta Post (online ed, 1 July 2013) <www.thejakartapost.com/news/2013/07/01/editorial-damaging-our-green-campaign.html>.

184 De Melo, above n6, at 12.

185 APEC Committee on Trade and Investment, above n6.

186 "Joint Leaders' Statement on the launch of the 'Agreement on Climate Change, Trade and Sustainability' initiative", above n12.

187 It should be noted that Costa Rica is already considered by the World Bank to be "a global leader for its environmental policies and accomplishments … [its] pioneering Payments for Environmental Services (PES) program has been successful in promoting forest and biodiversity conservation; making Costa Rica the only tropical country in the world that has reversed deforestation." "The World

B Difficulty identifying environmentally preferable products

A second difficulty is that there are currently no agreed lists of 'environmentally preferable' products and correlating carbon footprint benchmarks that could be used as a reference point by negotiators. While the UNCTAD definition of 'environmentally preferable products'[188] may assist in framing the negotiations, the negotiators would still need to blaze a trail by considering the merits of each product for inclusion on a list of environmentally preferable products, determining the appropriate carbon emission benchmark to be met for tariff preference, and how producers could establish that their product met the specified benchmark. While it may be tempting to set generally applicable conditions to tariff preference, such as requiring that certain climate policies (greenhouse gas restrictions, an emissions trading scheme or carbon accounting requirements) were in place in the country of origin or that producers had received ISO certification or similar carbon neutrality certifications, these would be considered government-policy and producer-characteristics PPMs.[189] As discussed in Section III.B above, 'how-produced' PPM standards should be established for each product in order to stand the best chance of avoiding legal challenge in the WTO.

It would be time-consuming to apply this approach on a comprehensive basis across all products listed in the HS Code. Furthermore, standards and certification schemes for lifecycle carbon assessments are at a greater stage of development for some sector in comparison to others. Accordingly, one option for overcoming this challenge could be enabling an industry-led mechanism, where industry could collaborate to submit products that they agreed constituted 'environmentally preferable products' compared to others on the market based on their life-cycle carbon assessment. Product submissions could occur at any time, since the ACCTS participating countries have already indicated that further issues can be put forward for "consideration, either in the initial phase of the negotiations or afterwards through the 'living agreement' concept."[190]

Bank in Costa Rica: Overview" The World Bank <www.worldbank.org/en/country/costarica/overview#1>.

188 Above n19.

189 See Section III.B above.

190 "Agreement on Climate Change, Trade and Sustainability (ACCTS) negotiations", above n3. 'Living agreement' is a phrase commonly used by New Zealand to refer to a treaty that is drafted with a view to ensuring that it is capable being updated as appropriate to address issues that emerge in the future as well as new issues that arise with the expansion of the agreement to include new countries. See for example, Tracey Epps "International Economic Law" (2011) 9 New Zealand Yearbook of International Law 341, and "Case Study: Virtual signing of the Digital Economy Partnership

C Lack of specificity in the HS Code may hinder negotiations

Thirdly, the tariff nomenclature in the International Convention on the Hamonized Commodity Description and Coding System[191] (HS Code) that provides a framework for tariff negotiations, does not necessarily assist negotiators in the identification of environmental goods. The tariff descriptors are not always sufficiently specific at the six-digit level[192] "given that the HS classification does not generally identify products according to their environmental impacts."[193] This means that tariff reductions for a given HS Code could encompass a range of products regardless of their end-use.[194]

Dual-use goods, where products identified by a single HS Code have a number of applications some of which may not be considered environmental, are particularly problematic. In the context of an agreement aimed at supporting sustainability and climate change, it is questionable whether all such goods should benefit from tariff preferences, even if some might be considered 'environmentally preferable' in comparison to others on the market. The APEC Environmental Goods list addressed this issue through 'ex outs' and additional product specifications, where each economy determined the scope of goods with a given HS Code that would receive its tariff preference.[195] It was not possible to reach consensus among the APEC membership on 'ex outs' and additional product specifications for each environmental good, however. Although undertaking this process for 'environmentally preferable products' in ACCTS is likely to add a further layer of complexity to the negotiations, it is likely to be the best solution in the short-term.

Agreement a first for New Zealand" New Zealand Ministry of Foreign Affairs and Trade <www.mfat.govt.nz/en/about_us/mfat-annual-reports/mfat-annual-report-2019-20/case-study-virtual-signing-of-the-digital-economy-partnership-agreement/>.

191 1503 UNTS 168 (opened for signature 14 June 1983, entered into force 1 January 1988).

192 Ronald Steenblik "Liberalising Trade in 'Environmental Goods': Some Practical Considerations" OECD Trade and Environment Working Papers 2005/05 COM/ENV/TD(2003)34/FINAL (16 December 2005) at 6.

193 Howse and van Bork, above n43, at 18.

194 At 18.

195 For example, HS 841290 ("Nuclear reactors, boilers, machinery and mechanical appliances parts thereof, Other engines and motors, Parts") was included in the APEC List, but with the additional product specifications "Wind turbine blades and hubs" for the United States and "Only for civil aviation" for Russia. APEC Committee on Trade and Investment, above n6.

In the longer term, it seems clear that trade negotiators should seek to ensure that the HS Code becomes a better tool for facilitating negotiations for environmental goods and environmentally preferable products. Howse and van Bork have asserted that:[196]

> negotiators should regard themselves as the clients or "masters" of the HS; this classification system is there to serve their needs, not to impose disciplines and obstacles on trade liberalisation efforts.

This is not without its own difficulties.[197] Although the HS Code is amended periodically, proposals for amendments must meet the World Custom Organization (WCO) threshold criteria for establishment of four- and six-digit sub-headings. These criteria are based on volume of world trade, though exceptions have been made for social or environmental reasons.[198] Omi notes that the usual length of negotiations to amend the HS Code means that "the HS amendments will usually occur a substantially long time after the need has been identified."[199] For example, the seventh edition of the HS Code (HS 2022) features amendments for electrical and electronic waste that are aimed at "addressing environmental and social issues of global concern"[200] by assisting countries to implement the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.[201] These changes resulted "from approximately six years of extensive negotiations between the representatives of the Customs administration of Contracting Parties to the WCO HS Convention at the WCO's Harmonized System Committee, the Review Sub-Committee and the Scientific Sub-Committee starting with an original proposal from the secretariat of the Basel Convention, representing its Contracting Parties."[202] In order for further environmentally-motivated changes to the HS Code to be adopted, "sound proposals, either from Members or from the Secretariats for the relevant

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196 Howse and van Bork, above n43, at viii.

197 Steenblik, above n193, at 16.

198 At 16, footnote 14.

199 Kenji Omi "Current situation, analysis and observations on waste control at borders by Customs" WCO Policy Research Paper No. 50 (December 2020) <www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/research-paper-series/50_waste_control_at_borders_by_customs_omi_en.pdf?la=en> at 27.

200 "Amendments effective from 1 January 2022" World Customs Organization www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2022-edition/amendments-effective-from-1-january-2022.aspx>.

201 1673 U.N.T.S. 57 (opened for signature 22 March 1989, entered into force 5 May 1992) [Basel Convention].

202 Omi, above n200, at 26.

Conventions, that are practical for use at borders will be required."[203] Finally, the fact that changes to the HS Code must be agreed through a lengthy process, including a two-thirds majority vote in the Harmonized System Committee and approval by the WCO Council,[204] presents a further barrier to changing the HS Code. For example, Omi notes that introduction of the concept of biodegradable or compostable plastics in the HS 2022 amendment was not agreed "because they failed to find globally agreed definitions, universally accepted certifications or practical methods for testing biodegradation or compostability at the border."[205]

Short of amending the HS Code, the WCO Council can issue recommendations for signatories to amend national tariff and statistical nomenclatures on an interim basis.[206] This can be done annually.[207] A number of recommendations have been used to promote compliance with the Montreal Protocol on Substances that Delete the Ozone Layer[208] and other multilateral agreements.[209] Omi also notes that the multi-dimensional nature of products has been addressed through WCO recommendations in the context of wastes, that is, "the same material may be regarded as waste in one country but as a commodity or raw material in another country".[210] "The disadvantage is that this kind of recommendation is not binding on Contracting Parties to the HS Convention, which alone decide whether and at what speed to implement them."[211]

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203 At 27.

204 "Amending the HS" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/activities-and-programmes/amending_hs.aspx>.

205 Omi, above n200, at 16.

206 Steenblik, above n193, at 16.

207 "Recommendations Related to the Harmonized System" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_recommendations.aspx>.

208 1522 UNTS 3 (opened for signature 16 September 1987, entered into force 1 January 1989).

209 See for example, Recommendation on the insertion in national statistical nomenclatures of subheadings to facilitate the collection and comparison of data on the international movement of substances controlled by virtue of the Kigali amendments to the Montreal protocol on substances that deplete the ozone layer (27 June 2019) <www.wcoomd.org/-/media/wco/public/global/pdf/about-us/legal-instruments/recommendations/hs/recommendation_kigali.pdf?la=en>.

210 Omi, above n200, at 8.

211 Steenblik, above n193, at 16-17

D 'Environmentally preferable product' tariff preferences could be difficult to implement

The lack of specificity in the HS Code, and use of 'ex outs' and additional product specifications, may also pose challenges for the implementation of the ACCTS at the border. The HS Code does permit countries to adopt differentiation at the seven- and eight-digit level, which could potentially be used in the ACCTS context to simplify tariff administration by giving goods with low-emissions PPMs a unique HS Code. New Zealand does not currently define its tariff to this level of specificity, however.[212] Furthermore, "it is not always clear to customs authorities which HS heading to use: depending on their technical characteristics, similar goods can sometimes be classified under two or more headings."[213] If there were a difference in the carbon emission benchmark applicable between such product classifications, this could also pose implementation challenges.

Consideration will also need to be given to the practicalities of implementing PPM-based tariff preferences, which may require some form of audit or verification to ensure that the products comply. Howse and Regan note the risks that this can be "an expensive undertaking that increases the transaction costs to trade."[214] On the other hand, recent developments in paperless trading, global data standards, carbon certification, supply chain traceability and transparency mean that more information on the PPMs of a given product is available to customs officials in advance of importation than ever before. International trade has come a long way since customs officials were required to make decisions on applicable tariffs armed with only the physical product in front of them and knowledge of its country of origin.

E Carbon benchmarks will become obsolete over time

One challenge with negotiating lists of environmental goods is that "these lists are inherently oriented to the entrenchment of out-dated technologies", which is particularly problematic in areas of rapid technological and conceptual change.[215] With respect to the scale of the issue, Howse and van Bork note that the OECD has "estimated that 50 percent of established environmental technologies will be replaced within 15 years."[216]

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212 New Zealand Working Tariff Document <www.customs.govt.nz/business/tariffs/working-tariff-document/working-tariff-document/>.

213 Steenblik, above n193, at 6.

214 Howse and Regan, above n32, at 287.

215 Above n43, at 3.

216 At 3.

There is a risk that entrenching a list of environmentally preferable products in a treaty by reference to their carbon content would lose its value as an incentive over time. Energy efficiency ratings provide an illustrative example. Separate tariff lines could be created for products with energy-efficiency ratios greater than and less than 10, for example, but "[b]ecause of the continuous technological progress, performance rated highly energy-efficient in the present year is likely to be considered average or below-average five years hence."[217] At worst, if carbon footprint standards for the eligibility for tariff preferences remained static, this could result in the 'dumping' of older technologies in the markets of ACCTS participating countries.[218]

The ACCTS participating countries will therefore need to establish a 'sinking lid' or other review mechanism to ensure carbon footprint benchmarks continue to remain relevant despite technological advancement over time. The 'living agreement' concept that will be embodied in the ACCTS should support this.[219]

VI. CONCLUSION

Against the background of the accelerating climate crisis, States need to address accusations that they have generally conducted business as usual and have largely failed to address this predicament despite 40 years of global climate negotiations.[220] This must happen quickly as "[e]very year we fail to act, the level of difficulty and cost to reduce emissions goes up."[221] The Leaders of ACCTS participating countries have recognised this imperative when they said:[222]

> All policy levers are needed to drive the transformation to low-emissions, climate-resilient and sustainable economies. It is our collective view that these levers can and must include trade policy, rules and architecture.

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217 Steenblik, above n193, at 13.

218 Howse and van Bork, above n43, at 3.

219 See discussion in Section V.B above.

220 William J Ripple and others "World Scientists' Warning of a Climate Emergency" (2020) 70 (1) BioScience 8.

221 United Nations Environment Programme *Emissions Gap Report 2019* (UNEP, 26 November 2019) <www.unep.org/resources/emissions-gap-report-2019>.

222 "Joint Leaders' Statement on the launch of the 'Agreement on Climate Change, Trade and Sustainability' initiative", above n12.

Unfortunately, States are likely to continue to be wary of utilising trade measures to incentivise industry to adopt more sustainable, low carbon PPMs until there is clarity as to their legality under the WTO's 'like product' rules.

This paper has argued that the negotiation of tariff preferences for 'environmentally preferable products' in ACCTS, while unlikely to significantly change foreign producer behaviour or generate significant environmental effects, may provide a speedy route to clarifying the WTO rules on 'like products'. The risk of successful legal challenge in the WTO is assessed as low given the ACCTS participating countries' intention to extend the negotiated tariff preferences on an MFN basis, provided that the ACCTS rules for obtaining tariff preference for 'environmentally preferable products' were expressed as a 'how-produced' PPM based on carbon footprint benchmarks. If the ACCTS remained unchallenged, it could serve as a lightning rod to normalise the adoption of trade measures to incentivise low carbon PPMs. Though not without practical and implementation challenges that would need to be addressed during negotiations, the inclusion of tariff preferences for 'environmentally preferable products' in ACCTS would break new ground and provide a clear signal of the ACCTS participating countries' serious intent to address climate change. For trade negotiators and officials to continue to maintain the fiction that physically identical products with different climate credentials must be treated as 'like products' is untenable given the magnitude of the problem of global warming. It is time to clean up our act.

BIBLIOGRAPHY

A Cases

1 GATT Panel Reports

Belgium - Family Allowances GATT BISD, 1S/592 (Report of the Panel Adopted on 7 November 1952).

Germany – Treatment of Imports of Sardines GATT BISD, G/26 - 1S/53 (Report of the Panel Adopted on 31 October 1952) (*Germany – Sardines*).

Japan – Customs Duties, Taxes and Labelling Practices on Imported Wines and Alcoholic Beverages L/6216 (Report of the Panel Adopted on 10 November 1987) (*Japan – Alcoholic Beverages I*).

Japan – Tariff on Imports of Spruce, Pine, Fir (SPF) Dimension Lumber GATT BISD, L/6470 (Report of the Panel Adopted on 19 July 1989).

Spain – Tariff Treatment of Unroasted Coffee, L/5135 (Report of the Panel Adopted on 10 June 1981) (*Spain – Unroasted Coffee*).

United States – Measures Affecting Alcoholic and Malt Beverages GATT BISD, 39S/206 (Report of the Panel Adopted on 19 June 1992).

United States – Restrictions on Imports of Tuna (Mexico) GATT BISD, 39S/155, 3 September 1991 (Report of the Panel Unadopted) *(US – Tuna (Mexico))*.

United States – Restrictions on Imports of Tuna DS29/R, 16 June 1994, (Report of the Panel Unadopted) (*US – Tuna (EEC)*).

2 WTO Case Reports and Documents

Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather, WT/DS155/R, 16 February 2001 (Report of the Panel).

Argentina – Measures Relating to Trade in Goods and Services, WT/DS453/AB/R, 9 May 2016 (Report of the Appellate Body).

Canada – Certain Measures Affecting the Automotive Industry WT/DS31/AB/R, 30 July 1997 (Report of the Appellate Body).

Canada – Certain Measures Concerning Periodicals WT/DS31/AB/R 30 July 1997 (Report of the Appellate Body).

Canada – Measures Relating to the Feed-in Tariff Program, WT/DS412/AB/R, WT/DS426/AB/R, 24 May 2013 (Report of the Appellate Body) (*Canada – FIT Program*).

Canada – Patent Protection of Pharmaceutical Products WT/DS114/R, 7 April 2000 (Report of the Panel).

Chile – Price Band System and Safeguard Measures Relating to Certain Agricultural Products, WT/DS207/AB/R, 23 October 2002 (Report of the Appellate Body).

Colombia – Indicative Prices and Restrictions on Ports of Entry, WT/DS366/R, 20 May 2009 (Report of the Panel).

Dominican Republic – Measures Affecting the Importation and Internal Sale of Cigarettes, WT/DS302/AB/R, 19 May 2005 (Report of the Appellate Body).

European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries, WT/DS246/AB/R, 20 April 2004 (Report of the Appellate Body).

European Communities – Measures Affecting Asbestos and Asbestos Containing Products WT/DS135/AB/R, 5 April 2001 (Report of the Appellate Body) (*EC – Asbestos*).

European Communities – Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS400/AB/R / WT/DS401/AB/R, 18 June 2014 (Report of the Appellate Body) (*EC – Seal Products*).

European Communities – Regime for the Importation, Sale and Distribution of Bananas WT/DS27/AB/R, 25 September 1997 (Report of the Appellate Body).

European Union and Certain Member States – Certain Measures Concerning Palm Oil and Oil Palm Crop-based Biofuels (Malaysia) WT/DS600/1, 15 January 2021 (Request for Consultations by Malaysia) (*EU – Palm Oil (Malaysia)*).

European Union - Certain Measures concerning Palm Oil and Oil Palm Crop-Based Biofuels WT/DS593/1, 9 December 2019 (Request for Consultations by Indonesia) (*EU – Palm Oil (Indonesia)*).

European Union - Certain Measures concerning Palm Oil and Oil Palm Crop-Based Biofuels (Indonesia) WT/DS593/11, 10 June 2021 (Communication from the Panel).

Indonesia – Certain Measures Affecting the Automobile Industry WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, 23 July 1998 (Report of the Panel) (*Indonesia – Autos*).

Japan-Taxes on Alcoholic Beverages WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, 1 November 1996 (Report of the Appellate Body) (*Japan – Alcoholic Beverages II*).

Mexico – Taxes on Soft Drinks and Other Beverages WT/DS/308/R, 7 October 2005 (Report of the Panel).

Mexico – Taxes on Soft Drinks and Other Beverages WT/DS308/AB/R, 24 March 2006 (Report of the Appellate Body).

Philippines – Taxes on Distilled Spirits, WT/DS396/AB/R / WT/DS403/AB/R, 20 January 2012 (Report of the Appellate Body).

United States – Certain Measures Affecting Imports of Poultry from China, WT/DS392/R, 25 October 2010 (Report of the Panel) (*US – Poultry (China)*).

United States – Continued Existence and Application of Zeroing Methodology, WT/DS350/R, 19 February 2009 (Report of the Panel as modified by the Appellate Body Report WT/DS350/AB/R).

United States – Continued Existence and Application of Zeroing Methodology, WT/DS350/AB/R, 19 February 2009 (Report of the Appellate Body).

United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, 6 November 1998 (Report of the Appellate Body) (*US – Shrimp*).

United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia WT/DS58/AB/RW, 21 November 2001 (Report of the Appellate Body) (*US – Shrimp Article 21.5 (Malaysia)*).

United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381/AB/R, 13 June 2012 (Report of the Appellate Body).

United States – Standards for Reformulated and Conventional Gasoline, WT/DS2/R, 20 May 1996 (Panel Report, as modified by Appellate Body Report WT/DS2/AB/R) (*US – Gasoline*).

B Treaties and other International Instruments

Agreement on the Application of Sanitary and Phytosanitary Measures, Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994, Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995) (Anti-Dumping Agreement).

Agreement on Safeguards, Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

Agreement on Technical Barriers to Trade, Annex 1 A to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995) (TBT Agreement).

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1673 U.N.T.S. 57 (opened for signature 22 March 1989, entered into force 5 May 1992) (Basel Convention).

Environmental management — Life cycle assessment — Principles and framework (International Organization for Standardization, Standard No. 14040, 2006) (ISO 14040).

Extension of Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds, WT/L/1039, 26 July 2018 (Waiver Decision).

Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations 1867 UNTS 14 (opened for signature 15 April 1994, entered into force 1 January 1995).

General Agreement on Tariffs and Trade 1947 55 UNTS 194 (opened for signature 30 October 1947, provisionally entered into force 1 January 1948) (GATT 1947).

General Agreement on Tariffs and Trade 1994 1867 UNTS 190 (opened for signature 15 April 1994, entered into force 1 January 1995) (GATT 1994).

Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (International Organization for Standardization, Standard No. 14067, 2018) (ISO 14067).

International Convention on the Hamonized Commodity Description and Coding System 1503 UNTS 168 (opened for signature 14 June 1983, entered into force 1 January 1988) (HS Code).

Kyoto Protocol to the United Nations Framework Convention on Climate Change 2303 UNTS 51 (opened for signature 11 December 1997, entered into force 16 February 2005).

Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

Montreal Protocol on Substances that Deplete the Ozone Layer 1522 UNTS 3 (opened for signature 16 September 1987, entered into force 1 January 1989).

Paris Agreement to the United Nations Framework Convention on Climate Change <https://treaties.un.org/doc/Treaties/2016/02/20160215%06-03%PM/Ch_XXVII-7-d.pdf> (opened for signature 16 February 2016, entered into force 4 November 2016).

Recommendation on the insertion in national statistical nomenclatures of subheadings to facilitate the collection and comparison of data on the international movement of substances controlled by virtue of the Kigali amendments to the Montreal protocol on substances that deplete the ozone layer (27 June 2019) <www.wcoomd.org/-/media/wco/public/global/pdf/about-us/legal-instruments/recommendations/hs/recommendation_kigali.pdf?la=en>.

Understanding on Rules and Procedures Governing the Settlement of Disputes Annex 2 to the Marrakesh Agreement Establishing the World Trade Organization 1867 U.N.T.S. 154 (opened for signature 15 April 1994, entered into force 1 January 1995).

United Nations Framework Convention on Climate Change 1771 U.N.T.S. 107 (opened for signature 9 May 1992, entered into force 21 March 1994).

United Nations Rio Declaration on Environment and Development (13 June 1992) (1992) 31 I.L.M. 874 (Rio Declaration).

Vienna Convention on the Law of Treaties 1155 U.N.T.S. 331 (opened for signature 23 May 1969, entered into force 27 January 1980).

C Books and Chapters in Books

Arthur E Appleton "Private climate change standards and labelling schemes under the WTO Agreement on Technical Barriers to Trade" in Thomas Cottier, Olga Nartova and Sadeq Bigdeli (eds) *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, Cambridge, 2009).

Nathalie Bernasconi-Osterwalder and others *Environment and Trade: a Guide to WTO Jurisprudence* (Routledge, London, 2006).

Barbara Cooreman *Global Environmental Protection through Trade* (Edward Elgar Publishing, Cheltenham (UK), 2017).

William Davey "Chapter III: Most-Favoured-Nation Treatment" in *Non-Discrimination in the World Trade Organization: The Rules and Exceptions* (Online, 2012).

William J Davey and Joost Pauwelyn "MFN Unconditionality: A Legal Analysis of the Concept in View of its Evolution in the GATT/WTO Jurisprudence with Particular Reference to the Issue of "Like Product"" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010).

Christian Häberli "A Transatlantic Trade and Investment Partnership Agreement (TTIP): Implications for Swiss Agriculture" in Masanori Hayashi and Masahiko Gemma (eds) *Agricultural Trade Rules in the Era of "Post Trade Liberalization": Framework of Trade Rules and Its Impact Assessments* (Nourintoukei, Tokyo, 2015).

Robert E Hudec "Like Product": The Differences in Meaning in GATT Articles I and III" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010).

Khursid Hasan Hyder "Background to M.F.N. Clause in GATT" in *Equality of Treatment and Trade Discrimination in International Law* (Springer, Dordrecht, 1968).

Robert Jennings and Arthur Watts (eds) *Oppenheim's International Law Vol 1 Peace* (9th ed, Oxford University Press, Oxford, 2008).

Amber Maggio *Environmental Policy, Non-Product Related Process and Production Methods and the Law of the World Trade Organization* (Springer, Cham, 2017).

Mitsuo Matsushita and others *The World Trade Organization: Law, Practice and Policy*, (3rd ed, Oxford University Press, Oxford, 2015).

Petros C Mavroidis ""Like Products": Some Thoughts at the Positive and Normative Level" in Thomas Cottier, Petros C Mavroidis and Patrick Blatter (eds) *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future* (University of Michigan Press, Ann Arbor, 2010).

Donald Regan "How to think about PPMs (and climate change)" in Thomas Cottier, Olga Nartova and Sadeq Bigdeli (eds) *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, Cambridge, 2009).

David Sifonios *Environmental Process and Production Methods (PPMs) in WTO Law* (Springer, Cham, 2018).

World Trade Organization *The GATT Analytical Index: Guide to GATT Law and Practice* (World Trade Organization, Geneva, 1998).

D Journal Articles

Charles Benoit "Picking Tariff Winners: Non-Product Related PPMs and DSB Interpretations of Unconditionality within Article I:1" (2011) 42(2) Geo J Intl L 583.

Jagdish Bhagwati "On Thinking Clearly About the Linkage Between Trade and the Environment" (2000) 5(4) Environment and Development Economics 483.

Steve Charnovitz "The Law of Environmental PPMs in the WTO: Debunking the Myth of Illegality" (2002) 27(1) Yale J Intl L 59.

Jaime de Melo and Jean-Marc Solleder "The EGA Negotiations: Why They Are Important, Why They Are Stalled and Challenges Ahead" (2020) JWT 333.

Juan He "Unilateral Trade Measures Against Illegal, Unreported and Unregulated Fishing: Unlocking a Paradigm Change in Trade-Environmental Partnerships?" (2019) JWT 759.

Robert Howse "The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate" (2002) 27 Colum J Envtl L 489.

Robert Howse and Donald Regan "The Product/Process Distinction – An Illusory Basis for Disciplining 'Unilateralism' in Trade Policy" (2000) 11(2) EJIL 249.

Josef L Kunz "Revolutionary Creation of Norms of International Law" (1947) 41(1) AJIL 119-126.

Johannes Norpoth "Mysteries of the TBT Agreement Resolved? Lessons to Learn for Climate Policies and Developing Country Exporters from Recent TBT Disputes" (2013) JWT 575.

Peter WB Phillips "Alternative Paradigms: The WTO versus the Biosafety Protocol for Trade in Genetically Modified Organisms" (2000) JWT 63.

Matthew C Porterfield "Border Adjustments for Carbon Taxes, PPMs, and the WTO" (2019) 41(1) UPaJIntlL 1.

William J Ripple and others "World Scientists' Warning of a Climate Emergency" (2020) 70(1) *BioScience* 8.

Hengky K Salim and others "Global Trends in environmental management system and ISO14001 research" (2018) 170 Journal of Cleaner Production 645.

Wen-chen Shih "Trade and Environment Linkages and Challenges Facing East Asian WTO Members" (2006) 1 AJWH 157.

E Parliamentary and Government Materials

Hansard – New Zealand Parliament (2 December 2020) 749 NZPD (Motions – Climate Change – Declaration of Emergency).

Hansard - UK Parliament (Monday 11 January 2021) <hansard.parliament.uk/Lords/2021-01-11/debates/EB7AC813-0961-48D3-B3C3-453D7AE89FCB/AgreementOnClimateChangeTradeAndSustainability> (Question to the Minister of State, Department for Business, Energy and Industrial Strategy and Department for International Trade, Lord Grimstone of Boscobel - Agreement on Climate Change, Trade and Sustainability).

F Papers and Reports

Monica Araya "WTO Negotiations on Environmental Goods and Services: Maximising Opportunities?" (Yale Center for Environmental Law and Policy, Global Environment & Trade Study, 2003).

James Bacchus *Triggering the Trade Transition: The G20's Role in Reconciling Rules for Trade and Climate Change* (International Centre for Trade and Sustainable Development, White Paper, 2018).

Chris Bataille *Low and zero emissions in the steel and cement industries: Barriers, technologies and policies* (OECD, Green Growth and Sustainable Development Forum Issues Paper, 26-27 November 2019).

Clara Brandi *Trade Elements in Countries' Climate Contributions under the Paris Agreement* (International Centre for Trade and Sustainable Development, Issue Paper, March 2017).

Thomas Cottier *The Role of PPMs in Extractive Industries* (E15 Initiative, International Centre for Trade and Sustainable Development and World Economic Forum, March 2016).

Thomas Cottier and others *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement* (World Trade Institute, Legal Opinion for the Swiss Federal Finance Administration, Swiss Federal Office of Energy and State Secretariat for Economic Affairs, 18 April 2014).

Thomas Cottier, Ilaria Espa and Kateryna Holzer *Renewable Electricity Tax Exemptions and Trade Remedies under International Law: An Assessment of Policy Space under WTO Law, the Swiss-EU FTA and EU Law* (World Trade Institute, Legal Opinion to the Swiss Federal Office of Energy, March 2015).

Jaime de Melo *Negotiations for an Agreement on Trade, Climate Change and Sustainability: An Opportunity for Collective Action* (International Economics, 10 April 2020) <www.tradeeconomics.com/wp-content/uploads/2020/04/JDM-ACCTS-2.pdf>.

The Economist Intelligence Unit *Climate Change and Trade Agreements: friends of foes?* (International Chamber of Commerce World Trade Agenda, Report, 2019).

Environmentally preferable products (EPPs) as a trade opportunity for developing countries (United Nations Conference on Trade and Development (UNCTAD) Secretariat, UNCTAD/COM/70, 19 December 1995).

Tracey Epps "International Economic Law" (2011) 9 New Zealand Yearbook of International Law 341.

Chris Fisher "Who's afraid of PPMs?" (Eurogroup for Animal Welfare, Paper presented to EC ad hoc NGO consultation meeting on PPMs, Brussels, 31 May 2001).

Kathryn Gordon, Joachim Pohl and Marie Bouchard *Investment Treaty Law, Sustainable Development and Responsible Business Conduct: A Fact Finding Survey* (OECD, Working Papers on International Investment, 2014/01, 2014).

Christian Häberli *Potential conflicts between agricultural trade rules and climate change treaty commitments* (Food and Agriculture Organization, The State of Agricultural Commodity Markets (SOCO) Background Paper, 2018).

Robert Howse and Petrus van Bork *Options for Liberalising Trade in Environmental Goods in the Doha Round* (International Centre for Trade and Sustainable Development, Trade and Environment Series Issue Paper No. 2, 2006).

Interim definition and classification of the environment industry prepared in conjunction with OECD/EUROSTAT (OECD Informal Working Group on the Environment Industry, OCDE/GD(96)117, 1996).

Robert Ireland *Global Warming, International Trade, and the Quantification of Carbon Emissions: Production-Based and Consumption-Based Accounting* (WCO, Policy Research Paper No. 38, October 2016) <www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/research-paper-series/38_ireland_carbon_consumption_based_accounting.pdf?la=en>.

Ricardo Melendez-Ortiz "Foreword" in James Bacchus *Triggering the Trade Transition: The G20's Role in Reconciling Rules for Trade and Climate Change* (International Centre for Trade and Sustainable Development, White Paper, 2018).

Kenji Omi *Current situation, analysis and observations on waste control at borders by Customs* (WCO, Policy Research Paper No. 50, December 2020) <www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/research-paper-series/50_waste_control_at_borders_by_customs_omi_en.pdf?la=en>.

Giridharan Ramasubramanian *The ACCTS could be a catalyst for transitioning to a circular economy* (East Asia Forum, 29 November 2019) <www.eastasiaforum.org/2019/11/29/the-accts-could-be-a-catalyst-for-transitioning-to-a-circular-economy/>.

Report of the United Nations Conference on Environment and Development A/CONF.151/26 (Vol I) (12 August 1992) at Annex I "Rio Declaration on Environment and Development".

Renato Ruggiero "A Shared Responsibility: Global Policy Coherence for our Global Age" (speech to Conference on Globalisation as a Challenge for German Business: Export Opportunities for Small and Medium-Sized Companies in the Environmental Field, Bonn, 9 December 1997).

Ronald Steenblik *Liberalising Trade in 'Environmental Goods': Some Practical Considerations* (OECD, Trade and Environment Working Papers 2005/05 COM/ENV/TD(2003)34/FINAL, 16 December 2005).

Ronald Steenblik and Susanne Droege *Time to ACCTS? Five countries announce new initiative on trade and climate change* (International Institute for Sustainable Development, Blog, 25 September 2019) <www.iisd.org/articles/time-accts-five-countries-announce-new-initiative-trade-and-climate-change>.

United Nations Environment Programme *Emissions Gap Report 2019* (UNEP, 26 November 2019) <www.unep.org/resources/emissions-gap-report-2019>.

Peter Van den Bossche, Nico Schrijver and Gerrit Faber *Unilateral Measures addressing Non-Trade Concerns: A study on WTO Consistency, Relevance of other International Agreements, Economic Effectiveness and Impact on Developing Countries of Measures concerning Non-Product-Related Processes and Production Methods* (Ministry of Foreign Affairs of the Netherlands, 2007).

Rene Vossenaar (2013) *The APEC List of Environmental Goods: An Analysis of the Outcome & Expected Impact* (International Centre for Trade and Sustainable Development, Geneva, Switzerland, 2013).

ZhongXiang Zhang *Trade in Environmental Goods, with Focus on Climate-Friendly Goods and Technologies* (East-West Centre, Working Papers: Economic Series No. 120, October 2011).

G Press Reports

"Agreement reached on WTO waiver for "conflict diamonds" (World Trade Organization, WTO News, 26 February 2003 <www.wto.org/english/news_e/news03_e/goods_council_26fev03_e.htm>.

APEC Committee on Trade and Investment "APEC Cuts Environmental Goods Tariffs" (press release, 28 January 2016) <www.apec.org/Press/News-Releases/2016/0128_EG.aspx>.

Rt Hon Jacinda Ardern "New Zealand leading trade agreement driving action on climate change and the environment" (press release, 26 September 2019).

"Editorial: Damaging our green campaign" The Jakarta Post (online ed, 1 July 2013) <www.thejakartapost.com/news/2013/07/01/editorial-damaging-our-green-campaign.html>.

Fiona Harvey "UN secretary general urges all countries to declare climate emergencies" *The Guardian* (online ed, international, 12 December 2020).

Clare Naden, International Standardisation Organisation "Clean Green Fish: Choosing climate-friendly seafood should get easier with a new standard just published" (press release, 8 January 2021) <www.iso.org/news/ref2611.html>.

New Zealand Ministry of Foreign Affairs and Trade "New Zealander appointed to WTO interim appeals arrangement" (press release, 4 August 2020) <www.mfat.govt.nz/en/media-and-resources/news/new-zealander-appointed-to-wto-interim-appeals-arrangement/>.

New Zealand Ministry of Foreign Affairs and Trade "Trade ministers express support for the Agreement on Climate Change, Trade and Sustainability at the World Economic Forum, Davos 2020" (press release, 24 January 2020) <www.mfat.govt.nz/en/media-and-resources/trade-ministers-express-support-for-the-agreement-on-climate-change-trade-and-sustainability-at-the-world-economic-forum-davos-2020/>.

H Internet Resources

"ACCTS negotiating rounds" New Zealand Ministry of Foreign Affairs and Trade <www.mfat.govt.nz/en/trade/free-trade-agreements/trade-and-climate/accts-negotiating-rounds/>.

"Agreement on Climate Change, Trade and Sustainability (ACCTS) negotiations" New Zealand Ministry of Foreign Affairs and Trade <www.mfat.govt.nz/en/trade/free-trade-agreements/climate/agreement-on-climate-change-trade-and-sustainability-accts-negotiations/>.

"Amending the HS" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/activities-and-programmes/amending_hs.aspx>.

"Amendments effective from 1 January 2022" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2022-edition/amendments-effective-from-1-january-2022.aspx>.

"APEC - A Multilateral Economic Forum" APEC Secretariat <www.apec.org/About-Us/How-APEC-Operates>.

"Appellate Body Members" World Trade Organization <www.wto.org/english/tratop_e/dispu_e/ab_members_descrp_e.htm>.

"Case Study: Virtual signing of the Digital Economy Partnership Agreement a first for New Zealand" New Zealand Ministry of Foreign Affairs and Trade <www.mfat.govt.nz/en/about_us/mfat-annual-reports/mfat-annual-report-2019-20/case-study-virtual-signing-of-the-digital-economy-partnership-agreement/>.

"Environment: Issues: Labelling" World Trade Organization <www.wto.org/english/tratop_e/envir_e/labelling_e.htm>.

"GATT and the Goods Council" World Trade Organization <www.wto.org/english/tratop_e/gatt_e/gatt_e.htm>.

"Homepage" The Intergovernmental Panel on Climate Change <www.ipcc.ch/>.

"Home Page" Trade Law Guide <www.tradelawguide.com>.

"Joint Leaders' Statement on the launch of the 'Agreement on Climate Change, Trade and Sustainability' initiative" (25 September 2019) Beehive.govt.nz <www.beehive.govt.nz/sites/default/files/2019-09/ACCTS joint leaders statement.pdf>.

"Joint statement: Agreement on Climate Change, Trade and Sustainability (ACCTS) Trade Ministers' meeting" (6 October 2021) Beehive.govt.nz <www.beehive.govt.nz/release/joint-statement-agreement-climate-change-trade-and-sustainability-accts-trade-ministers>.

"List of Contracting Parties to the HS Convention and countries using the HS" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/overview/list-of-contracting-parties-to-the-hs-convention-and-countries-using-the-hs.aspx>.

"New Zealand Working Tariff Document" New Zealand Customs Service <www.customs.govt.nz/business/tariffs/working-tariff-document/working-tariff-document/>.

"Recommendations Related to the Harmonized System" World Customs Organization <www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_recommendations.aspx>.

"Tariff rate, applied, weighted mean, all products (%) – New Zealand" World Bank World Integrated Trade Solution Database <https://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS?locations=NZ>.

"The World Bank in Costa Rica: Overview" The World Bank <www.worldbank.org/en/country/costarica/overview#1>.

I Other Resources

Samira Bakhshi and William A Kerr "Labour Standards as a Justification for Trade Barriers: Consumer Concerns, Protectionism and the Evidence" (paper presented to joint CAES-CATPRN Workshop, Quebec City, 23 October 2009).

Veronique Bastien "Developing countries and challenges of climate change-related PPMs within WTO institutions" (LLM Thesis, University of Toronto, 2013).

Daniel T Matawu “The Increasing Necessity for the Inclusion of Process and Production Methods (PPMs) into the Current GATT Regime as a Safeguard Tool for Environmental Sustainability” (LLM (Commercial Law) Dissertation, University of Cape Town, 2015).