

INTERNATIONAL LAW ASSOCIATION

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SUSTAINABLE DEVELOPMENT AND THE GREEN ECONOMY IN INTERNATIONAL TRADE LAW

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Final Report of the Committee

Introduction

1. The Committee's mandate is two-fold. It is concerned with the analysis and study of how far the rules-based international trading system (including but not limited to the World Trade Organization (WTO) trading system) supports open, fair, and development-friendly trade, which is both socially inclusive and environmentally sustainable. And based on its analysis and study, the Committee formulates proposals to strengthen the international trading system as an enabling environment for sustainable development and a green economy.
2. At its inaugural meeting, held on 8-9 June 2015 at the WTO, Geneva, the Committee considered four thematic areas from its mandate: trade-related environmental issues; climate and energy, in the form of trade and green economy measures; trade and agriculture; and trade and development. A list of potential topics, drawn from these four themes, were presented during the public session of the Committee at the 77th Biennial ILA Conference, held in Johannesburg in August 2016.
3. Committee members presented papers at two further meetings, held on 11 November 2016 at King's College, Cambridge, England, and 8 June 2017 at the offices of the Permanent Mission of the European Union to the WTO, Geneva, Switzerland. The Committee then produced its first interim report for the 78th Biennial ILA Conference, held in Sydney in 2018.¹
4. In a meeting held on 18 May 2019 in Seoul, South Korea together with a conference on 'Climate Change, Sustainable Development and International Trade Law', organised by Yonsei Law School, Committee members, addressed specific topics in the Committee's mandate. A meeting held on 17 January 2020 at the University of Liverpool, London Campus, England gave Committee members an opportunity to present papers prior to the completion of the Committee's second interim report for the 79th Biennial ILA Conference, held in Kyoto on-line in 2020.²
5. Since then, the Committee has met on-line on 7 January 2021 and 7 December 2021, with organisational and business meetings held at various dates throughout the year in order to complete its final report for the 80th Biennial ILA Conference, to be held in Lisbon, 19-24 June 2022.
6. The Committee has completed its mandate against the background of the COVID-19 pandemic, which has highlighted the role of international trade, particularly in ensuring the uninterrupted flow of essential goods, including food, medicines and basic services. The pandemic has also served as a timely reminder of how, without closer cooperation among states, a global pandemic could serve as a 'dress rehearsal' for addressing the climate change crisis.
7. During 2021 the UN Human Rights Council adopted two resolutions, recognising the right to development³ and the human right to a clean, healthy and sustainable environment, at the beginning of October.⁴ This was followed by the postponed the UN Climate Change Conference (COP26), which was finally held in November,⁵ with modest outcomes. Meanwhile, efforts to finalise negotiations on fisheries subsidies at the WTO for Members to meet their commitments under Sustainable Development

*The Committee is grateful to Mr Ahmed Yasin Jelle at Bristol Law School for his assistance with footnote references in this Report.

¹ Committee on Sustainable Development and the Green Economy, 'Interim Report on Sustainable Development and the Green Economy in International Trade Law,' International Law Association, Sydney (Australia) Conference 2018 [hereinafter Interim Committee Report 2018].

² Committee on Sustainable Development and the Green Economy, 'Interim Report on Sustainable Development and the Green Economy in International Trade Law,' Kyoto (Japan) Conference 2020 [hereinafter Interim Committee Report 2020].

³ UN Human Rights Council (HRC), Resolution adopted by the HRC on 8 October 2021 - The right to development, 15 October 2021, A/HRC/RES/48/10.

⁴ UN HRC, Resolution adopted by the HRC on 8 October 2021 - The human right to a clean, healthy and sustainable environment, 18 October 2021, A/HRC/RES/48/13.

⁵ 26th Conference of the Parties (COP26) of the United Nations Climate Change Conference, Glasgow (Scotland), 1-12 November 2021 [hereinafter COP26].

Goal (SDG) 14.6,⁶ were stymied by the postponement of the 12th WTO Ministerial Conference, due to the emergence of the Omicron variant of COVID, but was subsequently rescheduled to 12-15 June 2022.⁷ While the WTO Director General called on Members to agree on a response to TRIPS and the COVID pandemic as well as fisheries subsidies disciplines early in 2022,⁸ a Joint Initiative on Services Domestic Regulation: Reference Paper was reached on 2 December 2021.⁹ It marks the successful conclusion of WTO negotiations aimed at reducing administrative costs and creating a more transparent, predictable and effective operating environment for service providers. While not explicitly linked to the SDGs, the priorities of the Joint Initiative may help achieve SDG10, which aims to reduce inequality within and among countries by eliminating discriminatory laws, policies and practices and promoting appropriate domestic legislation, policies and action.¹⁰

8. The following is the final report of the Committee, which is completing its work under all four thematic areas of its mandate. It is divided into eight Parts. They are: Part I: Trade and Climate Action: Balancing Action and Participation (paras 9 to 33); Part II: Subsidies and Sustainability (paras 34 to 64); Part III: Environmentally Beneficial Market Access (paras 65 to 89); Part IV: Green Governance as Supply Chain Governance (paras 90 to 105); Part V: Creating, Sharing, and Protecting Green Knowledge (paras 106 to 125); Part VI: Governing Sustainability and the Role of Dispute Settlement Structures (paras 126 to 151); Part VII: Sustainability and WTO Reform (paras 152 to 169) and Part VIII: Conclusions arising from the Committee's work (paras 170 to 216).

Part I: Trade and Climate Action: Balancing Action and Participation

9. International trade law can play a significant, if challenging, role in delivering global climate and sustainability goals. The focus in the opening section is on the interaction between international trade and climate change (section A). The active participation and consideration of development concerns is reviewed in the context of border carbon adjustments (BCAs) and developing countries (section B). The focus then shifts to the need to balance action and participation between international trade and climate law through various means to strengthen synergies and minimise conflicts between the two (section C). Finally, there is an excursus into climate change and food security in the developing country context, noting the differences in approach towards the issue that exist in the international food and agricultural community and at the WTO (section D).

A. Introduction¹¹

10. In August 2021, the Intergovernmental Panel on Climate Change (IPCC) released the first part of its Sixth Assessment Report, warning that '[g]lobal warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO₂) and other greenhouse gas emissions occur in the coming decades'.¹² Drastic emissions cuts are thus necessary to keep the temperature goals of the 2015 Paris Agreement within reach, and to avoid dangerous climate impacts,

⁶ UNGA Res 70/1 (25 Sep 2015), Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1(21 October 2015) [hereinafter UNGA Res 70/1] which lists the 17 Sustainable Development Goals (SDGs).

⁷ '[General Council decides to postpone MC12 indefinitely.](#)' WTO Press Release, 26 November 2021; 'Dates fixed for 12th Ministerial Conference in June', WTO Press Release, 25 April 2022

⁸ '[DG calls on members to agree on pandemic response, fisheries subsidies by end-February.](#)' WTO Press Release, 2 December 2021.

⁹ Joint Initiative on Services Domestic Regulation: Reference Paper on Services Domestic Regulation, INF/SDR/ (26 November 2021), adopted 2 December 2021 [hereinafter Services Domestic Regulation Reference Paper].

¹⁰ This is the thrust of Target 10.3 which forms part of SDG 10 (n 6), on reduction of inequality.

¹¹ Drafted by Professor Harro van Asselt (Netherlands Branch).

¹² IPCC, 'Summary for Policymakers' in Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC 2021) 14. The IPCC provides independent analysis which forms an important source of evidence for the parties to the Paris Agreement (adopted 12 December 2015) 55 ILM 743 (2016) [hereinafter the Paris Agreement], adopted within the framework of the United Nations Framework Convention on Climate Change (9 May 1992) 1771 UNTS 107 [hereinafter the UNFCCC].

especially on more vulnerable communities, small island developing states and Least Developed Countries (LDCs). While Parties to the Paris Agreement at COP26 in Glasgow in November 2021 acknowledged the urgency of the response to climate change,¹³ their collective pledges – in the form of Nationally Determined Contributions, or NDCs – are estimated to lead to a temperature rise of 2.7°C.¹⁴

11. International trade plays a vital role in achieving the Paris Agreement goals. Trade can have direct and indirect effects on global greenhouse gas (GHG) emissions. Direct effects include emissions resulting from the international transport of goods, such as shipping and aviation.¹⁵ Trade's indirect effects depend on the overall growing GHG emissions driven by the increase in global economic activity due to trade (*scale* effects), the reduced GHG emissions due to the transfer of clean technologies or diffusion of emissions standards (*technique* effects), and the GHG emissions resulting from the sectoral specialisation in the area in which an exporting country has a comparative advantage (*composition* effects).¹⁶

12. Although it is difficult to discern the precise impact of trade on climate change, a significant portion of GHG emissions is associated with international trade.¹⁷ In its Fourth Assessment Report, the IPCC found that '[t]wenty percent of the growth in CO₂ emissions in non-Annex B [developing] countries can, through trade, be attributed to the increased demand for products by Annex B [developed] countries'. While territorial emissions in OECD countries were going down, emissions embodied in imports were going up.¹⁸

13. In their NDCs, Parties mention various trade-related climate change mitigation measures, including import bans, 26 standards and labelling schemes, border carbon adjustments (BCAs), renewable energy support measures, fossil fuel subsidy reform, and the use of international market mechanisms.¹⁹ Many of these measures link directly to the SDGs: in particular improving access to affordable and clean energy, ensuring sustainable and responsible consumption patterns, and building resilient infrastructure – as well as the overarching targets relating to climate change.²⁰ Some of these 'response measures' may raise questions concerning their consistency with international trade agreements, and developing countries in particular have expressed concerns about the possible implications of trade measures. However, neither the UN Framework Convention on Climate Change (UNFCCC) nor the Paris Agreement offers concrete guidance on such measures, beyond the need to ensure their compatibility with broad principles of the UNFCCC,²¹ such as the principle of 'common but differentiated responsibilities and respective capabilities' (CBDR-RC).

¹³ UNFCCC, '[Decision-/CP.26, Glasgow Climate Pact](#)' ([Advance Unedited Version](#)) (signed 13 November 2021) [hereinafter *Glasgow Climate Pact*], paras 1–4.

¹⁴ UNFCCC, 'Nationally Determined Contributions under the Paris Agreement, Synthesis Report by the Secretariat' UN Doc FCCC/PA/CMA/2021/8 (17 September 2021) 29.

¹⁵ International freight transport accounts for about a third of global trade-related emissions. See Anca Cristea and others, 'Trade and the Greenhouse Gas Emissions from International Freight Transport' (2013) 65 *Journal of Environmental Economics and Management* 153. Moreover, these emissions are estimated to grow nearly four-fold between 2010 and 2050. International Transport Forum (ITF), 'The Carbon Footprint of Global Trade: Tackling Emissions from International Freight Transport' (OECD and ITF 2015).

¹⁶ Ludivine Tamiotti and others, 'Trade and Climate Change: WTO-UNEP Report' (WTO 2009) 49–52.

¹⁷ WTO, '[Trade and Climate Change](#)' (2021).

¹⁸ Gabriel Blanco and others, 'Drivers, Trends and Mitigation' in Ottmar Edenhofer and others (eds), *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2014) 351, 385, citing Glen P Peters and others, 'Growth in Emission Transfers via International Trade from 1990 to 2008' (2011) 108 *Proceedings of the National Academy of Sciences* 8093.

¹⁹ Clara Brandi, 'Trade Elements in Countries' Climate Contributions under the Paris Agreement' (International Centre for Trade and Sustainable Development 2017).

²⁰ SDGs 7, 12, 9, and 13 (n 6), respectively.

²¹ UNFCCC (n 12), Article 3(5) specifies that '[m]easures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade'. However, this formulation 'neither condones nor forbids the use of trade measures'; Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (Oxford University Press 2017) 347.

14. Against this backdrop, WTO rules, as enforced through the dispute settlement system, can be viewed as either an obstacle to urgently needed climate action, or as an important safeguard to ensure that trade-related climate policies do not amount to protectionism in disguise. Although climate change-related questions were hardly discussed within the WTO for a long time, this has changed in the last decade, with some WTO Members increasingly taking up the issue, for instance, in the context of the Committee on Technical Barriers to Trade and the Committee on Trade and Environment.²² In addition to these discussions, interactions between trade rules and climate policies have concerned the adoption of various climate-related measures, such as renewable energy support measures and biofuel standards, which were the subject of WTO disputes.²³ Outside of the WTO, climate-specific provisions have increasingly been adopted in the context of regional trade agreements,²⁴ with one agreement currently under negotiation – the Agreement on Climate Change, Trade and Sustainability (ACCTS) – specifically targeting the development of disciplines that would achieve climate benefits, such as rules on fossil fuel subsidies (see below in Part II(C)).²⁵

B. *Border Carbon Adjustments and Developing Countries*²⁶

15. The prospect of countries adopting border carbon adjustments, and specifically the European Union (EU)’s proposal for a carbon border adjustment mechanism (CBAM),²⁷ has raised concerns regarding the fairness and equity implications of such trade measures, particularly in light of the Paris Agreement’s principle of CBDR-RC.²⁸ For instance, the BASIC countries (Brazil, South Africa, India, China) released a joint statement in 2021 expressing ‘grave concern regarding the proposal for introducing trade barriers, such as unilateral carbon border adjustment, that are discriminatory and against the principles of Equity and CBDR-RC’.²⁹ Such concerns also overlap with Members’ commitments to reduce inequalities between among countries.³⁰

16. To mitigate these concerns, BCAs could include special provisions (e.g., exemptions) for LDCs,³¹ or channel revenues from the BCA to developing countries to support low-carbon and climate-

²² See WTO, ‘Report (2018) of the Committee on Trade and Environment’ WT/CTE/25 (10 December 2018), paras 3.1–3.5. As this report shows, even the discussion of climate change in WTO committees remains controversial: ‘Several other delegations believed the issue should not be discussed in the [Committee on Trade and Environment] as the issues under the Paris Agreement were delicate and outside the WTO mandate as well as no parallel negotiations should take place outside of the UNFCCC’, *ibid*, para 3.5.

²³ See, e.g., Kati Kulovesi, ‘International Trade Disputes on Renewable Energy: Testing Ground for the Mutual Supportiveness of WTO Law and Climate Change Law’ (2014) 23(3) *Review of European Community & International Environmental Law* 342; Ilaria Espa and Gracia Marín Durán, ‘Renewable Energy Subsidies and WTO Law: Time to Rethink the Case for Reform beyond Canada – Renewable Energy/FIT Program’ (2018) 21(3) *Journal of International Economic Law* 621.

²⁴ Jean-Frédéric Morin and Sikina Jinnah, ‘[The Untapped Potential of Preferential Trade Agreements for Climate Governance](#)’ (2018) 27 *Environmental Politics* 541; Noémie Laurens, Jean Morin and Clara Brandi, ‘Climate and Trade Policies: From Siloes to Integration,’ (2021) *Climate Policy* 1.

²⁵ New Zealand Ministry of Foreign Affairs and Trade, ‘[Agreement on Climate Change, Trade and Sustainability \(ACCTS\) negotiations](#)’.

²⁶ Drafted by Professor Harro van Asselt (Netherlands Branch).

²⁷ European Commission, ‘Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism,’ COM (2021) 564 final, 14 July 2021 [hereinafter European Commission, CBAM Proposal].

²⁸ See, for example, Sarah Davidson Ladly, ‘Border Carbon Adjustments, WTO-Law and the Principle of Common but Differentiated Responsibilities’ (2012) 12 *International Environmental Agreements: Politics, Law and Economics* 63; Michael Hertel, ‘Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities’ (2011) 45 *Journal of World Trade* 653.

²⁹ ‘[Joint Statement issued at the conclusion of the 30th BASIC Ministerial Meeting on Climate Change hosted by India on 8th April 2021](#)’, para 19.

³⁰ SDG 10 (n 6).

³¹ Tim Gore and others., ‘What can Least Developed Countries and Other Climate Vulnerable Countries Expect from the EU Carbon Border Adjustment Mechanism (CBAM)?’ (Institute for European Environmental Policy 2021).

resilient development.³² Differential treatment of (some) developing countries may lead to a violation of the most-favoured-nation treatment obligation under Article I GATT 1994.³³ However, the Enabling Clause might under certain circumstances allow for an exemption of these countries. Moreover differential treatment may also strengthen an Article XX GATT 1994 defence by acknowledging that different conditions may prevail in developing countries, and would be better aligned with the principle of CBDR-RC.³⁴ In addition to differential treatment, and as highlighted in Part III below, international dialogue on principles and best practices guiding BCAs could help to ensure that such measures do not hinder international cooperation on climate change and trade.

C. *Strengthening Synergies and Minimising Conflict between International Trade and Climate Law*³⁵

17. Studies have discussed various options to strengthen synergies and minimise conflicts between international trade and climate law. WTO options include: (1) the amendment of WTO agreements to accommodate climate action; (2) the adoption of a ‘climate waiver’ that temporarily relieves WTO Members from their obligations; (3) an authoritative interpretation by WTO Members of ambiguous WTO provisions; (4) a ‘peace clause’ through which members commit to refrain from challenging each other’s measures; (5) improved transparency of the climate impacts of trade measures; (6) the inclusion of climate expertise in WTO disputes; and (7) establishing a ministerial coalition on trade and climate change.³⁶

18. Due to their procedural requirements, legal changes at the WTO will be challenging to implement. For instance, a decision to propose an amendment to the WTO Agreement normally requires consensus. No amendment will come into effect until two-thirds of WTO Members have accepted it; an amendment that abridges Members’ most-favoured-nation rights (e.g. for a climate club) would not come into effect unless accepted by all 164 WTO Members. Even if an amendment comes into effect, Members that have not accepted it are not bound by it and can rely on their rights under the pre-amendment WTO Agreement.³⁷ These hurdles explain why WTO amendments are so rare.³⁸

19. Waivers have been more frequent.³⁹ Given their temporary nature, waivers offer a more flexible way of accommodating climate concerns, and it can be argued that the urgent need for climate action constitutes the ‘exceptional circumstances’ required by the Marrakesh Agreement.⁴⁰ In practice, a waiver requires consensus support; achieving consensus is a political process that can take time and effort to adjust the interests concerned. Waivers exceeding one year are regularly reviewed.⁴¹

20. In theory, the WTO could adopt an authoritative interpretation of WTO provisions. But while the high-level bodies of the WTO can adopt such an interpretative decision by a three-fourths supermajority vote, the decision must first be recommended by a lower-level body that operates solely

³² Marco Springmann, ‘Carbon Tariffs for Financing Clean Development’ (2013) 13 *Climate Policy* 20.

³³ GATT 1994: General Agreement on Tariffs and Trade 1994, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 UNTS. 187, 33 ILM 1153 (1994) [hereinafter GATT 1994].

³⁴ Michael A Mehling and others, ‘Designing Border Carbon Adjustments for Enhanced Climate Action’ (2019) 113 *American Journal of International Law* 433, 463–464, 469–70 and 47–473.

³⁵ Drafted by Professor Harro van Asselt (Netherlands Branch).

³⁶ These options are derived from Kasturi Das and others, ‘Making the International Trade System Work for the Paris Agreement: Assessing the Options’ (2019) 49 *Environmental Law Reporter News & Analysis* 10553; and Carolyn Deere Birkbeck, ‘Priorities for the Climate–Trade Agenda: How a Trade Ministers’ Coalition for Cooperation on Climate Action Could Help’ (Chatham House, 2021).

³⁷ WTO Agreement: Marrakesh Agreement Establishing the World Trade Organization, 15 April 1994, 1867 UNTS 154, 33 ILM 1144 (1994) [hereinafter Marrakesh Agreement or WTO Agreement], Article X.

³⁸ The only case of an amendment of WTO law was an amendment to the TRIPS Agreement: General Council, ‘Amendment of the TRIPS Agreement’, Decision of 6 December 2005, WT/L/641 (8 December 2005).

³⁹ A key example being the Kimberley Waiver for conflict diamonds. See General Council, ‘Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds, Decision of 15 May 2003’, WT/L/518 (27 May 2003).

⁴⁰ James Bacchus, ‘[The Case for a WTO Climate Waiver](#)’ (CIGI 2017) 24.

⁴¹ WTO Agreement (n 37) Article IX (3).

by consensus.⁴² Such an interpretation could clarify ambiguous terms (e.g., by specifying the conditions under which climate-related trade measures would meet the conditions of the *chapeau* of Article XX GATT 1994), but it cannot modify the legal rules and may not undermine the WTO's amendment rules.⁴³ The WTO has never adopted an authoritative interpretation.⁴⁴

21. Like a waiver, a 'peace clause' can provide space for climate action. However, whereas a waiver would suspend substantive rights and obligations, a peace clause would consist of a procedural agreement among WTO Members to refrain from challenging certain climate-related measures (e.g., renewable energy subsidies or BCAs).⁴⁵ Such a peace clause could be adopted through a decision by the Ministerial Conference or the General Council (in practice by consensus).⁴⁶

22. In addition to the procedural challenges to the various options discussed so far, there is also another, more substantive challenge: how to formulate the scope of any measure (amendment, waiver, authoritative interpretation, peace clause) in such a way so as to accommodate genuine, effective, and non-protectionist climate measures. Other, more procedural changes to the institutions and practices of the WTO do not face this hurdle. One such option is to strengthen the transparency of the climate and trade impacts of certain measures through, for instance, the Trade Policy Review Mechanism, building on the WTO's Environmental Database.⁴⁷ However, a mandatory impact assessment⁴⁸ would require an amendment, and thus be subject to the procedural requirements mentioned above.

23. Another procedural change would be to better integrate climate-related expertise in WTO dispute settlement through, for instance, ensuring that Appellate Body or panel members have a relevant background in environmental science, law and/or policy;⁴⁹ calling upon relevant climate-related experts or information pursuant to Article 13 of the Dispute Settlement Understanding;⁵⁰ or drawing on *amicus curiae* briefs.⁵¹

24. Lastly, building on momentum achieved through the launch of the Trade and Environmental Sustainability Structured Discussions,⁵² and proposed ministerial statements related to trade and environmental sustainability,⁵³ an informal coalition of trade ministers could offer a forum for, among others, coordinating national trade policies in support of the Paris Agreement, sharing experiences and best practices, and strengthening green aid for trade initiatives.⁵⁴

⁴² Ibid, Article IX (2).

⁴³ Ibid.

⁴⁴ WTO, *Analytical Index*, '[WTO Agreement - Article IX \(Jurisprudence\)](#)' (June 2021).

⁴⁵ For instance, an option may be 'to wait at least three years before challenging national climate measures or countermeasures that restrict trade or otherwise have trade effects in WTO dispute settlement'; see James Bacchus, 'Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes' (ICTSD and World Economic Forum 2016) 14.

⁴⁶ WTO Agreement (n 37) Article IX(1). On the customary practice of consensus-based decision-making, see General Council, 'Procedures for the Appointment of Directors-General', WT/L/509 (20 January 2003) para 20.

⁴⁷ See, WTO Environmental Database, accessible [here](#).

⁴⁸ As suggested by Bacchus (n 40) 6.

⁴⁹ A related suggestion is to ensure that WTO Secretariat staff assisting panels and the Appellate Body have the relevant expertise. See Joost Pauwelyn, 'The Use of Experts in WTO Dispute Settlement' (2002) 51 *International & Comparative Law Quarterly* 325, 345.

⁵⁰ See generally *ibid*; and Christopher T Timura, 'Cross-Examining Expertise in the WTO Dispute Settlement Process' (2002) 23 *Michigan Journal of International Law* 709.

⁵¹ See Theresa Squatrito, 'Amicus Curiae Briefs in the WTO DSM: Good or Bad News for Non-State Actor Involvement?' (2018) 17 *World Trade Review* 65.

⁵² WTO, '[Trade and environmental sustainability structured discussions news archives](#).'

⁵³ See, for example, '[Ministerial Statement on Trade and Environmental Sustainability](#)' (15 November 2021).

⁵⁴ Deere Birkbeck (n 36) 49.

D. Climate Change and Food Security⁵⁵

25. The growing prominence of the linkage between climate change and food security is reflected in recent IPCC reports, including its Fifth Assessment Report (AR5)⁵⁶ and the Special Report on global warming of 1.5°C (SR15).⁵⁷ An IPCC study of climate change and land, highlighted the fact that increases in frequency and intensity of extremes are having an adverse impact on food security.⁵⁸

26. Already in 2018, the international food and agricultural community noted that climate variability and extremes potentially affected the four pillars of food security in sustainable food systems – *availability*, *access*, *utilisation* and *stability*.⁵⁹ More specifically, climate change affects food *availability* in terms of agricultural productivity and food imports when countries try to compensate for domestic production losses. In particular, medium- and large-scale climate-related disasters may lead to significant impacts across the food value chain.⁶⁰ Access to food and its consumption can be negatively affected where food price spikes and volatility follow climate extremes. Climate variability can affect *utilisation* and *stability* of food in terms of the quantity, quality and dietary diversity of food consumption. More erratic rainfall and higher temperatures can jeopardize the quality and safety of food and can lead to crop contamination and outbreaks of pests and diseases.⁶¹

27. In its Trade and Development Report 2021, UNCTAD noted that ‘measures designed to achieve economic development through structural transformation in a climate-constrained world will need to achieve sufficiently productive agriculture to ensure food security at affordable prices.’⁶² It suggested that ‘halting deforestation and land degradation’ should be balanced with ‘improving access to technology in manufacturing and in agriculture to enable productivity growth and employment.’⁶³

28. The launch of a high level Report by FAO, UNDP and UNEP, in September 2021, called for the phasing out of the most distorting and damaging policies for nature, climate, nutrition, health and equity and a repurposing of agricultural support policies to transform food systems.⁶⁴ It noted that the international trade community could play an important role in pursuing further reform of border measures and coupled subsidies but that it would need a concerted effort by the WTO members to reform agricultural trade disciplines to make them more conducive to sustainable food systems transformation in a climate-challenged world.

29. There is a significant divergence in approach towards climate change and food security between the approach of the international food and agricultural community (the UN, FAO, IFAD, WFP, WHO),

⁵⁵ Drafted by Professor Emerita Mary Footer (British Branch).

⁵⁶ IPCC and others, *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (London and New York: Cambridge University Press, 2013) 1535 pp.

⁵⁷ IPCC and others, *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* (Geneva, Switzerland: IPCC, 2018).

⁵⁸ C Mbow and others ‘Food Security’ in P R Shukla and others (eds), *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* (Geneva, Switzerland: IPCC, 2019), chapter 5.

⁵⁹ FAO and others, *The State of Food Security and Nutrition in the World 2018. Building climate resilience for food security and nutrition* (Rome, Italy: FAO, 2018), p 39.

⁶⁰ FAO, IFAD, UNICEF, WFP and WHO, *The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all* (Rome, Italy: FAO, 2021), p 53.

⁶¹ *Ibid*, p 54.

⁶² UNCTAD, *Trade and Development Report 2021: From Recovery to Resilience* (2021) UNCTAD/TDR/2021, p 112.

⁶³ *Ibid*.

⁶⁴ FAO, UNDP and UNEP, *A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems. In brief* (Rome, Italy: 2021), p 15 [hereinafter FAO, UNDP and UNEP, *A multi-billion-dollar opportunity*]

and even UNCTAD, contrasted to that of the WTO.⁶⁵ The international food and agricultural community seeks to understand the impact of climate change on food security, principally in the realm of climate adaptation, whereas the WTO's legal and policy framework affecting food security focuses on other issues.

30. The WTO's Agreement on Agriculture (AoA)⁶⁶ was not designed to promote food production, but to make competition in agricultural trade fairer for countries that cannot or do not subsidise, by reducing trade-distorting domestic support and export subsidies (see Part II, section A below). In the AoA's preamble,⁶⁷ WTO Members agreed to take into account 'the particular needs and conditions of developing country Members' and to undertake those commitments 'in an equitable way [...] having regard to non-trade concerns, including food security and the need to protect the environment'.

31. Article 6.2 AoA⁶⁸ provides policy space for developing country assistance for agricultural and rural development. The AoA's 'Green Box' list of permitted agricultural support under Article 6.1 (AoA Annex 2) explicitly allows public stockholding (PSH) for food security purposes, as well as domestic food aid, subsidies for environmental infrastructure and research, payments under environmental or conservation programmes and disaster relief payments.⁶⁹ The AoA does not have any limits on supplying food to the poor or malnourished.

32. Recent WTO discussions on food security have focused on the trade effects of certain PSH programmes for food security that involve government procurement of crops at above-market prices (administered prices), and sale or other disposal of those stocks. These discussions have not featured climate change but they have included the concerns of affected developing country agricultural exporters.

33. In a Ministerial Decision adopted in 2013,⁷⁰ WTO Members agreed to negotiate a solution to this issue and decided on a 'peace clause' for developing country breaches of domestic support commitments through existing PSH programmes for traditional staple crops. In return, Members seeking the shelter of the peace clause must ensure that stocks procured do not distort trade or adversely affect the food security of other Members, and must provide information to show they are complying with these conditions. Negotiations on this issue have continued from 2013 to the present; WTO Members remain divided with no agreement in sight. Meanwhile, the peace clause remains in place.

Part II: Subsidies and Sustainability

34. Existing levels of economic production and consumption do not achieve the objective of sustainable development; that is, they do not ensure 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.⁷¹ Government subsidisation programmes have significant impacts on the sustainability of production and consumption levels. By providing subsidies, a government incentivises certain types of economic activity (over others). From an economic perspective, such a government intervention could be warranted to correct market failures and to internalize *positive* externalities, for instance to stimulate R&D for sustainability purposes if the results thereof benefit the wider society.⁷² On the other hand, governments should not induce economic activity causing *negative* externalities, imposing a cost to society (such as

⁶⁵ For a broader analysis of this divergence see Mary E Footer, 'Trade-related Aspects of International Food Security and the Developing World' (2014) 6(2) *Trade, Law & Development*, 288-358.

⁶⁶ Agreement on Agriculture, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 UNTS 410 [hereinafter AoA].

⁶⁷ Ibid, Preamble, recitals 5 and 6.

⁶⁸ Ibid, Article 6.2.

⁶⁹ Ibid, Article 6.1 together with Annex 2, para. 3.

⁷⁰ WTO, Ministerial Decision of 7 December, 2013 on Public Stockholding for Food Security Purposes, WT/L/913 (2013), paragraph 2, as modified by the WTO, General Council Decision of 28 November, 2014, WT/L/939 (28 November 2014) and WTO, Ministerial Decision of 19 December 2015 on Public Stockholding for Food Security Purposes, WT/L/979 [hereinafter Ministerial Decision on Public Stockholding for Food Security Purposes].

⁷¹ Brundtland report, *Our Common Future* (United Nations, 1987), para. 27.

⁷² And thereby supporting the attainment of SDGs 7 (affordable and clean energy) and 12 (responsible consumption) (n 6).

environmental degradation) not borne by the producers or consumers. From a sustainability perspective, such economic activity should be paid for by those who benefit (either through taxation or regulation), rather than incentivised.

35. The WTO restricts Members' ability to provide certain subsidies, in particular under the Agreement on Subsidies and Countervailing Measures (ASCM) and the Agreement on Agriculture (AoA).⁷³ However, the existing disciplines focus on the *trade* impact of subsidisation, without – explicitly – taking into consideration the impact of subsidies on *sustainability* (on either positive or negative externalities). This raises the question of whether WTO Members need more flexibility to provide subsidies *conducive* to sustainability, which the Committee and some of its members have addressed elsewhere (seeing little prospect for any multilateral reform in the near future).⁷⁴ It also raises the question of whether new international disciplines are needed to restrict countries' ability to provide subsidies that *undermine* sustainability goals, and how to design such disciplines. New disciplines could be developed either at the multilateral WTO level and/or in bilateral or plurilateral agreements. Existing subsidies for agriculture, fisheries and fossil fuels result in negative externalities to the environment. We discuss each in turn and explore existing initiatives and options for creating new international subsidy disciplines in these areas.

36. In considering new disciplines, we need to take into account lessons learned and concerns never satisfactorily resolved during 25 years of implementation of the WTO's ASCM. These include in particular: (i) the importance of prompt, adequate, effective and neutral dispute settlement;⁷⁵ (ii) the lack of transparency about national and especially sub-central subsidies;⁷⁶ and, (iii) the resolution of several technical issues, such as the use of alternative benchmarks for the benefit determination.

A. *Agricultural subsidies disciplines*⁷⁷

37. At the WTO's 10th Ministerial Conference held in Nairobi in December 2015, Members agreed to abolish agricultural export subsidies (with some flexibility under Article 9.4 of the AOA for developing countries until 2023, and for LDCs and net food-importing developing countries until 2030).⁷⁸

38. Although the removal of agricultural export subsidies is a positive development, other forms of agricultural subsidies remain intact and need to be reformed. In particular, the WTO's current disciplines on subsidies are not well-tailored to addressing the climatic harm caused by specific types of farming and its subsidisation. Below we briefly summarise recent findings with respect to agricultural subsidies and climate impact, and then address the WTO's current disciplines and how Members could better incentivise climate-friendly agricultural production and practices.

(i) *Agricultural subsidies and climate change*

39. There is a need to redirect agricultural subsidies so as to ameliorate the effects of agriculture on the climate. This is illustrated by a recent study which estimates that over 80 percent of GHG emissions in the agricultural sector derive from dairy, rice, and particularly beef farming, all of which receive significant government market price-support, including in the form of subsidies.⁷⁹ Overall, the

⁷³ Agreement on Subsidies and Countervailing Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 UNTS 14 [hereinafter SCM Agreement or ASCM] and the Agreement on Agriculture or AoA (n 66). It should be noted that the General Agreement on Trade in Services, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 UNTS 183, 33 ILM 1167 (1994) [hereinafter GATS] only indirectly disciplines certain subsidies affecting trade in services.

⁷⁴ See Interim Committee Report 2018 (n 1) at paras 49-54; 74.

⁷⁵ A lot of the issues are not novel, such as the length of some of the steps under the WTO Dispute Settlement Understanding. See e.g., Mexico's most recent formulation of its 'diagnosis' which dates back to 2007, Mexico 'Diagnosis of the Problems Affecting the Dispute Settlement Mechanism' 16 July 2007 (TN/DS/W/90).

⁷⁶ This was noted, for instance, by the E15 Project and Global Trade Alert.

⁷⁷ Drafted by Professor Meredith Kolsky Lewis (New Zealand Branch).

⁷⁸ See Article 9.4 AoA, (n 66); Ministerial Decision of 19 December 2015 (WT/MIN(15)/45-WT/L/980; G/AG/5/Rev.10).

⁷⁹ David Laborde and others, '[Agricultural subsidies and global greenhouse gas emissions](#)' (2021) 12 *Nature Communications*, Article number 2601, 2.

study determined that simply removing all forms of agricultural support would lead to a slight *increase* in overall emissions⁸⁰. At the same time, a recent FAO/UNDP/UNEP publication finds that nearly 90 percent of global agricultural support (including subsidies) is harmful. And far more subsidies and other support are provided to support beef and dairy production than to the production of more sustainable crops such as various vegetables.⁸¹ However, the FAO/UNDP/UNEP study concludes that expenditures should continue but should be redirected to improve the climate among other objectives.⁸² A recent World Bank report similarly concludes that agricultural support can help mitigate climate change if channelled into research and development and innovation.⁸³

40. The above findings would seem to point towards removing certain subsidies while furthering others. At the same time, it must be taken into account that the world needs to produce more food. Global population is estimated to increase to nearly 10 billion by 2050, and in order to feed the population and combat climate change, the world will need to produce 50 percent more food in 2050 than it did in 2010 while reducing GHG emissions by two-thirds.⁸⁴ This difficult task calls for WTO Members to identify ways to align WTO rules with these policy imperatives to avoid undermining one objective in the pursuit of another.

(ii) WTO Disciplines

41. At present, WTO subsidies disciplines are not well-tailored to addressing the above challenges. In particular, the AOA's box system focuses on whether subsidies are trade-distorting. Subsidies that are tied to increased production or which distort international markets are deemed to be in the 'Amber Box',⁸⁵ meaning the aggregate amount of such subsidies must be reduced over time. These subsidies are actionable under the SCM Agreement (as well as under the AoA if the aggregate measure of support is not reduced as required). Subsidies that would otherwise be amber but are tied to requirements to limit production are deemed 'Blue Box'⁸⁶ and do not have spending limits. Finally, non-trade-distorting subsidies are permitted without limitation (Green Box).⁸⁷ In addition, Members may grant subsidies that are coupled with production if they represent five percent or less of the value of the given product.

42. The AoA rules are not directed at particular types of agricultural farming. There is no distinction between a Blue Box subsidy given to a wheat farmer whose crops require vast quantities of fertilizer and intense irrigation, and one given to a farmer who is limiting the production of a drought-resistant crop that requires minimal fertilizer or irrigation. This is problematic because approximately one-third of GHG emissions produced from agriculture in the United States derive from fertilizers and pesticides.⁸⁸

43. Even if subsidies and other payments decoupled from production do not increase the amount of farm outputs produced, holding these production levels constant is not a win because certain types of farming result in particularly high GHG emissions. Similarly, although the amount of coupled subsidies permitted is small as a percentage of overall production by a granting country, this additional encouragement of production is problematic when the type of farming produces a substantial quantity of GHG emissions.

44. Additionally, while the AoA requires countries providing domestic support to reduce their aggregate levels of support, there is no preference built into the AoA for reducing support to climate-unfriendly types of farming and farm products rather than to sustainable practices and crops. Indeed, the Aggregate Measure of Support (AMS) system means that a WTO Member can *raise* the support to

⁸⁰ Ibid, 4.

⁸¹ FAO, UNDP and UNEP, *A multi-billion-dollar opportunity* (n 64).

⁸² UN News, [Most agricultural funding distorts prices, harms environment: UN report](#).

⁸³ Timothy D Searchinger and others, '[Revising Public Agricultural Support to Mitigate Climate Change](#)' (2020) *Development Knowledge and Learning*' (World Bank, 2020).

⁸⁴ Tim Searchinger, '[World Resources Institute, Redirecting Agricultural Subsidies for a Sustainable Food Future](#)' (World Resources Institute, 21 July 2020).

⁸⁵ Article 6.5 AoA (n 66).

⁸⁶ Ibid.

⁸⁷ See FAO, UNDP and UNEP, *A multi-billion-dollar opportunity* (n 64) and associated text.

⁸⁸ David Pimentel and others, '[Organic and Conventional Farming Systems: Environmental and Economic Issues](#)' (2005).

certain producers, which could be its most climate-damaging producers, so long as it makes sufficient reductions elsewhere.

45. It is clear that agricultural production, particularly of bovine meat, is a significant contributor to GHG emissions but that there are significant variations across sectors and countries. As such, it is crucial to consider how to better align subsidies disciplines with emissions reduction. This likely argues in favour of continuing to allow some agricultural subsidies, but to incentivize subsidies that will lead to emissions reductions, whether through research and development into more emissions-efficient farming methods or by encouraging a shift away from emissions-intensive cattle farming and towards more emissions-efficient crops.

46. Given the degrees of magnitude by which emissions from bovine meat farming exceed those from any other types of farming, members should consider how to encourage innovations in emissions reductions specifically in this sector. For example, methane emitted by livestock is a significant source of GHGs. In Australia, these emissions comprise 70 percent of all of the country's agricultural GHGs, and 11 percent of the country's GHG emissions as a whole.⁸⁹ Research has identified various strategies for reducing methane emissions, including providing the animals with feed additives. A particular type of seaweed has shown initial promise, appearing to reduce methane emissions by 80 percent.⁹⁰ It would be climate-friendly therefore for countries to subsidize the production of this seaweed and to provide it to their farmers; however, this could be deemed an amber box subsidy. Yet surely it would be preferable to have slightly more bovine meat production at an 80 percent emissions reduction than to maintain the status quo.

47. Given the challenges in generating new rules within the WTO, a pragmatic solution may lie in a waiver or 'peace clause'-type of arrangement so that Members are temporarily able to give certain climate-friendly and efficiency-friendly subsidies, even if such subsidies lead to an increase in production. Perhaps such a stopgap could also include commitments related to technology and supply (e.g. of methane-reducing seaweed) sharing.

(iii) Special and Differential Treatment (SDT)

48. Reforming the most environmentally damaging farming processes will require nuanced strategies. While special and differential treatment generally dictates that developing countries have lesser obligations than developed countries, in the case of beef cattle farming, in many cases developing country production methods lead to far higher levels of GHG emissions than do developed country production methods for the same product. In particular, the GHG emission intensity for beef substantially exceeds that of any other food product, and that intensity is nine-fold higher for beef produced in India (108.3 CO₂g CO₂ eq per kg of production) than for beef produced in the United States (12.1 kg CO₂ eq per kg of production), and twelve times higher than for beef produced in Japan (9.5 kg CO₂ eq per kg of production).⁹¹

49. In general, there is a high correlation between productivity and lower emissions per kg of production. Developed country producers are more efficient and thus have lower emissions per kg produced than do developing countries with respect to beef, while developing countries as a whole have slightly lower emissions in connection with rice production than do developed countries.⁹² Policymakers thus need to consider how to balance the interests in food security and the viability of small farms with those in improving production efficiency and reducing emissions. As above, this may counsel in favour of permitting subsidies in R&D and technology that would be shared, as well as factoring into the food security negotiations more flexibility for stockholding of sustainably-produced crops and less for farming with low production yields and high GHG emissions.⁹³

⁸⁹ Government of Western Australia, '[Department of Primary Industries and Regional Development, Carbon farming: reducing methane emissions from cattle using feed additives](#)' (1 February 2022).

⁹⁰ Ibid.

⁹¹ Laborde and others (n 79) 3.

⁹² Ibid.

⁹³ See also above Part I(B), specifically on BCAs in developing country context.

B. Fisheries Subsidies⁹⁴

50. This Committee has previously noted the multilateral and regional trade regimes governing (or not, as the case may be) the use of subsidies as regards fisheries.⁹⁵ At the plurilateral and regional level, there has been a continuation of the practice of referencing commitments in relation to prohibiting subsidies that contribute to illegal, unregulated, or unreported (IUU) fishing.⁹⁶ Meanwhile, it is looking more likely that the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) (which contains commitments on subsidies to IUU fishing) may expand its membership in the near future. The UK is currently engaged in formal negotiations to accede to CPTPP, and other WTO members, such as China and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu (Chinese Taipei), which have both made applications to accede. There have been reports that South Korea is seriously considering its own application, as is Thailand.⁹⁷ Accession by any of these, or other, economies, would further expand the coverage of the existing disciplines.

51. At the multilateral level, the 2020 deadline set by SDG 14.6 was missed. The most recent comprehensive circulated text was a draft Agreement on Fisheries Subsidies⁹⁸ which in and of itself presented a substantial achievement. On 17 June 2022, members agreed the Agreement on Fisheries Subsidies (AFS). An impressive achievement, nonetheless, it is less comprehensive than the draft Agreement as it fails to cover subsidies that contribute to overcapacity and overfishing and includes considerable carve-outs and qualified language. The following sections examine the draft Agreement as regards scope, disciplines, SDT, notifications and enforcement, noting particularly possible ‘lessons learned’ for the development of other disciplines in the sustainability space, and comparing it with the agreed AFS. This comparison is of particular importance as members are instructed under Article 12 AFS to adopt ‘comprehensive disciplines’ within four years from the entry into force of the agreement, failing which (absent a decision of the General Council) the AFS is terminated. Whether this serves as an incentive for members to conclude a comprehensive agreement or not, it constitutes a significant risk.

(i) Scope

52. Under both the draft Agreement and AFS, subsidies are to be understood in line with the definitions of Article 1.1 of the SCM Agreement. The proposed disciplines are expected to apply to subsidies provided to marine wild capture fishing and fishing-related activities at sea (aquaculture and inland fisheries are excluded). They are also expected to apply to *specific* subsidies (within the meaning of Article 2 of the SCM Agreement), although there is disagreement over the extent to which non-specific fuel subsidies may be covered by new disciplines. There is a further question over the ‘fit’ of core concepts in the SCM (in particular, specificity) and their applicability to rules on subsidies that are concerned not with economic harm in the narrow sense but rather with their environmental impact (see below).

(ii) Disciplines

⁹⁴ This section was drafted by Dr Gregory Messenger (British Branch) and Mr Stefan Amarasingha (Danish Branch).

⁹⁵ See Interim Committee Report 2018 (n 1) at paras 68-83; and Interim Committee 2020 (n 2) at paras 132-134.

⁹⁶ For example, see Agreement between the United States of America, the United States of Mexico and Canada or USMCA (revised version signed 10 December 2019, in force 1 July 2020), at Article 24.20 (Fisheries Subsidies), and the Agreement in Principle between the United Kingdom and New Zealand which refers to specific subsidy prohibitions to tackle IUU fishing, overfishing and overcapacity.

⁹⁷ Comprehensive and Progressive Agreement for Trans-Pacific Partnership or CPTPP (signed on 8 March 2018, entered into force on 30 December 2018); Bryce Baschuk and Jiyeun Lee, ‘[South Korea ‘Seriously’ Looking to Join CPTPP Following China Bid](#)’ (Politics, 8 October 2021); See also Reuters, ‘[Thailand plans to join talks on trans-Pacific trade pact membership](#).’

⁹⁸ WTO, ‘[Draft agreement on fisheries subsidies submitted for ministers’](#) attention ahead of MC12’ (24 November 2021) WT/MIN(21)/W/5 [hereinafter Draft Agreement on Fisheries Subsidies]. Numerous provisions of the Draft Agreement refer to the Agreement on Subsidies and Countervailing Measures or ASCM (n 73). Negotiations were concluded (for now) with the Agreement on Fisheries Subsidies (17 June 2022) WT/MIN(22)/W/22 [hereinafter AFS].

53. The draft Agreement proposed: a blanket prohibition on subsidies to any form of IUU fishing; a prohibition on subsidies to fishing of overfished stocks (with limited exceptions); and a presumptive prohibition on subsidies that contribute to overcapacity or overfishing with limited grounds for rebuttal.⁹⁹ The AFS includes IUU disciplines, but does not contain any restrictions on overcapacity and limits the scope of disciplines on both IUU and overfishing as these include an exemption for subsidies provided by developing countries within their exclusive economic zone for a 2 year period under Articles 3.8 and 4.4.

54. Members had already moved closer to agreement on disciplines relating to IUU fishing (possibly echoing the increasing inclusion of IUU disciplines within FTAs).¹⁰⁰ Both the AFS and draft Agreement prohibit subsidies being provided to any vessel or operator engaged in IUU fishing.¹⁰¹ Whether a vessel or operator is engaged in IUU fishing is based on a determination by either the coastal state, the flag state, or a relevant competent Regional Fisheries Management Organisation or Arrangement (RFMO/A).¹⁰² Deferring the determination of IUU fishing to authorities outside the WTO, has allowed Members to (mostly) agree on the subsidies prohibition applying to both vessels and their operators should the operator be found to engage in IUU fishing and not just one or more of its vessels).¹⁰³ Concerns over procedural guarantees for operators are reflected, for example, in requirements for coastal State Members to notify (in a timely manner) the Committee, flag State Member and (if known) subsidising Member of a determination that a vessel is engaged in IUU fishing.¹⁰⁴ This speaks to the increasingly blurred line between obligations on public actors, and the impact that such determinations have on private actors.¹⁰⁵

55. Both the AFS and draft Agreement prohibit certain subsidies concerning overfished stocks. Whether a stock is overfished is determined by either coastal states or the competent RFMO/A. Unlike the prohibition on subsidies to IUU fishing, the prohibition on subsidies concerning overfished stocks contains an exception where a Member implements measures to build stocks to a sustainable level. Here there is a small but important distinction in positions (unresolved in the text of the draft Agreement): as to whether the exception applies only to *subsidies* intended to build stocks or to *any* measure to build stocks.¹⁰⁶ The latter interpretation is concerning as it presumes the possibility of subsidies to overfishing being mitigated by other measures instead of carving out ‘good’ subsidies to build stocks. In the narrower proposal, nothing stops Members from introducing other measures to build stocks – while still prohibiting the use of subsidies that would undermine such measures. Allowing harmful subsidies, however mitigated, would be sub-optimal. This is especially the case given the weaker obligation foreseen in the case of unassessed stocks, where Members are only to ‘take special care and exercise due restraint’.¹⁰⁷ Article 4.3 AFS allows for these ‘positive’ subsidies where they are ‘implemented to rebuild the stock to a biologically sustainable level’. A hopeful interpretation of this provision could give inspiration for disciplines in relation to other areas of environmental subsidies.

56. Of the prohibitions, the prohibition of subsidies that contribute to overcapacity or overfishing presents a specific challenge. Specifically, the potential (mis)use of an exception for financial support to maintain stocks at a sustainable level.¹⁰⁸ Key challenges relate to the determination of sustainable levels, as well as the extent to which commitments under Article 5 of the draft Agreement are subject

⁹⁹ Ibid, Articles 3, 4, and 5.

¹⁰⁰ IUU fishing is defined in line with International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, without any additional qualifiers that were present in previous drafts (eg., ‘as implemented in national legislation’).

¹⁰¹ Draft Agreement on Fisheries Subsidies (n 98) and AFS (n 98), Article 3.1.

¹⁰² Ibid, Article 3.2.

¹⁰³ Agreement on Fisheries Subsidies, Draft Text, Addendum (24 November 2021) [WT/MIN\(21\)/W/5/Add.1](#) [hereinafter the Chair’s comments] at paras 22-27.

¹⁰⁴ Draft Agreement on Fisheries Subsidies (n 98) and AFS (n 98), Article 3.3(b).

¹⁰⁵ See Agreement on the Implementation of Article VI of GATT 1994 (15 April 1994) 1868 UNTS 201 [hereinafter the Anti-Dumping Agreement], Article 13, or Article XIII GATT 1994 (n 33) in relation to the administration of tariff rate quotas.

¹⁰⁶ See the implication of the Chair’s comments (n 103), para 45, over the potential confusion between Articles 4 and 5.

¹⁰⁷ Draft Agreement on Fisheries Subsidies (n 98), Article 11.1.

¹⁰⁸ Ibid, Article 5.1.1.

to carve-outs for developing country Members. These tensions ran throughout the talks as Members attempt to identify the correct balance between disciplines that support sustainable fishing while allowing flexibilities for developing Members yet keeping such flexibilities from undermining the objectives of the rules themselves. It should be noted, that Article 5 AFS *does* prohibit subsidies to distant-water fishing (where no State has jurisdiction or RFMO/A has competence) – a surprising achievement (though enforcement of this provision will be difficult). For this reason, the compromises evident in the AFS represent a partial success only. Especially if such carveouts were to remain in any future comprehensive agreement.

(iii) *Special and Differential Treatment (SDT)*

57. The Committee has previously noted the challenges in relation to SDT and negotiations over fisheries subsidies.¹⁰⁹ Similar challenges continue, with Members' positions varying between according priority to peace clauses, transitions, and exemptions, and focusing on technical assistance and capacity building. As before, the principal concern is for Members to be able to find a landing zone whereby SDT is reflected as a core element, is practicable for developing Members, but does not undermine the aims of the disciplines. These challenges are long-standing as Members have not effectively disaggregated the core elements of SDT (that is, sustainability of stocks and the right to development). These challenges are aggravated by the fact that some proposed exceptions foreseen create *inverse* SDT, allowing members with resources (developed and large developing Members) to rely on the exceptions to the disadvantage of developing Members who may not have such capacity.¹¹⁰ While both the draft Agreement and AFS contain provision for the creation of a WTO Fisheries Funding Mechanism to provide targeted technical assistance and capacity building for developing country Members, it is voluntary and cannot rely on 'regular budget resources' of the WTO.¹¹¹

(iv) *Notification and enforcement*

58. In the shadow of criticisms of the practice of notifications at the WTO,¹¹² the draft Agreement provided some innovations, building on the existing structure of the SCM Agreement while including notifications of measures as a necessary precursor for a Member wishing to claim certain exceptions.¹¹³ This bold proposal was not included in the AFS, despite the systemic problems of non-compliance with transparency obligations in the WTO.

59. As previously noted by this Committee,¹¹⁴ the enforcement of disciplines on fisheries subsidies is unclear. The Chair's earlier explanatory note provides a useful overview of these issues, noting the core challenges.¹¹⁵ The AFS and draft Agreement make considerable headway over previous draft texts which had not provided detail on dispute settlement. Fast-track consultations and panel establishment (as used for prohibited subsidies under the SCM) will apply.¹¹⁶ Meanwhile, all other provisions of the AFS and draft Agreement that do not relate to the substantive prohibitions are covered by the 'standard' procedures for dispute settlement.¹¹⁷ It is a concern that more detailed discussions over the appropriate fit of such a mechanism for sustainability issues never took place and does not, explicitly, appear to be part of future negotiations.

¹⁰⁹ See Interim Committee Report 2020 (n 2), Part III.A.

¹¹⁰ For a recent note raising this concern: Nicholas J S Lockhart and Dominic Coppens, '[Fishing for a Solution: Using Technical Assistance and Capacity Building to Unlock a Fair and Ambitious Fisheries Subsidies Deal](#)' (14 September 2021)

¹¹¹ Draft Agreement on Fisheries Subsidies (n 98), Article 7.

¹¹² E.g., Draft General Council Decision on 'Procedures to Enhance Transparency and Strengthen Notification Requirements Under WTO Agreements' circulated by Argentina, Australia, Canada, Chile, Costa Rica, EU, Israel, Japan, New Zealand, Norway, Singapore, Switzerland; Taiwan, the UK and the US (15 July 2021) JOB/GC/204/Rev.6.

¹¹³ Draft Agreement on Fisheries Subsidies (n 98), Article 8.6.

¹¹⁴ See Interim Committee Report 2018 (n 1), Part III(iii)(e).

¹¹⁵ See Chair's comments (n 103), paras 100-103.

¹¹⁶ Draft Agreement on Fisheries Subsidies (n 98), Article 10.2.

¹¹⁷ Ibid, Article 10.1.

C. Fossil Fuel Subsidies¹¹⁸

60. Unlike negotiations on fisheries subsidies, negotiations on new fossil fuel subsidy (FFS) disciplines are not yet at an advanced stage. Nevertheless, a range of commitments to phase out FFS does already exist. Most recently, at the COP26 in November 2021, all 197 Parties to the UNFCCC agreed ‘to accelerat[e] efforts’ towards the ‘phase-out of inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable [...]’.¹¹⁹ Several WTO Members, including the EU, have also proposed to ‘share information and experiences to advance discussion in the [WTO] aimed at achieving ambitious and effective disciplines on inefficient fossil fuel subsidies’.¹²⁰ In addition, in the APEC context, Ministers in November called on member economies to take forward discussions in 2022 to facilitate future implementation of options identified for a potential voluntary standstill on inefficient fossil fuel subsidies.¹²¹ With specific WTO disciplines still a distant prospect, six Members – Costa Rica, Fiji, Iceland, New Zealand, Norway and Switzerland – have begun negotiating FFS disciplines in the context of the plurilateral Agreement on Climate Change, Trade and Sustainability (ACCTS).¹²² While agreeing on plurilateral subsidy disciplines might disadvantage their own industries against non-party competitors, these countries seem inclined to adopt such rules for sustainability reasons, and, in so doing, have a unique opportunity to shape FFS disciplines and create a stepping stone for other countries to become party to the agreement or for multilateral negotiations. What might such disciplines look like?

(i) Scope

61. While existing commitments typically refer to the need to regulate ‘inefficient’ FFS,¹²³ negotiating partners will need to operationalise this concept by defining the scope of the agreement and relevant disciplines. There are several options. First, parties could adopt the SCM definition of a subsidy¹²⁴ whilst also clearly defining ‘fossil fuels’.¹²⁵ In so doing, they could decide that only FFS that are ‘specific’, within the meaning of the SCM Agreement, are covered.¹²⁶ Alternatively, they could omit the specificity requirement and cover a broader scope of FFS (thus including non-specific subsidies such as fixed fuel prices), or they could adopt an alternative specificity requirement. Second, parties could list specific types of subsidies, such as those agreed to be particularly environmentally harmful (e.g. subsidies for new coal production). Third, parties could self-select which subsidies they intend to subject to disciplines. Such discretion would however run the risk of no or only limited subsidies being put forward.

(ii) Disciplines

62. Possible disciplines could include a prohibition of either all or a subset of FFS, following the model of prohibited subsidies under the SCM Agreement¹²⁷ and the fisheries subsidies negotiations.¹²⁸ Likewise, following the example of the SCM Agreement’s category of actionable subsidies, disciplines

¹¹⁸ Drafted by Professor Harro Van Asselt (Netherlands Branch) and Dr Ilaria Espa (Swiss Branch).

¹¹⁹ Glasgow Climate Pact (n 13), para. 20. In addition, 34 countries (and five regional development banks) committed to ‘end new direct public support for the international unabated fossil fuel energy sector by the end of 2022, except in limited and clearly defined circumstances’ that are consistent with the Paris Agreement. ‘[Statement on International Public Support for the Clean Energy Transition](#)’ (4 November 2021) para. 2. Such statements align with SDG 12.c (n 6) to ‘[r]ationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions’.

¹²⁰ [Proposed Fossil Fuel Subsidies Ministerial Statement](#), JOB/GC/264/Rev.3 (18 November 2021) para. 8.

¹²¹ See ‘[2021 APEC Ministerial Meeting](#)’.

¹²² The ACCTS negotiations, above n 25, were launched by New Zealand and its negotiating partners at the United Nations in September 2019. See reporting [here](#).

¹²³ See ‘[G20 Leaders Statement: The Pittsburgh Summit](#)’ (24–25 September 2009) para 24.

¹²⁴ SCM Agreement (n 73), Article 1.

¹²⁵ UNEP, ‘Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals’ (UNEP 2019) 12–15.

¹²⁶ SCM Agreement (n 73), Article 2.

¹²⁷ Ibid, Article 3.

¹²⁸ See above, Part II(B)(iv), paras 58 and 59.

could be related to the assessment of certain environmentally harmful effects (e.g. on greenhouse gas emissions or local air pollution). However, establishing a causal link between an individual subsidy and specific environmental effects may be challenging.¹²⁹ Subsidy disciplines could also follow the model of the Agreement on Agriculture by requiring the phasing down or phasing out of FFS over a given time period. This approach requires that parties have a good understanding – and agreement – on the quantity of FFS, which would serve as the basis for reduction commitments. Lastly, as discussed in the APEC context, countries could agree on a ‘stand-still’ obligation under which they agree to not introduce any new fossil fuel subsidies.

(iii) *Special and Differential Treatment (SDT)*

63. Given the challenges that some developing countries face in their energy transition away from fossil fuels, any disciplines would likely need to be combined with SDT provisions. Conversely, any SDT provision would depend on the type of discipline adopted. SDT could be applied to all developing countries agreeing to FFS disciplines, with further flexibility granted to LDCs. The SDT provisions could consist of an exemption (temporary or not) for those countries, for instance for FFS provided to ensure energy access for the most vulnerable and poorest. SDT provisions could also consist of technical and/or financial assistance and technology transfers, with the possibility of making implementation of commitments dependent on the provision of support.

(iv) *Notification and Enforcement*

64. To strengthen transparency, parties could require the notification of FFS. Counter-notification by other parties (or possibly even third-party notification by international organisations tracking FFS) may help to spur compliance with notification obligations – a general challenge for the WTO, but one particularly problematic in the context of fossil fuel subsidies.¹³⁰ Another model, building on existing practice (under the G20, APEC, and the Trade Policy Review Mechanism), would be for countries to regularly report on their FFS and progress made in their phase-out or reform, with those reports being subject to a peer review by other parties. Depending on the type of disciplines, providing for dispute settlement may also allow countries to challenge each other’s inconsistent FFS.

Part III: Environmentally Beneficial Market Access

65. WTO Members have increasingly leveraged their market size to pursue environmental objectives. This has taken the form of, among others, (A) conditioning improved market access through the liberalisation of environmental goods and services, (B) proposing greater detail in relation to border carbon adjustments, and (C) developing product carbon standards. While these objectives may support the pursuit of sustainable communities, responsible consumption and clean energy,¹³¹ nonetheless, they may present challenges in relation to their compliance with existing WTO obligations owed to all, and commitments to developing country Members of the WTO, in particular.¹³²

A. *Liberalisation of Environmental Goods and Services*¹³³

66. There has been no progress in the WTO negotiations for a plurilateral Environmental Goods Agreement (EGA) since November 2016, at which time – as reported by this Committee – there was a reasonable amount of consensus on around 260 tariff lines for inclusion on a list of environmental

¹²⁹ Though not impossible: see Ploy Achakulwisut, Peter Erickson and Doug Koplow, ‘Effect of Subsidies and Regulatory Exemptions on 2020–2030 Oil and Gas Production and Profits in the United States’ (2021) 16 *Environmental Research Letters* 084023.

¹³⁰ Liesbeth Casier and others, ‘Shining a Light on Fossil Fuel Subsidies at the WTO: How NGOs Can Contribute to WTO Notification and Surveillance’ (2014) 13 *World Trade Review* 603.

¹³¹ SDGs 11, 12, and 7 (n 6) respectively.

¹³² Reflected in SDGs 10, 16, and 17 (ibid).

¹³³ Drafted by Dr Tracey Epps (New Zealand Branch), Ms Amy Porges (American Branch), and Dr Gregory Messenger (British Branch).

goods.¹³⁴ Some developed country Members, including Australia,¹³⁵ have supported re-launching the negotiations in the context of the Trade and Environmental Sustainability Structured Discussions (TESSD), which were launched in November 2020 by 53 WTO Members to complement the existing work of the Committee on Trade and Environment and other relevant WTO committees.¹³⁶ However, there is currently no negotiating mandate to move forward with discussions in this forum.

67. There has, however, been some progress on the bilateral and regional fronts. With respect to the ACCTS, six negotiating rounds have been held to date. In a statement issued in the margins of COP26 in Glasgow, Climate Ministers of the ACCTS negotiating countries underscored ‘the importance of concluding the Agreement as soon as possible’.¹³⁷ Work on the environmental goods list is underway, with ACCTS Trade Ministers stating in October 2021 that they look forward to further expansion of the list in the months ahead. On services, work is being done to expand the understanding of environmental and environmentally related services.¹³⁸

68. Several recently concluded bilateral agreements also make reference to environmental goods and services. In the EU–UK Trade and Cooperation Agreement (TCA), the Parties agree to work together on trade-related aspects of environmental policies and measures, including at the WTO, including initiatives to promote environmental goods and services.¹³⁹ They also agree to promote trade and investment in environmental goods and services, including through ‘addressing related non-tariff barriers or through the adoption of policy frameworks conducive to the deployment of the best available solutions’, and trade in goods and services that ‘contribute to enhanced social conditions and environmentally sound practices’.¹⁴⁰ Simultaneously, the EU and UK are reforming their GSP schemes, with particular focus on sustainable development – though it should be noted that such schemes constitute liberalisation with (partial) environmental aims, rather than environmental liberalisation *per se*.¹⁴¹

69. The 2018 EU–Japan Economic Partnership Agreement also provides that the Parties ‘shall strive to facilitate and promote trade and investment in environmental goods and services’.¹⁴² The Australia–UK FTA includes commitments to facilitate and promote trade in environmental goods and services both between the parties and to cooperate in international fora also.¹⁴³ The New Zealand–UK FTA Agreement in Principle additionally states that the Agreement will ‘include the most comprehensive list of environmental goods agreed to date, with tariff elimination at entry into force’.¹⁴⁴

70. In a similar vein, the EFTA–Indonesia Comprehensive Partnership Agreement (CEPA) requires the Parties ‘to strive to facilitate and promote investment, trade in, and dissemination of, goods and services that contribute to sustainable development, such as environmental technologies, sustainable renewable energy, as well as goods and services that are energy efficient or subject to voluntary sustainability schemes’.¹⁴⁵ Importantly, this agreement also requires certification of palm oil products

¹³⁴ Interim Committee Report 2018 (n 1), paras. 29–41.

¹³⁵ WTO, ‘[Members advance work on trade and environmental sustainability ministerial declaration](#)’ (17 September 2021).

¹³⁶ See below Part VII.

¹³⁷ [Agreement on Climate Change, Trade and Sustainability \(ACCTS\): Climate Ministers statement](#), November 2021 and see further above in text accompanying n 25 and n 122.

¹³⁸ [Joint statement](#): Agreement on Climate Change, Trade and Sustainability (ACCTS) Trade Ministers’ Meeting, 6 October 2021.

¹³⁹ Trade and Cooperation Agreement: UK/EU and EAEC: Trade and Cooperation Agreement [TS No. 8/2021] [hereinafter EU–UK TCA], Article 400.5(b).

¹⁴⁰ Ibid, Article 405.2(b) and (c).

¹⁴¹ See, [Commission Proposal COM\(2021\) 579 final](#). The UK consultation on its GSP scheme closed in September 2021 with a Government decision expected imminently.

¹⁴² Agreement between the European Union and Japan for an Economic Partnership, OJ L 330, 27.12.2018, p.3–899 [hereinafter JEEPA], Article 16.5(b).

¹⁴³ Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia (signed 16 December 2021), Article 22.6.

¹⁴⁴ New Zealand–UK FTA Agreement in Principle, available [here](#).

¹⁴⁵ Comprehensive Economic Partnership Agreement between the Republic of Indonesia and the EFTA States (signed 16 December 2018), Article 8.4.2.

in order to benefit from preferences under the agreement.¹⁴⁶ This is the first such development in an FTA, conditioning tariff preferences on meeting sustainability requirements through a third-party certification scheme.¹⁴⁷

71. Unilateral action is increasingly common: on its departure from the EU, when developing its Global Tariff to replace the EU's Common External Tariff (EU CET), the UK removed tariffs on an additional 133 product categories listed in the EGA list and their categories. In the EU CET, these products had tariffs of between 1.5 and 4%. The UK also maintained tariff-free access for the 67 products from the EGA list that were already free under the EU CET. Overall, only five EU CET tariff lines from the EGA list remain at their previous levels.¹⁴⁸ Given the difficulty in agreeing on the EGA, it might be hoped that by prioritising environmental goods and services for unilateral liberalisation and progressively locking in these preferences under FTAs or plurilateral initiatives such as the ACCTS (see above, para 67), Members will be able to create momentum in environmental liberalisation. Whether this might support the completion of EGA negotiations at the WTO is, however, another matter.

¹⁴⁶ Ibid, Article 8.10.2.

¹⁴⁷ See below Part IV(C).

¹⁴⁸ Ronald Steenblik, Dmitry Grozoubinski and George Riddell, '[The UK's Global Tariff: A new broom sweeps green?](#)' IISD, 10 June 2020.

*B. Border Carbon Adjustments (BCAs)*¹⁴⁹

72. This Committee has previously discussed the possible adoption of border carbon adjustments (BCAs) and, specifically, highlighted aspects that would strengthen the likelihood that the design and implementation of BCAs conforms to WTO law.¹⁵⁰

73. The WTO compatibility of BCAs has received increased scrutiny in the context of the proposal by the European Commission for a carbon border adjustment mechanism (CBAM).¹⁵¹ Other jurisdictions are also considering their own BCAs. Canada has launched a consultation process,¹⁵² the UK Parliament's Environmental Audit Committee has started an inquiry into a possible BCA,¹⁵³ and in the US, two Democratic members of Congress have put forward a proposal for a bill containing a BCA that applies to imports of certain carbon-intensive products.¹⁵⁴ Unlike the EU, Canada and the UK which have carbon pricing systems in place, a BCA in the US would require a determination of the domestic environmental costs to be adjusted.¹⁵⁵ Were it to be introduced, it would prove an interesting model for BCAs in countries without carbon pricing systems.

74. The EU's CBAM proposal is the most detailed thus far and, therefore, provides an important case-study for the design of BCAs, incorporating welcome elements that could be emulated and others which present concerns in relation to WTO compatibility.

(i) Objective

75. The stated overarching aim of the CBAM proposal is 'addressing the risk of carbon leakage in order to fight climate change by reducing GHG [greenhouse gas] emissions in the Union and globally'.¹⁵⁶ However, the European Commission also acknowledges that the measure may 'push third countries to adopt more stringent climate measures' and raise revenues for the EU budget. By stressing the environmental rationale of the measure (i.e., addressing carbon leakage and increasing budget aimed at achieving climate action), a legislator can strengthen its defence that a BCA that violates a GATT obligation can be justified through the environmental exceptions under Article XX GATT 1994.¹⁵⁷

(ii) Inclusion of Exports

76. As noted in the Committee's 2020 Interim Report, including exports in a BCA (i.e., rebating the charge upon export) may lead to inconsistency with the SCM Agreement and can undermine an Article XX GATT 1994 defence.¹⁵⁸ To mitigate this risk, the Commission decided that '[t]he inclusion of refunds of a carbon price paid in the EU would undermine the global credibility of EU's raised climate ambitions and further risk to create frictions with major trade partners due to concerns regarding compatibility with WTO obligations'.¹⁵⁹

(iii) Geographical Scope.

77. The CBAM proposal excludes four countries from its scope: Iceland, Liechtenstein, Norway, and Switzerland. These countries are either integrated into, or linked to, the EU emissions trading system (EU ETS).¹⁶⁰ An exemption for LDCs was contemplated but discarded, as the Commission

¹⁴⁹ Drafted by Professor Harro van Asselt (Netherlands Branch) and Dr Ilaria Espa (Swiss Branch).

¹⁵⁰ Interim Committee Report 2020 (n 2), paras 95-107. In addition, the implications of BCAs for developing countries are discussed above in Part I(B).

¹⁵¹ European Commission, CBAM Proposal (n 27).

¹⁵² See: '[Consultation on border carbon adjustments.](#)'

¹⁵³ See the [UK Environmental Audit Committee inquiry into CBAMs.](#)

¹⁵⁴ S.2378 – [Fair, Affordable, Innovative, and Resilient Transition and Competition Act](#) (19 July 2021). Separately, [US Democrats also included the option of a 'carbon polluter import fee' to help fund President Biden's recovery package.](#)

¹⁵⁵ Ibid, S.2378, Sec. 9902.

¹⁵⁶ European Commission, CBAM Proposal (n 27) 3; see also Article 1.

¹⁵⁷ GATT 1994 (n 33), Article XX; see further Andrei Marcu and others, 'Guide to the European Carbon Border Adjustment Mechanism' (ERCST – Roundtable on Climate Change and Sustainable Transition, 2021) 13.

¹⁵⁸ Interim Committee Report, 2020 (n 2), paras 99 and 104.

¹⁵⁹ European Commission, CBAM Proposal (n 27) 42.

¹⁶⁰ Ibid, Article 2(3) and Annex II.

feared it would offer an incentive to those countries to increase their emissions.¹⁶¹ The proposal also exempts countries integrated into the EU internal market for electricity through market coupling, which could increase the number of exempted jurisdictions.¹⁶² Such exemptions are a concern and increase the risk of inconsistency with Article I GATT 1994.¹⁶³

(iv) *Assessing Carbon Content*

78. To determine the carbon content of imported products, which in turn forms the basis for the adjustment, the CBAM proposal envisages using actual GHG emissions data or, where not possible, relying on ‘default values’.¹⁶⁴ Allowing importers to show actual emissions data may support claims that the measure is in line with Article III GATT 1994,¹⁶⁵ or strengthen the defence under the *chapeau* of Article XX GATT 1994.¹⁶⁶ There still exist significant challenges to the definition of appropriate calculation methodologies, however, particularly when it comes to correctly estimating indirect emissions. Given the complexity of the issue, prioritising coverage of direct emissions while seeking to develop appropriate methodologies for indirect emissions may arguably increase the soundness of the proposal in WTO terms.¹⁶⁷ Harmonising standards for carbon accounting could also help mitigate this risk, as discussed further below in Section C.

(v) *Calculation of the Adjustment*

79. In the CBAM proposal, the adjustment may be reduced to the extent emissions were subject to a carbon price in the country of origin.¹⁶⁸ This could strengthen the environmental rationale of the measure, as double charging the carbon price ‘would work against the objective of reducing GHG emissions by penalizing good climate policy abroad’.¹⁶⁹ At the same time, by allowing this only for countries that have a carbon price in place, the EU could be seen as ‘self-judging other WTO members on the extent and quality of their climate actions’, thereby giving rise to a potential MFN violation,¹⁷⁰ and undermining a defence under the *chapeau* of Article XX GATT 1994.¹⁷¹ However, if non-pricing policies in other countries could be credited, this could also mean that the EU should base its adjustment to include its own non-pricing policies, significantly complicating the CBAM, and ‘arguably plac[ing] it on the wrong side of WTO law’.¹⁷²

80. Under the CBAM proposal, the adjustment would also need to reflect the extent to which producers of covered goods in the EU receive emissions allowances for free under the EU ETS.¹⁷³ Although the CBAM was originally presented as an alternative to the existing system of free allocation,¹⁷⁴ the proposal envisages them operating side by side until 2035, with CBAM being

¹⁶¹ Ibid, 30. In a resolution, the European Parliament had called for ‘special treatment’ for LDCs and Small Island Developing States. European Parliament, ‘[A WTO-compatible EU Carbon Border Adjustment Mechanism](#)’, P9_TA(2021)0071 (10 March 2021) para. 8.

¹⁶² European Commission, CBAM Proposal (n 27) Article 2(7). No countries are listed in the proposal under this exemption.

¹⁶³ Sanna Markkanen and others, ‘On the Borderline: The EU CBAM and Its Place in the World of Trade’ (University of Cambridge Institute for Sustainability Leadership, 2021) 42; Marcu and others (n 157) 28.

¹⁶⁴ For electricity, the proposal also resorts to default values. European Commission, CBAM Proposal (n 27) Article 7 and Annex III.

¹⁶⁵ GATT Panel Report, *United States – Taxes on Petroleum and Certain Imported Substances*, GATT Panel Report, BISD 34S/136 (17 June 1987), para. 5.2.9.

¹⁶⁶ *United States – Standards for Reformulated and Conventional Gasoline*, Appellate Body Report, WT/DS2/AB/R (20 May 1996), 27. See further Michael A. Mehling and Robert Ritz, ‘Going beyond Default Intensities in an EU Carbon Border Adjustment Mechanism’ [Cambridge Working Papers in Economics](#) 2087, Faculty of Economics, University of Cambridge 2020.

¹⁶⁷ See European Commission, CBAM Proposal (n. 27), Article 30, para. 1.

¹⁶⁸ Ibid, Article 9.

¹⁶⁹ Marcu and others (n 157), 44.

¹⁷⁰ James Bacchus, ‘Legal Issues with the European Carbon Border Adjustment Mechanism’ Briefing Paper No. 125 (Cato Institute 2021) 3.

¹⁷¹ Markkanen and others (n 163) 43.

¹⁷² Marcu and others (n 157) 45.

¹⁷³ European Commission, CBAM Proposal (n 27) Article 31(1).

¹⁷⁴ European Commission, ‘The European Green Deal’, COM (2019) 640 final, 11 December 2019, 5.

gradually phased in while free allocation is gradually phased out. To the extent that removing free allocation altogether could have arguably constituted a reasonably available, less trade-restrictive – though politically more fraught – alternative, the necessity test under Article XX(b) GATT 1994 may prove challenging to meet.¹⁷⁵

(vi) *Revenues*

81. Once the CBAM begins generating revenue (from 2026 onwards), the Commission proposal suggests that '[m]ost revenues generated by CBAM will go to the EU budget'.¹⁷⁶ However, the proposal does not spell out to what end(s) the revenues should be used. Using revenues for international climate action may strengthen the environmental defence under Article XX GATT 1994, and would help strengthen alignment with international climate change law.¹⁷⁷ In this vein, it has been proposed that revenues 'shall be directed to Union action aimed at reducing CO₂ emissions and mitigate the impacts of climate change in LDCs'.¹⁷⁸

(vii) *Reflections*

82. The CBAM proposal has generated mixed reactions, from tacit adaptation to expressions of concern,¹⁷⁹ including at the WTO.¹⁸⁰ It raises important questions over the role international coordination can play in the context of unilateral measures. First, trading partners could develop a common BCA whilst maintaining diverse decarbonisation policies.¹⁸¹ However, where such an approach may involve only developed countries,¹⁸² this may lead to further equity-related concerns among developing countries. Second, the introduction of BCAs could be delayed to allow countries to negotiate mutual recognition agreements that would spell out the conditions under which each other's emission reduction policies are considered to be equivalent.¹⁸³ However, such negotiations are unlikely to dispel concerns among third parties. A third option, therefore, would be to develop 'international agreement on principles and best practice in elaboration and implementation of BCAs'.¹⁸⁴ Such an agreement could be developed in a multilateral forum such as the WTO or a smaller forum such as the G20, with a view to allowing for dialogue and consultations on how to make BCAs an effective and non-protectionist climate policy tool.

83. Lastly, BCAs are not the only measure available to address carbon leakage. One alternative is a consumption charge on carbon-intensive materials.¹⁸⁵ Such charges could be consistent with WTO law, as they do not involve discrimination between domestic and foreign products based on their carbon intensity.¹⁸⁶ A current challenge, however, is that carbon intensity cannot be identified by the product itself, and instead requires distinguishing products on their production methods which raises Article III

¹⁷⁵ Markkanen and others (n 163) 42. A defence under Article XX(g) GATT 1994 could more likely pass muster.

¹⁷⁶ European Commission, CBAM Proposal (n 27) 11.

¹⁷⁷ Marcu and others (n. 157) 44.

¹⁷⁸ Amendment 23, [Draft Opinion of the Committee on International Trade for the Committee on Environment, Public Health and Food Safety by Rapporteur Katrin Karlsbro](#) (COM(2021)0564 – C9-0328/2021 – 2021/0214(COD)), 22 November 2021.

¹⁷⁹ A Assous and others, 'A Storm in a Teacup: Impacts and Geopolitical Risks of the European Carbon Border Adjustment Mechanism' (Sandbag/E3G, 2021) 46–47.

¹⁸⁰ Russian Federation, 'European Union – Proposed Carbon Border Adjustment Mechanism', G/MA/W/172, G/C/W/800 (8 October 2021). On questions over the fairness and equity implications of a CBAM see above Part I(b).

¹⁸¹ Timothy Meyer and Todd N. Tucker, 'A Pragmatic Approach to Carbon Border Measures' (2022) 21 *World Trade Review* 109.

¹⁸² Meyer and Tucker, *ibid*, suggest cooperation between the EU and the US.

¹⁸³ Gary Clyde Hubauer and others, 'Can EU Carbon Border Adjustment Measures Propel WTO Climate Talks?' (Peterson Institute for International Economics, 2021).

¹⁸⁴ Aaron Cosbey, 'Principles and Best Practice in Border Carbon Adjustment: A Modest Proposal' (International Institute for Sustainable Development, 2021) 2.

¹⁸⁵ Hector Pollitt and others, 'The Impact of Implementing a Consumption Charge on Carbon-intensive Materials in Europe' (2020) 20 *Climate Policy* S74.

¹⁸⁶ See Roland Ismer and others, 'Border Carbon Adjustments and Alternative Measures for the EU ETS: An Evaluation' (DIW 2020).

GATT 1994 concerns. Another alternative and complementary tool is the use of carbon product standards, discussed next.

C. Carbon Product Standards and Technical Regulations¹⁸⁷

84. There exists a vast landscape of private, public, national, and international standards in relation to the carbon content of products.¹⁸⁸ In parallel, the number of private and public voluntary standards has increased as governments have sought to ‘harden’ some standards by introducing mandatory technical regulations to increase their effect.¹⁸⁹ Both trends have important consequences for climate policy and trade relations. While they may support efforts to reduce carbon emissions (principally by improving transparency over the carbon content of products), they may also constitute unnecessarily burdensome restrictions on trade. This burden falls disproportionately on producers in developing countries, where economic actors may not always be able to access low-carbon inputs or technologies and where their representatives (public and/or private) may not have been effectively consulted in the standard-setting or regulatory process.¹⁹⁰

85. Carbon product standards and technical regulations have an important role to play in relation to BCAs as they can mitigate concerns over methods for calculating carbon content in products for the purposes of an adjustment.¹⁹¹ Additionally, they can act as a potentially powerful tool to mitigate climate change by clarifying processes for carbon accounting or requirements for labelling. More speculatively, they could serve as a tool to encourage low-carbon trade – specifically by conditioning tariff-based preferences through carbon certification requirements.¹⁹²

86. Carbon standards may entail processes for carbon accounting for businesses, providing guidance on measuring emissions from energy purchases and supply chain activity.¹⁹³ They also communicate information about the carbon content of products.¹⁹⁴

87. The importance of carbon standards has driven activity at the international level with the International Organization for Standardization (ISO) working on a family of standards (ISO14000) to support sustainable development.¹⁹⁵ Standard ISO14067 is of particular importance as it specifies principles, requirements, and guidelines for the quantification and communication of the carbon footprint of a product based on life cycle assessment. This work (led by the ISO Technical Committee 207) covers a range of environmental management standards. However, ISO standard development is slow and national standard setters (such as the British Standards Institution and its Publicly Available Specification 2050), private standard setters, and non-profit standard setters have been preparing and implementing new carbon standards to meet increasing demand for carbon standards.¹⁹⁶

¹⁸⁷ Drafted by Dr Gregory Messenger (British Branch).

¹⁸⁸ See Interim Committee Report 2020 (n 2), Part II (B).

¹⁸⁹ The definitions in the Agreement on Technical Barriers to Trade, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 UNTS 120 [hereinafter TBT Agreement or TBT], Annex 1, are used for this section.

¹⁹⁰ Both Annex 3 of the TBT Agreement, *ibid* (i.e., the Code of Good Practice for the Preparation, Adoption, and Application of Standards) and the TBT Committee Decision on Principles for the Development of International Standards (G/TBT/1/Rev.8, p.26ff) stress the importance of transparency and consultation – especially as regards North-South relations – in the creation and adoption of standards.

¹⁹¹ See above Part III(B).

¹⁹² Much as the EFTA-Indonesia FTA includes tariff preferences for *certified* sustainable palm oil products only, examined in the following Section. Currently such preferences would have to be pursued through FTAs given the current lack of carbon conditionality included within the latest revisions of the Harmonised System which act as the basis of tariff schedules at the WTO. See Interim Committee Report 2018 (n 1), Part I (B).

¹⁹³ The most well-known high-level accounting standards are those provided through the GHG Protocol, especially its Corporate Accounting and Reporting Standard which covers accounting and reporting of seven greenhouse gases.

¹⁹⁴ A large selection of carbon labelling schemes can be found through the [Ecolabel Index](#).

¹⁹⁵ [The London Declaration](#), agreed in September 2021 by the ISO General Assembly, has committed the ISO to streamline climate considerations in all new and revised standards.

¹⁹⁶ For a comprehensive analysis of the multiple actors involved in this space: Guillaume Gruère, ‘A Characterisation of Environmental Labelling and Information Schemes’ OECD Environment Working Papers No. 62 (3 October 2013).

88. Mandatory carbon product schemes are also increasing in popularity. They can be important instruments to support climate objectives (ensuring that businesses and consumers are able to effectively identify carbon content of their products or the carbon cost of their business practices).¹⁹⁷ However, as binding regulatory requirements they are subject to specific obligations under the TBT Agreement on non-discrimination to identify the least-trade restrictive measure reasonably available, and base any technical regulation on existing international standards where they exist.¹⁹⁸ Where governments incorporate existing voluntary standards,¹⁹⁹ there may be instances where their linked obligations bring these measures within the remit of the ‘harder’ obligations under the TBT Agreement (as well as the GATT 1994), especially if products are either required to bear such labels, or where they are only able to market themselves in a particular manner (e.g., ‘low carbon’) when complying with identified voluntary standards.²⁰⁰

89. Given the impact of the myriad private carbon standards already in existence, and the drive for increasing government intervention (necessarily entailing a consequence for traders), simply noting the potential legal consequences under the GATT 1994 or the TBT Agreement is insufficient. As with most areas of trade policy, disputes are resolved through regulatory diplomacy and informal dispute settlement.²⁰¹ It is here that enhanced regulatory cooperation may play a role.²⁰²

Part IV: Green Governance as Supply Chain Governance

90. The increasing use of environmental conditionality along supply chains (whether to access preferences or to avoid penalties) has continued in both the public and private spheres. Indeed, the separation between the two has become increasingly blurred as economic green governance continues its transnational turn. This Part notes (A) more recent developments in supply chain conditionality from public purchasers (that it, in public procurement) and (B) the role of private actors (through certification schemes) that are subsequently used by governments to enforce green governance commitments.

*A. Supply Chain Implications of Environmental Standards in Procurement*²⁰³

91. Neither the GATT nor the GATS prevent WTO Members from making whatever choices they wish regarding procurement of goods or services for governmental purposes, including buy-national or buy-local rules. Although the non-discrimination rules of Article III GATT 1994 forbid Members from imposing local content requirements on private purchasers, Article III:8 GATT 1994 provides explicitly that these non-discrimination rules do not apply to government procurement. However, some WTO Members have agreed to open government procurement markets and impose restrictions on themselves through the plurilateral Government Procurement Agreement (GPA).²⁰⁴

¹⁹⁷ E.g., the UK Companies Act 2006 (Strategic Report and Directors’ Reports) Regulations 2013 requires quoted companies to report information on GHG emissions in their Directors’ Reports.

¹⁹⁸ Arts 2.1, 2.2, and 2.4 TBT Agreement (n 189) respectively. See also: T Gerres and others, ‘To ban or not to ban carbon-intensive materials: A legal and administrative assessment of product carbon requirements’ (2021) 30 *RECIEL* 249–262.

¹⁹⁹ E.g., France’s methodology for calculating carbon footprints (BPX 30-323), and Republic of Korea’s Low Carbon Product Certification rules.

²⁰⁰ *US – Tuna II (Mexico)*, Report of the Appellate Body (WT/DS381) 16 May 2012, paras 190-199.

²⁰¹ See Robert Wolfe, ‘See you in Geneva? Legal (Mis)Representations of the Trading System’ (2005) 11(3) *European Journal of International Relations* 339-365; Kateryna Holzer, ‘Addressing Tensions and Avoiding Disputes: Specific Trade Concerns in the TBT Committee’, WTO Staff Working Paper ERSD-2018-11, 31 October 2018.

²⁰² Kateryna Holzer and Aik Hoe Lim, ‘[Trade and Carbon Standards: Why Greater Regulatory Cooperation is Needed](#)’ (Yale Center for Environmental Law & Policy, 2020).

²⁰³ Drafted by Professor Yen Kong Ngangjoh Hodu (British Branch) and Ms Amy Porges (American Branch).

²⁰⁴ See Interim Committee Report (2020) (n 2), Part II.D.128-131.

92. The GPA as amended in 2012²⁰⁵ has replaced earlier GPA texts; it now has 21 Parties comprising 48 WTO Members, and its coverage is estimated at USD 1.7 trillion per year in purchases of goods and services.²⁰⁶ The GPA applies to procurement specified in schedules for each Party.

93. The GPA requires its Parties to provide transparent and non-discriminatory treatment, in procurement covered by their schedules, to goods and services of other Parties. The GPA's system of transparent procurement serves trade liberalization, efficiency, cost-reduction for taxpayers, and the fight against cronyism and corruption. The waste, corruption and abuse in pandemic procurement in 2020-2021 have demonstrated how important it is for governments to procure transparently and with predictable procedure.

94. The GPA also regulates the use of technical specifications and evaluation criteria, because these are so often used to ensure that a favoured (usually domestic) bidder will win. Article X:1 bars a Party from adopting or applying technical specifications that create unnecessary obstacles to international trade. Article XV requires contract awards to be based on the evaluation criteria (and technical specifications) in the notices and tender documentation for a procurement.

95. Notably, the GPA rules do not prevent GPA Parties from employing green procurement policies. If a green procurement requirement is transparent and non-discriminatory, it would not conflict with Article IV:1-2 of the 2012 GPA on non-discrimination. The 2012 GPA explicitly allows its Parties to use non-discriminatory green procurement specifications and evaluation criteria. Article X:6 states that 'For greater certainty, a Party, including its procuring entities, may, in accordance with this Article, prepare, adopt or apply technical specifications to promote the conservation of natural resources or protect the environment.'²⁰⁷ Article X:9 further states that evaluation criteria in tender documentation (which determine the winning bidder) 'may include, among others ... environmental characteristics....' The GPA 2012, like earlier GPAs, provides for contract awards to go to the most advantageous tender (Article XV:5), and environmental factors could make a tender more advantageous.

96. Other GPA provisions further accommodate environmental and sustainability concerns. The GPA does not apply to procurement for international assistance including development aid (Article II:3(e)). It includes a general exception for measures 'necessary to protect human, animal or plant life or health' (Article III:2(b)). Article V allows wide latitude for agreement on transition measures by developing countries. Finally, a government can simply exclude sectors or measures when acceding to the GPA, or can renegotiate its GPA coverage later.

*B. Environmental Standards in Forestry Governance*²⁰⁸

97. Forests constitute a clear example for the conceptual and legal diversification of green governance taking place. This Committee has previously discussed the controls on timber trade and related initiatives.²⁰⁹ Such mechanisms focused on illegal logging and securing compliance with forestry legislation of the countries of origin and often involved a certification.

98. While halting forest degradation by way of sustainable forest management is still needed, the more pressing concern is currently the loss of forest cover as a result of direct and indirect land use change, with dramatic consequences for the global climate and biodiversity. In many regions of the world forests are cleared to grow commodity crops or to herd cattle. SDG 15,²¹⁰ which includes sustainable forest management, but also SDG 13²¹¹ – climate action – reflect these concerns.²¹² The Glasgow Leaders' Declaration on Forests and Land Use, which has been endorsed by 141 Parties to the

²⁰⁵ See GATT 1994 (n 33), Article III and Article III:8; the text of the Agreement on Government Procurement 2012 is available [here](#) [hereinafter GPA].

²⁰⁶ See Marc Steiner, 'The WTO Government Procurement Agreement: Assessing the scope for green procurement' (ICTSD, December 2015).

²⁰⁷ The text used the phrase 'for greater certainty' in order to avoid the implication that this text was an exception to normal rules, without which environmental specifications would be inconsistent with Article X GPA.

²⁰⁸ Drafted by Professor Peter-Tobias Stoll (German Branch).

²⁰⁹ See ILA Report (2020) (n 2), Part II.A, paras 66-81.

²¹⁰ SDG 15 (n 6).

²¹¹ SDG 13, *ibid*.

²¹² Note the recent European Commission proposal on deforestation, explicitly noting the relationship between climate change and deforestation: COM(2021) 706 final, 17 November 2021, p.1.

UNFCCC at COP26 on 12 November 2021 addresses these concerns and calls for strengthening efforts to ‘Facilitate trade and development policies, internationally and domestically, that promote sustainable development, and sustainable commodity production and consumption, that work to countries’ mutual benefit, and that do not drive deforestation and land degradation’.²¹³

99. While the Declaration highlights that deforestation is a climate change issue, it failed to explicitly refer to the long-standing REDD+ programme or the fact that deforestation is part of many of the Nationally Determined Contributions (NDCs) submitted by Parties to the Paris Agreement, and therefore could be revised and strengthened.

100. The Declaration adds to earlier and more comprehensive action taken in a multi-stakeholder format as is true for the 2014 New York Declaration on Forests, subsequently adopted by national and sub-national governments, companies, indigenous peoples, NGOs, and CSOs at the 2014 United Nations Climate Summit in New York.²¹⁴ The New York Declaration *inter alia* calls for the application of ‘high standards for forest conservation’ and contains a number of ‘Zero Deforestation Commitments from Commodity Producers and Traders’.²¹⁵ While its impact as a soft law instrument might be questionable, the declaration has made it clear that deforestation is an issue at the crossroads of environmental, developmental and trade policies.

101. However, designing effective trade-related mechanisms to prevent further deforestation is a considerable challenge as diverse products may carry a risk of deforestation and they may be traded and used as an input for other products at home and internationally. Further, the deforestation risk of certain products is difficult to assess, and consequently it is difficult to define standards which could be used to set up controls for trade and in the supply chain. There are ongoing discussions as to whether deforestation could be added to the list of issues that traders, operators and distributors should take care of in terms of their supply chain due diligence. To a degree it would be their responsibility to find out about appropriate standards to fulfil their obligations. In doing so, they will have to rely on diverse governmental, non-governmental, private and mixed initiatives, which produce and accredit different schemes for assessments, standards and certification.²¹⁶ This raises questions in regard to the potential overlap of measures, the interrelationship with the climate change regime and related commitments and private standards.

C. Green Policy in Palm Oil Production/Supply²¹⁷

102. One commodity of acute concern in relation to deforestation is palm oil. It presents a significant deforestation risk but may also constitute an ingredient for green gas and green diesel, thus potentially helping to promote the decarbonization in the traffic sector.

Sustainability in this sector has been a subject of considerable interest through diverse initiatives. One such instrument is the Amsterdam Declaration in Support of a Fully Sustainable Palm Oil Supply Chain by 2020’ of December 2015,²¹⁸ which is an example of an intergovernmental initiative of a number of EU member states. Building on the New York Declaration, mentioned above, the Amsterdam Declaration supports stakeholders to meet commitments in relation to sustainable palm oil. A key multi-stakeholder initiative is the Roundtable on Sustainable Palm Oil (RSPO), founded in 2004.²¹⁹ It gathers palm oil producers, processors or traders, consumer goods manufacturers, retailers, banks/investors, and environmental and social non-governmental organisations (NGOs) and has developed standards and a certification process and a complaint procedure. These initiatives and developments have been largely discussed in relation to their effectiveness, legitimacy, and impact.²²⁰ However, the soft law status of many of these schemes has limited their scrutiny as a matter of world trade law.

²¹³ [Glasgow Declaration on Forests & Land Use](#), 12 November 2021.

²¹⁴ UNEP, [New York Declaration on Forests. Declaration and Action Agenda](#), (2014).

²¹⁵ Ibid, Section 3.

²¹⁶ See ILA Report (2020) (n 2), paras 49-57, 75-76.

²¹⁷ Drafted by Professor Peter-Tobias Stoll (German Branch).

²¹⁸ Amsterdam Declaration in Support of a Fully Sustainable Palm Oil Supply Chain, available [here](#).

²¹⁹ See the website of the organization at <https://rspo.org/about>.

²²⁰ See Denis Ruysschaert and Denis Salles, ‘Towards global voluntary standards : questioning the effectiveness in attaining conservation goals: the case of the Roundtable on Sustainable Palm Oil (RSPO)’ (2014) 107, issue C

103. The contrary is true for a piece of EU legislation which affects palm oil and recently provoked two WTO disputes.²²¹ The issue at hand has been a recent amendment and recast of the EU's Renewable Energy Directive (RED II).²²² The RED II aims at reducing the EU's GHG emissions in the energy sector by promoting the use of renewable energy. It sets a share of renewable energy in the overall energy mix within the EU including targets for the transport sector. In this context, the use of renewable energy commodities is linked to some further sustainability criteria. These cover especially the emission of GHGs in the course of the production of such commodities. Palm oil is often added to gas or diesel as a renewable energy component to meet the requirements of the directive. With a view to preventing deforestation, RED I²²³ - the former version of the directive - already contained standards in view of 'direct land use change' (DLUC) caused by the production of such commodities. In addition, the amended RED II takes into account indirect land use changes (ILUC), e.g. the displacement of traditional production of crops for food and feed purposes.

104. The complainants in the two WTO disputes challenging RED II raise various issues concerning the standards set by the directive in view of the validity of the underlying concepts, their correct definition and application, as well as the even-handed treatment of palm crop-based biofuels as compared to other crop-based biofuels.²²⁴ Accordingly, the complaints point to possible inconsistencies with the EU's obligations under the TBT Agreement and the GATT 1994.

105. As this case, with two WTO Member claimants, may indicate, the setting of standards for deforestation-free sustainable commodities is already complex – and further complicated by the 'hardening' of standards through mandatory schemes (such as RED II) when considering WTO obligations. It will become even more complex, where standards and commitments are made in view of deforestation within the climate change regime or where mechanisms are developed to tax the carbon content of goods in international trade. In this situation, a case-by-case analysis of the conformity of certain standards and related trade mechanisms with WTO rules by way of WTO dispute settlement is likely to fail to provide the predictability and legal security, which is required to bring about the necessary transformation of the world's economy in view of sustainable development.

Part V: Creating, Sharing, and Protecting Green Knowledge

106. This Committee has previously considered various aspects of intellectual property and the transfer of environmentally-sound technologies. In this Part, attention is paid to regional and development issues in the context of the transfer of green technology.²²⁵ This Part first examines the various initiatives and activities concerning transfer of technology in the ASEAN context (section A), followed by an assessment of the role of transfer of technology in the context of small island developing states (section B). There follows an excursus on the matter of green knowledge and technology transfer under the TRIPS Agreement where public health and essential security issues are involved (section C). There is also a further review of TRIPS-plus commitments in preferential trade agreements that typically include obligations on parties to introduce stronger intellectual property protection (section D).

Ecological economics 438-446; C Brandi, 'The interaction of private and public governance : the case of sustainability standards for palm oil' (2021) 33(6) *The European journal of development research*, 1574-1595 and May Miller-Dawkins and others '[Beyond Effectiveness Criteria: The possibilities and limits of Transnational Non-Judicial Redress Mechanisms](#)', Business and Human Rights Resource Centre, Corporate Accountability Research, Report 1.

²²¹ WTO disputes European Union (and certain Member States) — *Certain measures concerning palm oil and oil palm crop-based biofuels* DS593 (complainant: Indonesia) and DS600 (complainant: Malaysia).

²²² Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources 2018 OJ L328/82.

²²³ Directive (EU) 2009/28/EC on the promotion of the use of energy from renewable sources, 2009, OJ L140/16.

²²⁴ See (n 221) for requests for the establishment of a Panel by Indonesia, WT/DS593/9, 24 March 2020 at paras. 17 *et seq.* and 40 and by Malaysia, WT/DS600/6 of 16 April 2021 at paras 18 *et seq.*

²²⁵ As aligned to SDG 17 (n 6), and in particular, target 17.7 on the promotion and dissemination of environmentally sound technologies.

A. *Initiatives and Activities Regarding Transfer of Technology: ASEAN*²²⁶

107. ASEAN countries promote the transfer of technology in a number of collaborative initiatives and plans. A recent example is the Framework on the Circular Economy for the ASEAN Economic Community (AEC).²²⁷ This Framework is significant in two ways: first, in that it connects efforts in the AEC and those in the ASEAN Socio-Cultural Community (ASCC)²²⁸ and secondly, in that it directs attention to the relevance of, *inter alia*, regional supply chains and micro-, small and medium enterprises (MSMEs) in what is referred to as the ‘ecosystem for circular products and services’. The Framework sets out a number of new initiatives, ‘strategic goals’ and ‘guiding principles’ to implement its goals. Strategic Goal 3, which aims to promote sustainable and inclusive growth, envisages ASEAN as a ‘hub for circular innovations’, with the promotion of ‘complementarities in regional supply chains through technology exchange’.²²⁹ Principle 4 of the Framework also encourages ASEAN-wide coordination on knowledge, technology transfer and capacity-building. To this end, it provides as an example the possibility of ‘online platforms for best practices, or partnerships with research networks, the private sector, and other stakeholders’, which could help promote such transfer of technology.²³⁰

108. ASEAN has identified climate finance and transfer of technology as ‘key priorities’, and examples of technologies of interest for climate adaptation in member states include climate-smart agriculture, water balance systems, flood and typhoon hazard and early warning systems, integrated water resource development, and disease surveillance systems. Given that ASEAN policymakers are keen to balance growing Information and Communication Technology (ICT) needs and energy use, the transfer of technology which can help achieve such a balance would also be of interest.²³¹ Cleaner coal technology is another area in which ASEAN member states may benefit from transfer of technology.²³² Under the ASEAN Plan of Action for Energy Cooperation Phase II, 2021-2025, ASEAN member states aim to transition to a 23% share of renewable energy in its total primary energy supply by 2025.²³³ A number of collaborative projects which facilitate the transfer of technology under the Plan are ongoing.²³⁴

109. In October 2021, the members of ASEAN issued a Joint Statement prior to the 26th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26) held in Glasgow, Scotland, highlighting the need for international cooperation and assistance with the provision of support for ASEAN members and other developing countries for financing and ‘the development and transfer of environmentally sound technology, scientific research, and capacity building, for mitigation and adaptation measures, as stipulated under the UNFCCC and the Paris Agreement...’.²³⁵

²²⁶ Drafted by Professor Locknie Hsu (Singaporean Branch).

²²⁷ ASEAN, ‘[ASEAN adopts framework for Circular Economy](#)’ (21 October 2021).

²²⁸ See the [ASCC Blueprint 2009-2015](#), section D10; and also section 3.4.1.

²²⁹ ASEAN, [Framework for Circular Economy for the ASEAN Economic Community](#), Strategic Goal 3 at p 6.

²³⁰ Ibid, Principle 4 at p 7. See also generally, ‘[ASEAN State of Climate Change Report](#)’ (ASEAN, 12 October 2021).

²³¹ Akhoun Myriam, ‘[How Singapore and Asia’s tech sector can lead in renewable energy adoption](#)’ (*Business Times*, 28 June 2021).

²³² See APEC, ‘[Clean Coal Technology in ASEAN – Balancing Equity, Security and Sustainability](#)’ (14 September 2021).

²³³ [ASEAN Plan of Action for Energy Cooperation \(APAEC\) 2016-2025: Phase II 2021-2025](#).

²³⁴ See e.g., Randi Kristiansen and Lucila Arbolea, ‘[Southeast Asia can reach clean energy targets by investing in transmission](#)’ (IEA, 5 February 2021).

²³⁵ [ASEAN Joint Statement on Climate Change to the 26th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change](#) (UNFCCC, COP26), 26 October 2021, para. 17.

*B. Initiatives and Activities Regarding Transfer of Technology: Small Island Developing States (SIDS)*²³⁶

110. Transfer of technology remains axiomatic to the development of small island developing states (SIDS)' achievement of nationally-determined contributions (NDCs), and mitigation and adaptation to climate change. This situation has become more acute because of COVID-19, and technology transfer will underpin most of the five priorities for the blue stimulus identified by the High Level Panel for a Sustainable Ocean Economy.²³⁷ However, SIDS struggle to attain a critical mass of scientists and scientific research institutions and to emphasise STEM disciplines, requiring technical assistance. However, SIDS are rich in traditional knowledge and technology, much of which is not adequately protected, but should be harnessed for sustainability.

111. Technology transfer is crucial for many sectors of SIDS' economies, including agriculture and fisheries, but also – because many SIDS are 'large ocean states'²³⁸ – emerging sectors such as the blue economy, digital economy, and indigenous renewables. However, scientific research involving marine genetic resources in areas beyond national jurisdiction (ABNJ) is limited, and Pacific SIDS have called for a strengthening of the international framework through an integrated approach to advancement, sharing and application of knowledge.²³⁹

112. The explosion in new data and technology brings an opportunity for better management and monitoring of ocean resources. In its statement at the Joint Plenary of COP26, CMP, CMA, SBSTA and SBI, the Association of SIDS (AOSIS) underscored that capacity building, information sharing, and technology transfer are critical to meet mitigation and adaptation goals of SIDS. One measure AOSIS identified is a dedicated seat for SIDS on the CTCN Advisory Board. To date under the GEF-supported CTCN, regional tech centres are under implementation: Africa (AfDB), Asia and Pacific (ADB/UNEP), Eastern Europe and Central Asia (EBRD), as well as Latin American and Caribbean (IDB). The CTCN has supported 4 pilot projects, including transfer of technologies spanning renewable energy, energy efficiency, transport, composting, membrane drip irrigation, flood- and drought-resistant crops, and sustainable land management.

113. SIDS in the Pacific and the Atlantic, Indian Ocean, Mediterranean, and South China Sea (AIMS) region have received commitments of support by the Economic and Social Commission for Asia and the Pacific (ESCAP). At the First Virtual SIDS Solutions Forum held in 2021, three priority areas were identified: SDG and climate financing; promotion of rights and interests of communities or individuals that are migrating, displaced or relocated due to climate change and natural disasters by supporting micro, small, medium-sized enterprises (MSMEs); and sustainable management of the oceans, including through piloting and implementation of oceans accounts. Pacific SIDS have also, through the Regional Pacific NDC Hub, launched Strategy 2030: A Blueprint for NDC Implementation in Pacific Island Countries.²⁴⁰ Among its objectives, the Strategy allows for climate finance support aimed at climate action under the Paris Agreement, including technology transfer.

114. Caribbean SIDS are keen to diversify from their overwhelming reliance on tourism, as well as from importing fuels to utilising indigenous renewables. There is an urgent need to protect the biodiversity hotspot from further ecosystem degradation and species loss. These goals drive the need for transfer of technology, but information and data on research, science, technology, and innovation, especially on ocean related matters, are limited. One such initiative is to catalyse a paradigm shift is

²³⁶ Drafted by Miss Alana Malinde Lancaster (Caribbean Branch).

²³⁷ See Eliza Northrop and others, '[A Sustainable and Equitable Blue Recovery to the COVID-19 Crisis](#)' (Ocean Panel 2020).

²³⁸ Nicholas Chan, "Large Ocean States": Sovereignty, Small Islands, and Marine Protected Areas in Global Oceans Governance' (2018) 24 *Global Governance: A Review of Multilateralism and International Organizations* 537.

²³⁹ Harriet R Harden-Davies, 'Research for regions: Strengthening marine technology transfer for Pacific Island Countries and biodiversity beyond national jurisdiction' (2017) 32 *International Journal of Marine and Coastal Law* 797.

²⁴⁰ See, '[A Blueprint for NDC Implementation in Pacific Island Countries](#)'.

transformational financing under the Green Climate Fund.²⁴¹ Further initiatives will support climate adaptation and resilience in agriculture, water, forestry, and fisheries.

115. For their part, African SIDS view technology transfer as a vehicle for sustaining natural resources and improving livelihoods of those who rely on them. In addition to investment in hard technologies, initiatives for capacity building and other institutional technologies require equal attention. An example of technology transfer is in sustainable biofuels, as seen between Brazil and African countries.

C. Green Knowledge in the Context of Recent Health and Security Case Law²⁴²

116. Two 2020 WTO cases affect issues relevant to green knowledge and technology transfer in the context of the TRIPS Agreement: the Appellate Body Reports in *Australia – Tobacco Plain Packaging*, cited at the Panel stage in the Committee’s 2018 report in connection with TRIPS Articles 7–8 (para. 59); and the (unadopted) Panel Report in *Saudi Arabia – Protection of IPRs*, regarding the security exception in Article 73 TRIPS.²⁴³

117. In *Australia – Tobacco Plain Packaging*, the Appellate Body declined to determine the legal status of the Doha Declaration on TRIPS and Public Health, finding that the Panel’s reliance on this document merely confirmed the relevance of Articles 7–8 TRIPS as context in interpreting Article 20 TRIPS, in accordance with general rules of treaty interpretation.²⁴⁴ While relying in its own Article 20 interpretation on the principle in Article 8.1 TRIPS that Members may ‘adopt measures necessary to ... promote the public interest in sectors of vital importance to their socio-economic and technological development’ (which would extend to environmental matters), the Appellate Body emphasised that Article 8.1 requires that such measures be ‘necessary’ and also that they be consistent with the TRIPS Agreement.²⁴⁵

118. These statements of the Appellate Body provide further guidance on Articles 7 and 8 of the TRIPS Agreement, mentioned before the appeal in para. 58 of the Committee’s 2018 report, also with respect to the Doha Declaration on TRIPS and Public Health. Regarding the implications of these provisions under the Vienna Convention on the Law of Treaties (VCLT), we can note that the qualification regarding TRIPS-consistency identified by the Appellate Body with respect to Article 8.1 also exists in Article 8.2, which recognises that ‘Appropriate measures ... may be needed to prevent ... the resort to practices which ... adversely affect the international transfer of technology’. Article 8 TRIPS is therefore not an ‘exception’, but it remains relevant ‘context’ in interpreting the TRIPS Agreement in accordance with VCLT Article 31(1).²⁴⁶ Similarly, Article 7 (‘protection and enforcement of intellectual property rights should contribute to ... the transfer and dissemination of technology ... in a manner conducive to social and economic welfare’) reflects ‘object and purpose’ under VCLT Article 31(1),²⁴⁷ along with the reference to ‘the objective of sustainable development, seeking to protect and preserve the environment’ in the preamble to the Marrakesh Agreement Establishing the WTO.²⁴⁸ These words may support green interpretations of TRIPS provisions, particularly in case of ambiguity.

119. The most relevant aspect of the security exceptions for green knowledge is Article 73(b)(iii) TRIPS, which states that ‘Nothing in this Agreement shall be construed ... to prevent a Member from taking any action which it considers necessary for the protection of its essential security interests; ...

²⁴¹ ‘[Transformational Climate Financing for the Caribbean Regional Engagement](#)’ accessed 30 November 2021.

²⁴² Drafted by Professor Tania Voon (Australian Branch).

²⁴³ See Interim Committee Report 2018 (n 1), Part I, section B., para. 62, which was drafted before this current dispute arose.

²⁴⁴ WTO, *Australia – Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging* (9 June 2020) WT/DS435/28 WT/DS441/29, paras 6.657–6.658.

²⁴⁵ *Ibid.*, para. 6.649.

²⁴⁶ United Nations, *Vienna Convention on the Law of Treaties*, 23 May 1969, UNTS, vol. 1155, p. 331.

²⁴⁷ *Ibid.*

²⁴⁸ WTO Agreement (n 37), Preamble.

taken in time of war or other emergency in international relations’.²⁴⁹ We now have further informal guidance on this provision beyond that discussed at para 62 of the Committee’s 2018 report, due to the circulation of the Panel Report in *Saudi Arabia – Protection of IPRs* (although this dispute has since been terminated and the report will remain unadopted).²⁵⁰ Adopting the framework used by the Panel in *Russia – Traffic in Transit* regarding the GATT security exceptions, the Panel in *Saudi Arabia – Protection of IPRs* recognised several limits in this exception. First, invocation of the exception is in principle justiciable. Second, essential security interests relate to ‘the quintessential functions of the state, namely, the protection of its territory and its population from external threats, and the maintenance of law and public order internally’. Third, the challenged measures must not be implausible as a means of protecting such interests. Finally, the existence of an emergency in international relations is objectively determined and means ‘a situation of armed conflict, or of latent armed conflict, or of heightened tension or crisis, or of general instability engulfing or surrounding a state’.²⁵¹

120. These restrictions on the use of Article 73(b)(iii) TRIPS, which might otherwise be perceived as ‘self-judging’ based on the words ‘which it considers necessary’, are likely to hinder efforts to rely on this security exception with respect to environmental measures. Although climate change might be accepted as an external threat to a Member’s territory and population and therefore related to essential security interests, it might be harder to establish that climate change amounts to an emergency in international relations.

D. *TRIPs-Plus Commitments in Preferential Trade Agreements*²⁵²

121. Since the early 1990s, a global and increasingly dense web of bilateral and regional agreements (including free trade or economic partnership agreements, here all referred to as preferential trade agreements, or PTAs) that include obligations to introduce typically stronger protections of IP has developed. In the IP – environment interface, a key policy issue is whether these ‘TRIPs-plus’ standards may affect flexibilities under the TRIPS Agreement that are relevant in the context of access to and transfer of environmentally sound technologies (ESTs). The following offers an overview of environment-related issues that pertain to patents, trade secrets, copyright and trademark protection, keeping in mind how these IP rights are addressed in PTAs. A general observation is that IP provisions in PTAs hardly ever refer specifically to environmental issues (other than replicating the right under Article 27.2 TRIPS²⁵³ to deny patents for inventions whose commercial exploitation causes ‘serious prejudice to nature or the environment’), or specific industries (other than pharmaceuticals or producers of other regulated goods such as fertilisers), so that a direct link between IP and environment usually does not exist.

122. Nevertheless, IP Chapters in PTAs often require contracting parties to ratify or comply with various multilateral IP treaties, including international registration systems such as the Patent Cooperation Treaty (PCT), or the Madrid Agreement or Protocol.²⁵⁴ If implemented, the availability of international registration systems can make it easier for EST producers to obtain patent protection abroad, hence potentially facilitating the dissemination of ESTs through licensing. Similarly, patent cooperation and work-sharing commitments (see e.g., Article 20.15 USMCA²⁵⁵) may facilitate the development of common standards in patent examinations (with again a potential positive impact on obtaining patents, including on ESTs, abroad) – but may also effectively undermine national diversity in dealing with key concepts such as novelty or inventive step. ‘Best mode’ disclosure obligations and

²⁴⁹ Agreement on Trade-Related Aspects of Intellectual Property Rights (15 April 1994) 1869 UNTS 299, 33 ILM 1197 [hereinafter TRIPS], Article 73(b)(iii).

²⁵⁰ *Saudi Arabia – Measures Concerning the Protection of Intellectual Property Rights: Communication from Qatar* (25 April 2022) WT/DS567/11.

²⁵¹ *Saudi Arabia – Measures concerning the Protection of Intellectual Property Rights* (circulated 16 June 2020, unadopted and terminated) WT/DS567/9, paras 7.23, 7.245, 7.280, 7.285.

²⁵² Drafted by Professor Henning Grosse Ruse-Khan (British Branch).

²⁵³ TRIPS (n 249), Article 27:2.

²⁵⁴ Patent Cooperation Treaty (adopted 19 June 1970, entered into force 24 January 1978) 28 UST 7645; 1160 UNTS 231; 9 ILM 978; Madrid Agreement.

²⁵⁵ USMCA (n 96), Article 20.15.

transparency with regard to registered rights (e.g. via online databases, see Article 14.6 EU-Japan EPA or JEEPA and Article 18.15 CPTPP)²⁵⁶ can improve the identification of ESTs that have fallen into the public domain, and generally facilitate access to scientific information available in patent databases. Patent term extensions for undue delays (see Article 1.12.2(a) US-China Phase One Deal)²⁵⁷ also can have an impact on ESTs both in terms of additional protection for the owners and licensors of patented ESTs but equally in terms of prolonged unavailability of such technologies for competitors and other users.

123. As discussed in greater detail in the 2020 Report of this Committee,²⁵⁸ in terms of trademarks, the above-mentioned international registration systems under the Madrid Agreement or its Protocol can support the international use, recognition and implementation of eco-labels and other certification schemes that may receive protection under collective or certification mark systems (see e.g., Article 18.19 CPTPP²⁵⁹). From the environmental perspective, the principal issue is to ensure that such certification schemes sufficiently guarantee adherence to the standards a label suggests to the average consumer – an issue that Article 6 *quinqvis* B (iii) of the Paris Convention allows to address by rejecting marks that are ‘of such nature as to deceive the public’.²⁶⁰ In the copyright context, associated protection for technological measures against circumvention (see e.g., Article 20.66 USMCA²⁶¹) can limit access to academic journals or other scientific publications – even where exceptions for research, education and study would otherwise allow some use, including for environmental protection purposes. In recent PTAs, trade secret protection has gained importance (see Article 1.3-1.9 US-China Phase One Deal²⁶²) – which in turn usually favours the technology holder over competitors or users. Finally, most PTAs contain significant TRIPS-plus standards on IP enforcement (see, e.g., Article 20.32-42 EU - Canada Comprehensive and Economic Trade Agreement or CETA²⁶³) – but the main emphasis here is to enhance civil, criminal and border measure remedies in particular against copyright piracy or trademark counterfeiting (and hence arguably not concerning IP protection for ESTs).

124. As discussed in detail in the 2018 report of this Committee, key horizontal flexibilities of the TRIPS Agreement (that is to say, those which apply to all types of IP commitments) retain relevance for interpreting and implementing PTAs.²⁶⁴ That view finds further support in state practice, as many PTAs explicitly incorporate the TRIPS’ objectives and principles (see e.g., Article 10.1 EUSFTA), include verbatim copies of these provisions (see e.g., Article 15.2 and 15.3 UK-Australia FTA), or otherwise express the parties’ commitment to retain TRIPS flexibilities (see e.g. Article IP.32 EU-UK TCA).²⁶⁵ Many PTAs also include national security exceptions equivalent to Article 73 TRIPS²⁶⁶ (see e.g., Article 28.6 CETA), or incorporate the latter by reference (see e.g., Article 14.54 JEEPA) – while some even appear to be more permissive in terms of the requirements for invoking such exceptions (see

²⁵⁶ JEEPA (n 142), Article 14.6; ; CPTPP (n 97), Article 18.15.

²⁵⁷ Economic And Trade Agreement Between The United States of America And The People’s Republic of China: Phase One (signed on 15 January 2020) [hereinafter US-China Phase One Deal], Article 1.12.2(a).

²⁵⁸ See Interim Committee Report 2020 (n 2), paras 58-64.

²⁵⁹ CPTPP (n 97), Article 18.19.

²⁶⁰ Paris Convention for the Protection of Industrial Property, open for signature 20 March 1883, as subsequently revised through 1979, in force variously from 1883, see <http://www.wipo.int/treaties/en/ip/paris/>, Article 6 *quinqvis* B (iii).

²⁶¹ USMCA (n 96), Article 20.66.

²⁶² US-China Phase One Deal (n 257), Article 1.3-1.9.

²⁶³ Comprehensive Economic and Trade Agreement (CETA) between Canada, of the one part, and the European Union and its Member States, of the other part, OJ L 11, 14.1.2017, pp 23–1079 [hereinafter CETA], Article 20.32-42.

²⁶⁴ See 2018 Interim Committee Report 2018 (n 1), paras 65-66, and for a detailed analysis in Henning Grosse Ruse-Khan, ‘From TRIPS to FTAs and back: Re-conceptualising the Role of a Multilateral Intellectual Property Framework in a TRIPS-plus World’ (2017) *Netherlands Yearbook of International Law* (Springer, 2018), pp 57-107.

²⁶⁵ Free Trade Agreement between the European Union and the Republic of Singapore [2019] OJ L 294/3 in force 21 November 2019 [hereinafter EUSFTA], Article 10.1; UK-Australia FTA (n 143); Article 15.2 and 15.3; EU-UK TCA (n 139), Article IP.32.

²⁶⁶ TRIPS (n 249), Article 73.

Article 32:2 USMCA).²⁶⁷ Therefore, additional IP protection in PTAs generally can be construed and implemented with due regard to the broader international (IP) law context: unless individual TRIPS-plus standards specifically prevent effective reliance on TRIPS flexibilities, these generally remain available for WTO Members.

125. In sum, the additional standards of IP protection in PTAs commonly do not address environmental issues. However, TRIPS-plus standards in PTAs may well affect incentives for the development, production and marketing of ESTs. At the same time, they are likely to affect access to and dissemination of these technologies, or can otherwise impact on the IP – environment interface. Since most PTAs however in general do not undermine horizontal flexibilities under TRIPS, those can continue to afford policy space for WTO Members to adopt environmental measures – unless TRIPS-plus rules specifically diverge from these flexibilities.

Part VI: Governing Sustainability and the Role of Dispute Settlement Structures

126. A proper governance of environmental sustainability requires the existence of *fora* where States can amicably search for a common position as to the legitimacy of trade-related environmental measures or, in the most extreme cases, settle their disputes by judicial means.²⁶⁸ The Committee has addressed this issue, focusing on: the key role of a WTO functioning dispute settlement mechanism (Section A); the availability of alternative judicial or non-judicial mechanisms to settle environment-related trade disputes (Section B); with respect to PTAs, the more recent practice on the relationship between rules on trade liberalization and sustainable development (Section C) and the effect of inter-state dispute settlement on sustainability in international trade law (Section D).

A. *The key role of a functioning dispute settlement system*²⁶⁹

127. The long-term effects of not having a fully functional multilateral dispute settlement for trade are not yet clear. What has been clear for a long time is that the WTO dispute settlement system had an unprecedented visibility. The negotiations during the Uruguay Round (notably the end of blocking of panels and panel decisions) combined with clearer substantive rules, such as the end of textile/apparel quotas²⁷⁰ and the requirement of ‘fair comparison’ in anti-dumping,²⁷¹ led to cases being raised which had not been brought under the GATT 1947. Much of the effect of the change in rules was outside the cases that actually were brought.²⁷² The visibility afforded to those who did bring a case might have given some of the smaller participants in the system more leverage.²⁷³ The current lack of Appellate Body members has led to a restoration of the practical equivalent of ‘blocking’ panels via ‘appeals into the void’²⁷⁴ and invites the question, what are the effects of this development?

²⁶⁷ CETA (n 263), Article 28.6; JEEPA (n 142), Article 14.54; USMCA (n 96), Article 32.2. See also above, paras 119-120, for the discussion on recent case-law interpreting the national security exception under TRIPS.

²⁶⁸ The existence of effective institutions that support the rule of law are also an integral part of SDG16 (n 6) on the promotion of peace, justice, and strong institutions.

²⁶⁹ Drafted by Mr Martin Björklund (Finnish Branch).

²⁷⁰ For example, DS24 *United States — Restrictions on Imports of Cotton and Man-Made Fibre Underwear* (Costa Rica).

²⁷¹ DS141 *European Communities — Anti-Dumping Duties on Imports of Cotton-type Bed Linen from India* (India).

²⁷² Marc Busch and Eric Reinhardt, ‘Bargaining in the Shadow of the Law’ (2000) 24 *Fordham International Law Journal* 158-171.

²⁷³ Compare the visibility and support gained by Peru in the Sardines dispute with the EU (WT/DS231/R) to a country such as Vietnam having fisheries issues with the US prior to WTO accession in Christina L Davis ‘Do WTO Rules Create a Level Playing Field for Developing Countries? Lessons from Peru and Vietnam’ in John H Odell (ed) *Negotiating Trade: Developing Countries in the WTO and NAFTA* (Cambridge: Cambridge University Press, 2006), 219-256,

²⁷⁴ James Bacchus, ‘[Appeals to the abyss are letting China off the hook on trade violations](#)’ (15 June 2021) The Hill .

128. One result might be more unilateral action from those who perceive they have been wronged.²⁷⁵ In a situation where states are ramping up climate and other sustainability-related action that inevitably will impact trade, unilateral retaliation would cause severe damage to international trade, and thus international relations writ large. The lack of a single forum where trade and other interests are balanced, is also particularly worrisome given some of the more contested aspects of Article XX GATT 1994 (in particular, the chapeau).²⁷⁶ Further, the language of Article XX GATT 1994, or something akin to it, has now been used in several PTAs and BITs.²⁷⁷ If the meaning of that language ceases to be interpreted in WTO dispute settlement at a time when that meaning is increasingly crucial, it is inevitable that there will be contradictory messages as to what sustainability measures are permissible. This dynamic is unlikely to facilitate the transition announced by so many at COP26 for the coming decade.

B. *Alternative (Judicial and Non-judicial) Dispute Resolution Mechanisms*²⁷⁸

129. Government actions to mitigate climate change and otherwise to protect the environment often have economic effects on trade. These trade effects may be incidental or even intentional, as in the case of carbon border adjustments. The affected stakeholders and governments may then seek redress against these measures – through negotiations, through political pressure including trade retaliation or other retorsion, or through formal or informal dispute settlement under international agreements.

130. The WTO Agreement has provided well-understood procedures for formal dispute settlement through presentations by both sides to a neutral panel of decision-makers, with an optional appeal to a standing Appellate Body. But this formal mechanism is only a middle stage in a negotiating process. Governments bring formal WTO disputes after negotiation has failed to settle a dispute on mutually agreeable terms. They then litigate, to change the terms of settlement and to clarify whether the measures at issue are legitimate. Panel decisions can provide an exit strategy from illegality, or a reason not to retaliate. Since the WTO cannot compel its members to act, any commercial outcome results from negotiations after the litigation is over.

131. Oversights by the drafters of the WTO dispute settlement rules have led to the current problem of ‘appeals into the void’ that deprive panel decisions of any binding effect. In response, governments have brought far fewer formal WTO disputes. They have also turned their attention to alternative dispute resolution (ADR) methods and other means to reconcile trade and environmental objectives in regulatory measures.

132. The WTO dispute settlement rules provide explicitly for optional good offices, mediation and conciliation in Article 5 of the WTO Dispute Settlement Understanding (DSU).²⁷⁹ Article 5 DSU has never been fully invoked, but mediation and good offices have taken place in a few WTO disputes (although none that concerned environmental regulation).²⁸⁰

133. In addition, under Article 25 DSU, the parties to any dispute can agree to arbitration based on terms of reference and procedures set by them. They must agree to abide by the arbitral award; the award must be consistent with substantive WTO law; and the award can also trigger WTO authorization for trade retaliation.²⁸¹ Article 25 DSU does not explicitly limit these arbitrations to WTO issues, so the parties could agree to include non-WTO issues as well.

²⁷⁵ For a list of actions by trading partners retaliating against the US §232 tariffs see: https://legacy.trade.gov/mas/ian/tradedisputes-enforcement/retaliations/tg_ian_002094.asp.

²⁷⁶ The question of various climate measures would likely at some point be dealt with under the standards established by how the ‘importance of the interests or values at stake’ in a GATT 1994, Article XX case should be assessed as discussed *inter alia* in *Brazil - Tyres* (WT/DS332/AB/3) at para 178.

²⁷⁷ For example, agreements concluded *inter alia* between the EU and Ukraine, China and Chile and between Australia; see further below, Part VI(C).

²⁷⁸ Drafted by Ms Amy Porges (American Branch).

²⁷⁹ Understanding on the Rules and Procedures Governing the Settlement of Disputes 1869 UNTS 401 [hereinafter Dispute Settlement Understanding or DSU]. Article 5 DSU, *ibid*, is optional, not mandatory, because the drafters wanted to avoid adding time to the dispute settlement process.

²⁸⁰ For example, Article 3.12 DSU, *ibid*, concerning good offices was invoked in the *EC – Bananas* dispute, resulting in the Geneva Agreement on Trade in Bananas (WT/L/784) 15 December 2009.

²⁸¹ Article 25 DSU, *ibid*, paras 1 – 4.

134. In 2020, a group of WTO Members drew on Article 25 and agreed to establish a Multi-Party Interim Appeal Arbitration Arrangement (MPIA).²⁸² As of May 2022, parties to six WTO disputes have agreed to MPIA-based appeal arbitration procedures to provide review of panel reports; in five other disputes, the parties have agreed to arbitrate appeals without reference to the MPIA. Turkey initiated the WTO's first appeal arbitration on 25 April 2022, under MPIA-like procedures agreed with the EU.²⁸³ As this is effectively a test drive for the MPIA idea, there will be much interest in how this arbitral panel manages the case and meets its deadlines. Separately, the US and EU have initiated and suspended arbitrations in two disputes in the context of a steel trade settlement. Arbitration could displace WTO appeals, and postpone any revival of the Appellate Body.

135. The WTO's Committees on Technical Barriers to Trade (TBT) and on Sanitary and Phytosanitary Measures also use their meetings as a forum to discuss issues related to 'specific trade concerns' (STCs) raised by Members on behalf of their exporters.²⁸⁴ These committees now set aside most of their meeting time for STC discussions. Raising an STC can help even a small Member collaborate with like-minded Members to seek resolution or mitigation of unnecessary trade impacts, or trade discrimination. Members with similar regulatory concerns, or similar measures, can also form coalitions. STC-related documents and statements can be used to ask for more information on existing or proposed measures, ask for translations, ask for updates or clarification, or seek opportunities to comment.²⁸⁵

136. STCs can lead to non-litigious resolution of issues. A WTO Secretariat paper finds that 89% of STCs raised in the TBT Committee 1995–2018 were resolved non-litigiously and only 11% were ongoing; STCs raised with respect to draft measures were particularly likely to be resolved without a WTO dispute.²⁸⁶

C. *The Relationship between Trade Chapters and Sustainable Development Chapters in Preferential Trade Agreements: a Focus on the 2020 EU-Ukraine Report*²⁸⁷

137. As mentioned in the Committee's two Interim Reports of 2018 and 2020, the inclusion of specific chapters on Trade and Sustainable Development (TSD) has become standard practice in preferential trade agreements (PTAs), especially those negotiated by the EU, the US and Canada.²⁸⁸ Previous Reports have delved into both the substantive disciplines included in such TSD chapters and the *ad hoc* enforcement regime envisaged in cases of alleged violations of TSD provisions.²⁸⁹

138. An issue that deserves closer attention however is the relationship between TSD provisions, on the one hand, and the provisions contained in chapters that regulate purely trade matters, on the other hand. This issue was examined in detail in the recent *Ukraine – Wood Products* dispute that arose in

²⁸² On 30 April 2020, Australia, Brazil, Canada, China, Chile, Colombia, Costa Rica, the European Union, Guatemala, Hong Kong, China, Iceland, Mexico, New Zealand, Norway, Pakistan, Singapore, Switzerland, Ukraine and Uruguay being a Statement on a 'Mechanism for Developing, Documenting and Sharing Practices and Procedures in the conduct of WTO Disputes' JOB/DSB/1/Add.12, known as the 'Multi-party Interim Appeal Arbitration Arrangement pursuant to Article 25 of the DSU' [hereinafter MPIA].

²⁸³ *Turkey – Pharmaceuticals*, WT/DS583/12 (notice of appeal disclosing text of panel report, 28 April 2022); WT/DS583/10 (arbitration procedures, 25 April 2022); see 'Turkey initiates arbitration procedure in pharmaceuticals dispute, discloses panel report', WTO press release, 28 April 2022; WT/DS583/13 (constitution of arbitrator, circulated 4 May 2022).

²⁸⁴ Based on the TBT Agreement (n 189), Article 13.1 and Agreement on the Application of Sanitary and Phytosanitary Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 UNTS 493 [hereinafter SPS Agreement or SPS], Article 13 SPS, G/TBT/1/Rev.14 (p 55-59) and G/SPS/61.

²⁸⁵ Kian Casseghari Posada and others, 'The Role of WTO Committees through the Lens of Specific Trade Concerns Raised in the TBT Committee', WTO Staff Working Paper ERSD-2020-09, 1 May 2020, 912.

²⁸⁶ *Ibid*, 16-18.

²⁸⁷ Drafted by Dr Ilaria Espa (Swiss Branch).

²⁸⁸ Interim Committee Report 2018 (n 1), Part I: A.2., paras 13-28; Interim Committee Report, 2020 (n 2), Part A.2., paras 19-44.

²⁸⁹ Interim Committee Report 2020, *ibid*, Part A.2., paras 21-37.

the context of the EU-Ukraine Association Agreement (AA).²⁹⁰ This case may be useful to understanding how the widening scope and reach of sustainability-related provisions in trade agreements can impact the interpretation of PTA rules that squarely regulate trade matters.

139. In the EU-Ukraine case the Arbitration Panel affirmed that the existence of a specific TSD chapter could be relevant to cases concerning alleged violations of basic trade obligations, such as the prohibition of quantitative restrictions, included in chapters that contain immediate obligations on the promotion of international trade. More specifically, it stated that, even though they cannot be considered as ‘self-standing or unqualified exceptions’ that can cure in and of themselves existing conflicts with ‘detailed, specific and compulsory rules’ arising out of trade chapters,²⁹¹ TSD provisions may still ‘serve as relevant “context” for the interpretation of other [trade] provisions, which allow the Parties to introduce or maintain measures in derogation to [applicable obligations], including for environmental reasons.’²⁹² In other words, TSD provisions could not be relied upon to justify measures incompatible with basic trade obligations arising out of PTAs (*in casu*, the prohibition of export prohibitions and restrictions as per Article 35 AA)²⁹³ but could still influence the interpretation of applicable exceptions available under the Agreement.

140. Accordingly, the Arbitration Panel arguably stretched the interpretation of the available public policy exceptions included in the AA (namely, the exception for measures ‘necessary to protect plant life or health’ under Article 36 AA,²⁹⁴ which incorporates Article XX GATT 1994 in its entirety).²⁹⁵ In particular, the Panel explicitly referred to the interpretative value of TSD provisions for the purposes of “weighing and balancing” more flexibly any of the individual variables of the necessity test, considered individually and in relation to each other’.²⁹⁶

141. Reference to TSD provisions as ‘relevant context’ was indeed crucial for the Arbitration Panel to consider that one of the measures at issue (namely, the export ban applied by Ukraine in 2005 on ten rare and valuable wood species) could be justified under the available Article XX(b)-like exception of the AA. Most importantly, it was arguably as a result of the ‘requirement to interpret [such exception] harmoniously with the [TSD] provisions’²⁹⁷ that the Arbitration Panel manifestly calibrated its necessity analysis differently than the consolidated WTO jurisprudence on Article XX GATT 1994.²⁹⁸

142. This was, however, the only ‘deviation’ made by the Arbitration Panel. Other relevant provisions of the AA were interpreted in line with the standard interpretative approach espoused in WTO jurisprudence. This choice can be explained by the fact that such AA provisions expressly incorporated the relevant WTO obligations in their entirety, both with regards to the basic trade obligation at stake and to the exceptions invoked).²⁹⁹ It remains to be seen, however, whether extensive

²⁹⁰ *Restrictions applied by Ukraine on exports of certain wood products to the European Union (Ukraine – Wood Products)*, Final Report by the Arbitration Panel established pursuant to the pursuant to Article 307 of the Association Agreement between Ukraine, of the one part, and the European Union and its Member States, of the other part, 11 December 2020 [hereinafter AA].

²⁹¹ *Ukraine – Wood Products*, *ibid*, paras 250-251.

²⁹² *Ibid*, para 251

²⁹³ As per Article 35 AA (n 290), ‘No Party shall adopt or maintain any prohibition or restriction or any measure having an equivalent effect on the import of any good of the other Party or on the export or sale for export of any good destined for the territory of the other Party, except as otherwise provided in this Agreement or in accordance with Article XI of GATT 1994 and its interpretative notes. To this end, Article XI of GATT 1994 and its interpretative notes are incorporated into, and made an integral part of, this Agreement.’

²⁹⁴ Article 36 AA, *ibid*, states: ‘Nothing in this Agreement shall be construed in such a way as to prevent the adoption or enforcement by any Party of measures in accordance with Articles XX and XXI of GATT 1994 and its interpretative notes, which are hereby incorporated into and made an integral part of this Agreement.’

²⁹⁵ *Ukraine – Wood Products* (n 290), para 253 ff.

²⁹⁶ *Ibid*, para 332.

²⁹⁷ *Ibid*.

²⁹⁸ The Panel considered in particular that, because of the flexibility required in the ‘weighing and balancing’ exercise by the existence of Chapter 13 provisions, ‘a highly trade restrictive measure such as an export ban may still be found necessary within the meaning of Article XX(b) of the GATT 1994, as incorporated into Article 36 of the AA’, *ibid*.

²⁹⁹ GATT 1994 (n 33), Articles XI and Article XX (b) and (g) respectively.

reliance on existing WTO case law will remain a distinct feature of PTAs disputes even when arbitration panels have to interpret provisions that do not expressly fully incorporate relevant WTO rules.

*D. The Effect of Inter-state Dispute Settlement on Sustainable Development in International Trade Law*³⁰⁰

143. This Report has noted the overarching impact that the ongoing Appellate Body crisis has had on the possibility for WTO members to enforce their rights effectively under WTO law in relation to trade and sustainability.³⁰¹ Whether dispute settlement in international trade law contributes to or impedes sustainable development does not only depend on the content of legal rules but also on the degree to which states comply with the outcome when application of those rules is disputed, and how they behave in the shadow of the law. To understand the importance of dispute settlement for the development, defence, and enforcement of rules on trade and sustainability, the following section looks at the effects of inter-state dispute settlement on state practice.

144. While the Committee discussed this issue in broader terms in relation to regulatory chill in its 2020 Interim Report,³⁰² we here look at two effects in particular. First, in terms of compliance, following settlement, and second, the extent to which a mere threat of dispute settlement may influence state behaviour.

145. Concerning compliance with dispute settlement decisions, the focus in the literature is almost entirely on WTO dispute settlement, which is unsurprising given the limited dispute settlement practice under FTAs.³⁰³ One indicator for the rate of compliance with dispute settlement decisions is the number of times that a WTO panel has found a lack of compliance³⁰⁴ and the number of times that retaliation has been authorized by the DSB. At the WTO there have been six findings of a Member failing to bring itself into conformity with a prior dispute settlement finding (and a further eight ongoing compliance disputes). Authorisation for suspension of a trade concession, which depends on a prior finding of non-compliance with a dispute settlement decision, was granted in nine cases and requests for authorization have been made in another 12 cases.³⁰⁵

146. It has been argued that the rate of compliance with WTO dispute settlement decisions is higher than for other international judicial mechanisms,³⁰⁶ though the ability of WTO Members to appeal into the void has fundamentally challenged the situation as compared to that on which earlier studies were based.³⁰⁷ Further, additional complexities have been added: the MPIA³⁰⁸ may achieve greater success in terms of compliance given the explicit desire of the parties to it to create an alternative system of appellate review in international trade law. Meanwhile, the threat of unilateral action now being proposed by the EU and Brazil may also change this situation with some Members seeking alternative

³⁰⁰ Drafted by Dr Christiane Gerstetter (German Branch).

³⁰¹ See above Part VI(A), para 128 and Part VI(B), para 131.

³⁰² See Interim Committee Report, 2020 (n 2), Part I, A.2, section (v).

³⁰³ See Margherita Melillo, 'Informal Dispute Resolution in Preferential Trade Agreements' (2019) 53 *Journal of World Trade* 95; for further details see Interim Committee Report 2020 (n 2), Part I, A.2, section (ii). There has been a recent increase in activity – the EU is currently engaged in disputes with four States (Korea, Ukraine, South Africa, and Algeria) under bilateral trade agreements (with disputes with Korea and Ukraine now in the compliance monitoring stage). Details of EU claims are available from the Commission [here](#). Similarly, the US has increased its use of PTAs, including *inter alia* claims against Peru (over forestry management), Mexico (over labour conditions), Canada (over administration of dairy tariff-rate quotas) and Guatemala (over labour concerns). Other concerns have been raised but not escalated to formal litigation (e.g., Colombia and labour rights protection). The USTR maintains information about labour and environment claims [here](#) and [here](#) respectively.

³⁰⁴ Under Article 21.5 DSU (n 278)

³⁰⁵ WTO, 'Current Status of Disputes' available [here](#).

³⁰⁶ William Magnuson, 'WTO Jurisprudence & Its Critiques: The Appellate Body's Anti-Constitutional Resistance' (2010) 51 *Harvard International Law Journal Online*, publication date 06-2010, 121-154, at 134.

³⁰⁷ Indeed, there were pre-existing concerns over compliance with WTO law: see Gary Horlick & Judith Coleman, 'The Compliance Problems of the WTO', (2007) 24 *Arizona Journal of International & Comparative Law* 141ff.

³⁰⁸ See for further details of the MPIA (n 282) and the accompanying text at para 134.

means of enforcing WTO obligations (absent approval of the Dispute Settlement Body, as formally required).³⁰⁹

147. Concerning the influence of a mere threat of dispute settlement on state behaviour, a first point of relevance is what type of sanctions international trade agreements contain. In WTO law, the main sanction consists in the suspension of trade concessions.³¹⁰ In economic terms, the suspension of trade concessions directly affects companies exporting goods or services to the state suspending the concessions, not the state violating trade rules in first place. There may, however, be indirect effects on that state (for example, lower tax income), in addition to pressure from the companies affected by the suspension of obligations as well as reputational or political damage. As noted by the Committee in its 2020 Interim Report when discussing the enforcement of environmental obligations under PTAs, some of those agreements allow for monetary penalties, including for violation of sustainability-related obligations.³¹¹ This type of sanction has a more direct economic effect on the state having to pay for a violation of the relevant PTA.

148. The sanctions are mainly aimed at making the party violating a trade agreement comply with the agreement in the future, not at compensating other parties for losses incurred in the past or punishing non-compliant states.³¹² In this sense, existing sanctions in the international trade regime may be of limited reach by design,³¹³ which is likely to limit the degree to which they influence states' behaviour.

149. Ascertaining the wider influence of a threat of dispute settlement on countries' compliance with trade-related obligations is difficult, as previously noted, in terms of regulatory chill.³¹⁴ Moreover the limited evidence is not uniform. According to one study, PTAs among developing countries in particular are oftentimes not fully complied with, irrespective of the threat of dispute settlement as countries simply lack the capacity to properly implement.³¹⁵ Others have found that WTO dispute settlement outcomes have limited effect on national policy-making in some states³¹⁶ or, conversely, have had such an effect in a few states.³¹⁷ Seeking to avoid the economic or political costs of a dispute has been identified as one reason why countries may seek to comply.³¹⁸

150. Given the current uncertainty surrounding compliance at the WTO because of the paralysis of the Appellate Body and the possibility for the respondent party to appeal a panel report into the void,³¹⁹ combined with the limited evidence on compliance for disputes brought under PTA dispute settlement proceedings, state practice on the matter is especially unclear. More generally, there may be no simple cause-effect relationship between changes at the legal level and the actual trade-related behaviour of states.

³⁰⁹ See Regulation (EU) No 654/2014 (as amended) and Brazil's [Medida Provisória Nº 1.098, de 26 de Janeiro de 2022](#).

³¹⁰ While Article 22 DSU (n 279) also allows for 'compensation', this is a measure that the parties to a dispute would have to agree on (see Articles 22.1 and 22.2 DSU). If related negotiations fail, then a WTO Member can according to Article 22.2 DSU, *ibid*, request the DSB's authorisation for the suspension of concessions or obligations, but cannot request the DSB to define compensation to be paid by the other party.

³¹¹ See Interim Committee Report 2020 (n 2), Part I, A.2, section (ii), at paras 26-28, and especially for monetary compensation, at para 27.

³¹² Hsien Wu, 'Temporal Scope of WTO Dispute Settlement: Charting the Currents of a Turbulent Sea' (2017) 12 *Sian Journal of WTO & International Health Law and Policy* 135-170.

³¹³ In other areas of international law, it has been recognised that compensation for breaches of international law extends to damage caused in the past, see for example ICJ, Judgment of 2 February 2018, Case *Costa Rica v Nicaragua*, para. 28ff.

³¹⁴ See Interim Committee Report 2020 (n 2) at Part I, A.2, section (v) para 45.

³¹⁵ Julia Gray, 'Domestic Capacity and the Implementation Gap in Regional Trade Agreements' (2014) 47 *Comparative Political Studies* 55-84.

³¹⁶ See for the US and Canada, Jacqueline D Krikorian, *International Trade Law and Domestic Policy: Canada, the United States, and the WTO* (Vancouver; UBC Press, 2012).

³¹⁷ Emily Lydgate, 'Is it Rational and Consistent? The WTO's Surprising Role in Shaping Domestic Public Policy' (2017) 20 *Journal of International Economic Law* 561-582.

³¹⁸ Pepita Barlow and others, 'Trade Challenges at the World Trade Organization to National Non-communicable Disease Prevention Policies: A Thematic Document Analysis of Trade and Health Policy Space' (2018) 15 *PLOS Medicine* 18 pp.

³¹⁹ See above, Part VI(A), para 127 and Part VI(B), para 131.

151. In the context of trade and sustainability the above-described potential changes could cut both ways: WTO Members introducing climate or sustainability measures with a trade element may feel emboldened given the limited impact of even a restored dispute settlement mechanism. At the same time, the importance of other factors – related but not reduced to formal dispute settlement – may provide avenues for considering alternative means to resolve disputes in the sustainability space. These may include: considering the influence of private actors lobbying governments to comply; creating transnational spaces of regulatory cooperation under PTAs; or developing the types of regulatory diplomacy conducted at organizations, such as the International Organization for Standardization.

Part VII: Sustainability and WTO Reform³²⁰

152. ‘WTO reform’ can be understood to include any action, process or proposal that is aimed at improving the WTO, either in part or as a whole, with a view to enhancing its relevance, efficiency, effectiveness and reputation for the benefit of WTO Members and international trade.³²¹ As the objective of sustainability is embedded in the Preamble to the WTO Agreement³²² and the Ministerial Decision on Trade and Environment,³²³ its normative influence further trickles into the reform work of WTO Members.

153. This Part first covers Members’ reform proposals in the main multilateral negotiations that touch upon developments in terms of better preparedness for future health crises, fisheries, agriculture, and further reform of the rules-based trading system that also aim to promote sustainable trade. This Part secondly turns to those like-minded reform proposals that would apply to a sub-group of Members concerning trade and the environment, plastics pollution, investment facilitation, services domestic regulation, electronic commerce (e-commerce), gender, and MSMEs. Proposals that arise in WTO Councils and Committees that may lead to further reform initiatives in the future are thirdly outlined and include the TRIPS waiver, CBAM, and the circular economy.. Sustainable development is intrinsically linked to each of these areas of WTO reform as the objectives of improving the efficiency and international cooperation within the multilateral trading system align with the UN SDGs.

A. Sustainability in Multilateral WTO Reform Proposals

154. Central to WTO reform, Members have put forth proposals in the General Council to find a multilateral solution that better prepares the WTO and the world trading system for future health crises. Such efforts include enhancing the WTO transparency monitoring system, ensuring export restrictions do not pose barriers to vaccine supply, and playing an active role in minimising supply chain bottlenecks, which are fundamental to WTO reform and sustainability, as the institution takes on unforeseen activities in the promotion of good health and wellbeing in line with UN SDG 3.³²⁴ In furtherance to this, the Director General will present a compromised text for a TRIPS waiver aiming at enhancing more equitable production of COVID-19 vaccine distribution to the wider WTO Membership within the TRIPS Council: if implemented, it would also reform various trade-related WTO

³²⁰ Drafted by Professor Gabrielle Marceau (Canadian Branch) with significant assistance from Ms Rebecca Walker (British Branch), and Mr Mishael Musili Wambua, including a contribution on the circular economy in WTO context, in paragraph 167, drafted by Professor Yao-Ming Hsu (Chinese (Taiwan) Branch).

³²¹ WTO Secretariat, ‘G20 Trade and Investment Working Group, WTO Reform Information Note’ (World Trade Organisation 2021) 1 [hereinafter WTO Reform Information Note].

³²² WTO Agreement (n 37) Preamble.

³²³ Ministerial Decision on Trade and Environment, April 14, 1994, 33 I.L.M. 1267, 1268 (1994) [hereinafter Ministerial Declaration on Trade and Environment].

³²⁴ See General Council, ‘COVID-19 and Beyond: Trade and Health, Communication from Australia; Brazil Brunei Darussalam; Canada; Chile; China; The European Union; Hong Kong, China; Iceland; Japan; Kenya; Republic of Korea; Mexico; Republic of Moldova; Montenegro; New Zealand; North Macedonia; Norway; Singapore; Switzerland: The Separate Customs Territory of Taiwan; Penghu; Kinmen and Matsu; The United Kingdom; Uruguay and Vanuatu’ JOB/GC/251/Rev.2, dated 19 May 2021. General Council, ‘COVID-19 and Beyond: Trade and Health, Communication from Australia, Brazil, Canada, Chile, The European Union, Japan, Kenya, Republic of Korea, Mexico, New Zealand, Norway, Singapore, and Switzerland’, WT/GC/223, dated 24 November 2020.

provisions.³²⁵ This Report has also noted the central importance of ongoing multilateral negotiations in the areas of agricultural liberalisation with respect to food security and fisheries subsidies.³²⁶ The link between these issues and the SDGs³²⁷ is close and enduring: the ongoing pressure to conclude fisheries negotiations as put forth by SDG 14.6, and the close relationship between Ministerial Decisions on public food stocks to promote sustainable agriculture and food security whilst eradicating undernutrition and malnutrition, as embedded in the SDG 2, are notable examples.³²⁸

155. Additional Member proposals concern institutional reforms of the WTO to improve the effectiveness of the WTO's governance and deliberative functions. These *inter alia* pertain to the decision-making functions of the WTO, the dispute resolution process, increased transparency, and monitoring of trade measures of Members. One negotiation process, in particular, addresses the WTO's overarching sustainability objective, and concerns the status of developing countries and the categorical entitlements to special and differentiated treatment.³²⁹ These reform proposals, that aim to improve the application of special and differentiated treatment, promote sustainability by facilitating economic growth and by reducing inequality within and among countries (contributing to SDG 10).³³⁰

156. Further proposals have been made by Members to reform the dispute settlement system with a particular focus on the appellate process. As this Report has noted, a functioning dispute settlement system is a key element to secure the enforceability of any commitment in relation to sustainable development.³³¹ On 9 December 2019, the former Chair of the Dispute Settlement Body, having held informal discussions with Members, developed a report outlining points of convergence among Members concerning the reform of the dispute settlement system.³³² Access to justice and the promotion of the rule of law are critical to sustainability and therefore, SDG 16 aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. Unfortunately, suggestions for reform have not been adopted, and further proposals that attempt to resolve the Appellate Body crisis remain to be seen.

B. Sustainability in Discussions of Like-Minded Forums

157. Negotiations and discussions conducted in like-minded forums between a sub-group of Members constitute an emerging trend at the WTO. Such forums have developed in response to the resistance of some WTO Members to address various (new) issues that are considered essential areas of reform. These negotiations and discussions, which are referred to as Joint Statement Initiatives (JSIs) or plurilateral initiatives, first emerged during the 11th WTO Ministerial Conference held in December 2017. Although they are open to all WTO Members, JSIs would create new rules that are binding only on participating Members. Although JSIs raise legal and institutional issues within the WTO legal framework – such as whether concluding an agreement amongst sub-group of Members is legally possible in light of the WTO's mandate and the consensus-driven agenda, and whether the resulting benefits must be given to all on an MFN basis – the concerns addressed under JSIs are critical to sustainable development. Currently, these discussions that concern reform work for further sustainable trade include:

³²⁵ See 'Waiver from Certain Provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of Covid-19 Communication from India and South Africa', 2 October 2020, IP/C/W/669. See, Priti Patnaik, 'WTO DG To Take Compromise Text on TRIPS Waiver to the Wider Membership' (Geneva Health Files 2022) <<https://genevahealthfiles.substack.com/p/public-hearings-on-a-pandemic-agreement?s=w>>.

³²⁶ See above in Part I(D) and Part II(B) respectively.

³²⁷ See above (n 6) for the full list of SDGs referred to in Part VII.

³²⁸ See Ministerial Decision on Public Stockholding for Food Security Purposes (n 70).

³²⁹ The latest note outlining the privileges afforded to developing countries under the WTO rules is provided [here](#).

³³⁰ See for example, China, India, South Africa, the Bolivarian Republic of Venezuela, Lao People's Democratic Republic, Plurinational State of Bolivia, Kenya and Cuba, Communication, 'The Continued Relevance of Special and Differential Treatment in Favour of Developing Members to Promote Development and Ensure Inclusiveness', 18 February 2019, WT/GC/W/765.

³³¹ In particular, see above Part VI(D).

³³² See General Council, 'Informal Process on Matters Related to the Functioning of the Appellate Body – Report by the Facilitator, H.E. Dr. David Walker (New Zealand) and Draft Decision on the Functioning of the Appellate Body', WT/GC/W/791, dated 09 December 2019.

(i) *The Trade and Environmental Sustainability Structured Discussions (TESSD)*

158. The aim of the discussions is to strengthen the environmental sustainability of international trade in order to guarantee that trade and trade policies are supportive of, and in order to contribute to, sustainable development and the protection and preservation of the environment, thereby achieving the SDGs and international environmental commitments.³³³ Priority areas that have been identified during discussions are closely supportive of the SDGs. For example, the priority to promote sustainable supply chains and address the challenges and opportunities arising from the use of sustainability standards and any related measures aligns with SDG 12, which seeks to ensure sustainable consumption and production patterns. The priority to promote and facilitate access to environmental goods and services is in line with SDG 13 which calls for urgent action to combat climate change and its impact; SDG 14 which calls for the conservation of, and sustainable use of the oceans, seas and marine resources for sustainable development; and SDG 15 which aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.³³⁴

(ii) *The Informal Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade*

159. The aim of the discussions is to reduce plastics waste in order to move towards a circular plastic economy.³³⁵ Priority areas include, *inter alia*, designing and implementing trade policies to address plastic pollution; access to, and use of key technologies to reduce plastic pollution; expand sustainable and effective substitutes and alternatives; and provide capacity building and technical assistance especially to developing countries in order to reduce plastics waste. With such priority areas the Members of this initiative have a shared recognition of the sustainability implications of plastics pollution and its trade dimension for the achievement of SDGs 12, 14 and 15.³³⁶

(iii) *Investment Facilitation for Development*

160. The aim of the JSI on investment facilitation for development is to facilitate foreign direct investment throughout the life cycle of investment in the service and non-service sectors, from business registration procedures to capital transfers and payments.³³⁷ These plurilateral negotiations do not cover market access, investment protection or investor-state dispute settlement. Instead priority areas include, *inter alia*, improving regulatory transparency and predictability; streamlining and speeding up administrative procedures; and enhancing international cooperation, transparency and exchange of information. In doing so, these priorities are aligned with the promotion of sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8), as well as the development of resilient infrastructure, promotion of inclusive and sustainable industrialization and the fostering of innovation (SDG 9).

(iv) *Services Domestic Regulation*

161. The JSI on services domestic regulation has led to the adoption of a Declaration whereby the Members involved commit to incorporate the disciplines in the accompanying Reference Paper into

³³³ See Committee on Trade and Environment, 'Communication from Australia; Canada; Chad; Chile; Costa Rica; European Union; the Gambia; Fiji; Iceland; Japan; Korea, Republic of; Liechtenstein; Maldives; Mexico; Moldova, Republic of; Montenegro; New Zealand; North Macedonia; Norway; Senegal; Switzerland; the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu; and the United Kingdom', WT/CTE/W/249, dated 17 November 2020.

³³⁴ WTO Reform Information Note (n 321), 8.

³³⁵ See Committee on Trade and Environment, 'Communication from Australia, Barbados, Cabo Verde, Canada, Central African Republic, China, Costa Rica, Ecuador, Fiji, The Gambia, Jamaica, Kazakhstan, Morocco, New Zealand, Switzerland, Thailand and United Kingdom', WT/CTE/W/250/Rev.1, dated 26 July 2021.

³³⁶ WTO Reform Information Note (n 321), 8.

³³⁷ See Ministerial Conference, 'Joint Ministerial Statement on Investment Facilitation for Development', WT/MIN (17)/59, dated 13 December 2017.

their GATS schedules, alongside additional further specific commitments.³³⁸ It aims at elaborating upon the provisions of the WTO General Agreement on Trade in Services by easing the difficulties faced by suppliers, especially those from developing countries, by providing for, *inter alia*, enhanced transparency and procedural predictability of authorization procedures.³³⁹ While the initiative is in not *explicitly* linked to the SDGs, its objectives can contribute to SDG 10 on reducing inequality within and among countries.³⁴⁰

(v) *E-commerce*

162. The JSI on e-commerce covers six broad themes: enabling e-commerce; openness and e-commerce; trust and e-commerce; cross-cutting issues; telecommunications; and market access which are aimed at levelling the e-commerce playing field.³⁴¹ WTO Members aim to promote full and productive employment and decent work; boost inclusive and sustainable industrialization and consumption that fosters innovation; and reduce reliance on paper, hence preventing deforestation. In doing so this initiative will be a step closer to attaining SDGs 8, 9, 12 and 15.³⁴²

(vi) *Gender*

163. Within the reform process there is an Informal Working Group on Gender, which aims at increasing women's participation in trade, cultivating their economic empowerment and removing obstacles to women's economic independence.³⁴³ This working group is in line with achieving gender equality and empowering all women and girls (SDG 5), promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent wages for all (SDG 8), and building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation (SDG 9).

(vii) *Micro, Small and Medium Enterprises (MSMEs)*

164. The JSI aims at identifying obstacles faced by MSMEs interested in seizing international trade opportunities and developing recommendations to overcome these obstacles and improve MSMEs' access to market and regulatory information and access to finance.³⁴⁴ Though not explicitly linked by the Members, this initiative is in line with SDGs 5, 8, 9 and 10.³⁴⁵ This would be particularly the case in light of efforts of some Members to liberalise trade in environmental goods and services.³⁴⁶ Increasing MSME participation in trade of these products could help lessen the severity of, and assist countries to adjust to climate change pursuant to SDG 13 (e.g., solar and wind power equipment, energy efficient lights, insulation materials for buildings and drip irrigation and other water-saving technologies); protect the oceans in line with SDG 14 (e.g., booms to collect marine litter, floating barriers to contain oil spills, turtle and aquatic mammal excluder devices for fishing nets, and 'smart buoys' that transmit information to ships to prevent collisions with whales); and protect life on land in accordance with SDG 15 (e.g., a broad range of solid waste and wastewater management equipment, technologies to prevent soil erosion, clean and efficient cooking stoves, and filters and other equipment to reduce air pollution).³⁴⁷

³³⁸ 'Declaration on the Conclusion of Negotiations on Services Domestic Regulation', WT/L/1129, 2 December 2021. See para.1 for the list of 41 Participants.

³³⁹ See Services Domestic Regulation Reference Paper (n 9), sections 1(2) and (4).

³⁴⁰ UNGA Res. 70/1 (n 6).

³⁴¹ See 'Joint Ministerial Statement on Electronic Commerce', 11th WTO Ministerial Conference, Buenos Aires (10-13 December 2017), WT/MIN (17)/60 (13 December 2017).

³⁴² SDGs, 9, 12 and 15 (n 6).

³⁴³ See 'Joint Declaration on Trade and Women's Economic Empowerment on the Occasion of the WTO', 11th WTO Ministerial Conference, Buenos Aires (10-13 December 2017) available [here](#).

³⁴⁴ See 'Joint Ministerial Statement on the Declaration on the Establishment of a WTO Informal Working Programme for MSMEs', 11th WTO Ministerial Conference, Buenos Aires (10-13 December 2017), WT/MIN (17)/58 (13 December 2017).

³⁴⁵ SDGs 5, 8, 9 and 10 (n 6).

³⁴⁶ See above Part III(A).

³⁴⁷ WTO Reform Information Note (n 321), 7.

165. Other efforts of subsets of Members in relation to climate-friendly trade policies could similarly be supported by the ongoing work of these groups. For example, the ACCTS,³⁴⁸ or improved market access in relation to environmental services.³⁴⁹

C. Member Proposals Furthering Sustainability within Regular Committee Work

166. While the reform process in both multilateral and plurilateral forums are well underway, Member proposals that form part of the regular work of WTO committees dealing with current issues may lead to further reform initiatives in the future. Similarly, the CBAM proposal has raised questions in the Council for Trade and Goods and the Committee for Trade and Environment.³⁵⁰ As Members have raised questions about the EU proposal, and those of other Members considering their own BCAs, the WTO acts as a central mechanism for regulatory coordination and dispute avoidance. Thus, developments pertaining to CBAM are discussed by the Membership in the Market Access Committee, in the Trade and Goods Council, in the General Council, and in the plurilateral discussions such as the TESSD, confirming the WTO as a permanent forum of negotiation that has the capacity to implement reforms as part of its routine work.

167. Furthermore, some Members are increasing their interest in the development of the ‘circular economies’ that focuses on minimum input and output costs, along with limiting disposal in favour of the re-use and/or recycling of goods.³⁵¹ There is, as yet, no unanimous definition for this terminology, but it would include three basic aspects, which are to reduce (minimum use of raw materials), to reuse (maximum reuse of products and components), and to recycle (high quality reuse of raw materials).³⁵² One example can be found in the Circular Economy Promotion Law of the People’s Republic of China (promulgated August 2008; in force January 2009),³⁵³ even though there is no clear enforceable provisions at the regional level, and in the European Commission’s circular economy action plan (CEAP), adopted in March 2020.³⁵⁴ The possible inclusion of this concept in the practices of WTO Members could be evaluated in two ways. First, would the international trade of goods, which is not compatible with the spirit of promoting circular economies, be banned? Could this trade restriction be justified in the name of the general exception clause for the protection of the environment? Secondly, would process and production methods (PPMs) play a significant role in distinguishing traditional products from environmental goods that comply with the spirit of promoting circular economies?

168. It is noteworthy that the lines between the traditional distinctions of WTO ‘regular’ work (undertaken in the General Council, specialised Councils, Committees, Working Groups, and Working Parties), and reform work are becoming increasingly blurred, which is particularly so when reform concerns sustainability. For example, the Committee on Trade and Environment was established in 1994 to identify the relationship between trade measures and environmental measures in order to promote sustainable development and make appropriate recommendations on possible modifications to the multilateral trading system.³⁵⁵ Nonetheless, similar goals are also pursued by Members in the JSIs such as the one on plastic pollution and environmentally sustainable plastics trade, and TESSD. Thus, despite existing under different vehicles, the common thread that weaves through the ‘regular work, and the reform work of the WTO, is achieving the objective of sustainable development and the need to protect the environment. With this common thread, therefore, the erosion of the traditional distinctions of WTO ‘regular’ work and reform work becomes self-evident.

³⁴⁸ See above Part II(C) concerning the ACCTS, n 23 and n 120. and fossil fuel subsidies, as well as Part III(A) in relation to the liberalisation of environmental goods and services. Such policies are aligned with SDGs 13, 14, and 15.

³⁴⁹ See above Part III(A). Improved market access in this context would be aligned to SDGs 7, 11, 12, 13, 14 and 15.

³⁵⁰ See above Part III(B) concerning border carbon adjustments (BCAs).

³⁵¹ Sean Thomas, ‘Law and the circular economy’ 2019 *Journal of Business Law* 62.

³⁵² Se Nederland Circulair, [Knowledge Map Circular Economy](#) (January 2020).

³⁵³ [Decree N°16 of 2018](#) of the President of the People’s Republic of China (26 October 2018).

³⁵⁴ European Union, [A new Circular Economy Action Plan For a cleaner and more competitive Europe](#) (CEAP), 3 March 2020, COM/2020/98.

³⁵⁵ See ‘Ministerial Decision on Trade and Environment’ (n 323).

D. Concluding Remarks

169. A plurality of negotiations aimed at reforming the WTO have arisen, which range from discussions over well-established multilateral institutional reform to proposals that are yet in their infancy being brought by Members within WTO Councils and Committees. A commonality is that they are guided by the WTO's overarching objective of sustainability as reflected in the Preamble to the WTO Agreement.³⁵⁶ While initiatives by Members have taken the focus of this report, the sustainability objective further guides the work of the deliberative function of the WTO, the Secretariat, that has taken upon itself a governance role of facilitating Member work in trade and health, environmental initiatives, as well as improving the trade policy review and further transparency mechanisms, in which the ultimate beneficiaries are plants, animals, and humans of future generations. Post COP26, WTO reform has been prioritised ahead of MC12, which will take place 12-15 June 2022. This serves as an opportunity to not only increase international governance and effectiveness within the WTO, but to push the UN sustainability agenda promoting climate action and human development.³⁵⁷

Part VIII. Conclusions Arising from the Committee's Work

170. The relationship between the environment, sustainable development and international law is firmly established under both public and private international law, and there is a growing body of transnational law that also governs this relationship. This Committee has sought to reflect this complex and diverse range of sources in its work.

171. Transnational law comprises forms of law and regulation that transcend national frontiers and involve a range of non-state actors, such as international organisations, transnational corporations (TNCs) and other business enterprises, non-governmental organisations (NGOs) and civil society organisations (CSOs). Contexts in which non-state actors and transnational legal developments have been relevant to the work of the Committee include: multi-actor negotiations to discipline fisheries subsidies under the auspices of the WTO; the development of carbon product standard-setting alongside mandatory technical regulations; and the rise of economic green governance, as seen in the global management of the forestry sector or the palm oil supply chain.

172. There is a paradoxical relationship between the regimes on trade and the environment. Trade rules can be an obstacle to taking action on the environment (e.g., climate action) or to pursuing the goals of sustainable development. At the same time, they can also act as an important safeguard to ensure that trade-related environmental policies and regulatory frameworks, such as climate mitigation through border carbon adjustments (BCAs), do not amount to protectionism in disguise and thereby undermine economic development.

173. The Preamble to the WTO Agreement identifies an overarching objective of sustainability: 'the optimal use of the world's resources in accordance with the objective of sustainable development, seeking ... to protect and preserve the environment'. Members within WTO Councils and Committees are engaged in discussions, and in some instances negotiations (e.g., fisheries subsidies), to reform the multilateral institution, guided by this objective.

174. The sustainability objective further guides the reform work of the WTO Secretariat, which has assumed a governance role in facilitating Member work in trade and health, as well as on environmental initiatives. The Secretariat seeks to improve the trade policy review and further transparency mechanisms, in which the ultimate beneficiaries are plants, animals, and humans of future generations. Following the COP-26, WTO reform has been prioritised ahead of the 12th Ministerial Conference (MC12), scheduled for 12-15 June 2022, and MC12 also will serve as a forum to push the UN sustainability agenda, which promotes climate action and human development.

175. Access to justice and the promotion of the rule of law are critical to sustainability, including achieving the aims of SDG 16. A functioning dispute settlement system in the multilateral trading system is a key element to securing the enforceability of any sustainable development commitments

³⁵⁶ WTO Agreement (n 37), Preamble.

³⁵⁷ See Valdis Dombrovskis, ['We must not miss this chance to reform the WTO'](#), Financial Times, (24 November 2021).

(including effective participation of all WTO members in the trade regime). A non-operational Appellate Body has led to panel reports being ‘appealed into the void’, thereby depriving them of binding effect. Drawing on Article 25 of the Dispute Settlement Understanding (DSU), a group of WTO Members has established a Multi-Party Interim Appeal Arbitration Arrangement (MPIA) to hear ‘appeals’ from panels while *ad hoc* arbitration is being used by some other WTO Members.

176. WTO Members are bringing fewer formal disputes under the DSU and are turning their attention to alternative dispute resolution (ADR) and other means to reconcile trade and environmental objectives in regulatory measures. The lack of a single, effective forum where trade and other interests can be balanced may impact WTO jurisprudence, especially given some of the more contested aspects of interpreting Article XX GATT 1994 (in particular, the *chapeau*). The language of Article XX GATT 1994, or similar, has been used with respect to sustainability measures in several preferential trade agreements (PTAs). Should Article XX cease to be systematically interpreted in WTO dispute settlement, it could lead to a lack of consistent interpretation of Article XX-type language by panels of experts and arbitral tribunals under those PTAs.

177. The effect of inter-state dispute settlement for the defence and enforcement of rules on trade and sustainability impacts state practice in terms of compliance. Until recently WTO dispute settlement fared well in relation to compliance as compared to other international judicial mechanisms. The ability of Members to appeal panel decisions into the void imperils compliance and undermines the previously agreed centrality of *authorised* countermeasures under the DSU. The MPIA and other alternative dispute settlement mechanisms may achieve greater success in terms of compliance.

178. The threat of unilateral action (e.g., as proposed by the EU and Brazil) may encourage other Members to seek alternative means of enforcing WTO obligations, absent the approval of the Dispute Settlement Body that the DSU requires.

179. In line with the mandate given to the WTO Committee on Trade and Environment, and with a view to enhancing the mutual supportiveness between trade and the environment, the 2001 Doha Ministerial Declaration endorses negotiations on the relationship between WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs).

180. The principle of mutual supportiveness applies when there is a dispute arising from a potential conflict between trade and environmental protection or sustainable development in the multilateral trading system. WTO panels—and, due to the paralysis of the Appellate Body, the MPIA—may interpret WTO law harmoniously with international environmental law, including in the related field of international energy law, in accordance with Articles 31 and 32 of the Vienna Convention on the Law of Treaties (VCLT).

181. The principle of mutual supportiveness underlies the relationship between trade rules and specific environmental and/or sustainable development obligations in a growing number of PTAs. This includes EU-third party PTAs, which include dedicated trade and sustainable development (TSD) chapters, covering a broad range of specific environmental concerns (e.g., climate change, biodiversity, management of forests) or trade-related environmental issues (e.g., renewable energy or fisheries subsidies, trade in timber and fish or trade in environmental goods and services).

182. Other PTAs (e.g., the US-Korea Free Trade Agreement or KORUS) contain substantive provisions recognising the right of parties to set and pursue their own level of environmental protection and to modify national environmental laws and regulations consistent with MEAs binding upon them, coupled with parallel obligations not to encourage trade by lowering domestic environmental law protections. Still other PTAs (e.g., the EU - Canada Comprehensive and Economic Trade Agreement or CETA) contain a specific exception clause with GATT 1994 Article XX-type language, that sets out specific policy objectives, including measures for the protection of human, animal, or plant life or health, and the conservation of natural resources. Such exceptions should not constitute ‘a means of arbitrary or unjustifiable discrimination’ or ‘act as a disguised restriction on trade’.

183. US PTAs (e.g., the DR-CAFTA) provide for general state-to-state dispute settlement and economic sanctions. Sanctions can take the form of retaliation by means of the withdrawal of trade benefits, compensation or the payment of a ‘monetary assessment’. EU-third party PTAs with TSD chapters forbid the use of standard dispute settlement. Instead, the TSD chapters have traditionally provided for a softer, separate, two-step *ad hoc* enforcement mechanism, without the possibility of sanctions, thereby departing from the general procedure for the settlement of disputes under other trade chapters in the PTA

184. Due to the dearth of dispute settlement proceedings under PTAs involving environmental and/or sustainable development provisions, it is uncertain to what extent the principle of mutual supportiveness between trade rules and specific environmental and/or sustainable development obligations is being upheld. However, based on the arbitral decision in *Ukraine – Wood Products* (brought under the EU-Ukraine FTA), it is clear that while substantive TSD provisions cannot be relied upon to justify measures incompatible with basic trade obligations arising out of a PTA, they nonetheless can influence the interpretation of applicable exceptions under the relevant agreement.

185. Many PTAs regulate trade and the environment to a greater degree than does the multilateral trading system. Such agreements emphasise the Parties' right to regulate, including their discretion in determining the level of environmental protection, according to their domestic laws and regulations. Some PTAs take up specific language on regulatory cooperation (e.g., the Japan – EU Economic Partnership Agreement or JEEPA). However, there are indications that some PTAs can have a constraining, or even a chilling effect, on state practice in the matter of regulation taken for sustainability-related purposes (e.g., environmental protection) at the national level.

186. In a turn towards transnational law and governance, an increasing number of PTAs, especially those entered into by the EU, the US, UK, or Canada, provide for public participation in decision-making, including by civil society (e.g., the domestic advisory group (DAG) and Civil Society Forum under the EU - Canada Comprehensive and Economic Trade Agreement or CETA). Such public participation can reinforce the performance, particularly the monitoring, of individual PTAs.

187. In the international community, the multilateral liberalisation of trade and environmental goods and services is progressing at a slow pace. Negotiations for a plurilateral Environmental Goods Agreement (EGA), under the auspices of the WTO, began in 2016 but have subsequently stalled. However, there are encouraging developments in other plurilateral *fora* (e.g., the Agreement on Climate Change, Trade and Sustainability or ACCTS), currently under negotiation, and in bilateral *fora* (e.g., the JEEPA), both of which incorporate obligations on improving market access for environmental goods and services.

188. International trade has a vital role to play in achieving the Paris Agreement goals. It can have both direct effects by contributing to global greenhouse gas (GHG) emissions through the international transportation of goods by sea and air and indirect effects caused by an increase in global economic activity (e.g., production in the steel or cement sectors).

189. There has been a rise in trade-related climate change mitigation measures (e.g., carbon pricing and emissions trading systems (ETS), border carbon adjustments (BCAs), standards and labelling schemes) in many nationally determined contributions (NDCs) of Parties to the Paris Agreement. Article 6 of the Paris Agreement lays the legal groundwork for countries to voluntarily create bilateral and plurilateral cooperation arrangements for carbon trading that will lead to international transferred mitigation outcomes (ITMOs).

190. The Article 6 'Rulebook' adopted at the Glasgow Climate Summit further applies to interlinked ETS and international carbon crediting programmes, as well as to direct intergovernmental collaboration to implement the Paris Agreement. It introduces some international safeguards to ensure the environmental integrity of the internationally transferred carbon credits while creating the legal basis for a new international carbon crediting mechanism to replace the Clean Development Mechanism (CDM), which existed under the Kyoto Protocol. Although such market mechanisms constitute important policy instruments to mitigate GHG emissions, their potential links to international trade law remain largely untested.

191. The introduction of carbon constraints, including ETS, can lead to carbon leakage. Border carbon adjustment measures (BCAs) or charges levied on traded products based on their carbon content, can be used to address the issue. An increasing number of states are drawing up their own BCA schemes, albeit that some (e.g., the EU's carbon border adjustment mechanism (CBAM)) are controversial. For the CBAM, the controversy arises from its potential incompatibility with WTO rules and/or its potential unfairness and/or discriminatory character that conflicts with the principles of equity and common but differentiated responsibilities and respective capabilities (CBDR-RC). Thus far, countries have failed to adopt a common position on BCAs, to enter into mutual recognition agreements concerning their application, or to develop an international agreement on principles and best practices for the elaboration and implementation of BCAs.

192. Renewable energy subsidies can be a tool of a government's green energy policy by supporting the uptake of low-carbon technologies, thereby helping renewable energy industries flourish. However, there has been a rise in WTO disputes targeting government support schemes, combined with an increase in national trade remedy cases, often initiated by governments that are using subsidies domestically to lower renewable energy prices.

193. The majority of renewable energy subsidy cases in the multilateral trading system have stemmed from WTO Members conditioning support for renewable energy on the use of domestic over imported inputs (e.g. solar cells or modules, wind turbines). In the absence of a local content requirement, a government-supported renewable energy scheme need not be WTO-inconsistent under the Agreement on Subsidies and Countervailing Measures (ASCM) if a 'benefit' is not conferred (*Canada – Renewable Energy*).

194. Government support for fossil fuel production and consumption is a major driver of GHG emissions, resulting in carbon lock-in and leading to adverse impacts on public health. Unlike renewable energy subsidies, there have been no WTO disputes over fossil fuel subsidies (FFS), in part due to stringent criteria for finding the existence of a subsidy under the ASCM and in part due to its 'carbon blindness' in terms of harms caused by subsidies. Notwithstanding a Ministerial Statement on Reform at MC11 in 2017, efforts to reform FFS in line with SDG 12(c) have been limited. A group of WTO Members are supporting a new Joint Statement Initiative (JSI) on FFS. Future WTO disciplines could include a prohibition on FFS along the lines of prohibited subsidies and/or actionable FFS subsidies (related to an assessment of certain environmentally harmful effects), as exist under the ASCM.

195. Apart from current WTO negotiations, there are a range of other multilateral commitments (e.g., the UNFCCC), regional approaches (e.g., the EU's information-sharing on FFS in the WTO context, and APEC's voluntary standstill proposal on FFS) as well as plurilateral initiatives (e.g., the ACCTS negotiations on FFS disciplines). FFS can also be addressed through PTAs, though so far, only a few do so (e.g., EU – Singapore FTA, and the New Zealand – UK FTA).

196. Aside from the removal of agricultural export subsidies, attention needs to be paid more generally to redirecting agricultural subsidies to ameliorate the effects of agriculture on the climate. This should be done in a WTO-compatible manner and with due regard to the concerns of the developing world. The regulation of trade-distorting agricultural subsidies has yet to fully come to terms with the issue of food security, which in the WTO is bound up with the trade effects of certain public stockholding programmes in the developing country context.

197. At the level of multilateral, plurilateral, and regional trade, a patchwork governance of fisheries subsidies and sustainable ocean and freshwater fisheries exists, often referencing commitments on the prohibition of subsidies that contribute to illegal, unregulated, or unreported (IUU) fishing. Ongoing multilateral negotiations at the WTO are aimed at disciplining certain forms of harmful fisheries subsidies, in line with SDG 14.6. The draft Agreement on Fisheries Subsidies foresees a blanket prohibition on subsidies for any form of IUU fishing; a prohibition on subsidies linked to fishing of overfished stocks (with limited exceptions); and a presumptive prohibition on subsidies that contribute to overcapacity or overfishing, with limited grounds for rebuttal.

198. The link between trade and climate manifests itself in negotiations concerning government procurement, the governance of natural resources, and supply chain governance. The issue of green government procurement of goods and services is regulated under plurilateral agreements (e.g., the revised Government Procurement Agreement or GPA) and/or other regional (e.g., the EU's procurement regime) or functional procurement regimes. Increasingly, environmental conditionality is applied along supply chains in both the public and private spheres. These two spheres are increasingly overlapping as economic green governance continues its transnational turn. This is evident from the expanding role of private actors, and the use of certification and accreditation schemes which are subsequently used by governments to enforce green governance commitments, as found in the forestry sector and palm oil supply chain.

199. While international and regional measures have been introduced to halt illegal logging and to secure compliance with the forestry legislation of countries of origin, there is currently no comprehensive framework for trade in forestry products. Instead, multilateral, regional, and domestic systems provide a network of overlapping of regulation. A more encompassing system of forestry governance is needed to facilitate trade and development policies, internationally and domestically, while promoting sustainable development, and sustainable commodity production and consumption.

200. The international normative framework for sustainable water, sanitation and health recognises that trade and trade agreements can have negative and positive effects on the realization of these public policy objectives. Human rights instruments (e.g., the right to water in Article 12 of the Covenant on Economic, Social and Cultural Rights or CESCR), and their related documentation, tend to focus on the potential negative effects, whereas SDG 6 appears to underline the potential positive effects.

201. Trade agreements typically include commitments concerning the liberalisation of environmental services (i.e. market access and national treatment obligations), which usually encompass sanitation services, but not necessarily the supply and distribution of water. Thus far, there is no link in PTAs between trade and sustainable water usage, sanitation and health, with the exception of CETA Article 1.9 (general article on rights and obligations relating to water). A Joint Interpretative Instrument clarifies that CETA does not oblige either party to allow the commercial use of water.

202. There is a rise in private, voluntary standard-setting, particularly ecolabelling, which can support the identification and validation of products or practices. The schemes upon which ecolabels are based are imperfect, especially in terms of their legitimacy. ISO 14024:2018 sets out guiding principles for ecolabels, many of which are private but some are government-controlled. Others provide a certification scheme for organisations, products, services, and events (e.g., the ecolabel, CarboNZero, which measures, manages, and mitigates GHG emissions). Still other ecolabels are issued on an *ad hoc* basis and do not involve any form of vetting (e.g., ‘recycled content’).

203. Other voluntary standard-setting focuses on certification processes, like those that exist for product carbon standards (e.g., ISO 14607 to support the carbon footprint of a product, based on a life cycle assessment). Significant for the governance of sustainable development and the green economy in international trade law are voluntary certification processes. This is the case in forestry management (e.g., where (voluntary) Forest Stewardship Council (FSC) certification exists alongside (mandatory) technical regulations such as the EU Timber Regulation, and its FLEGT Action Plan).

204. Global trademark protection for ecolabelling and certification marks (CTMs) is governed by a complex regulatory regime of international, regional, and domestic laws. Using a CTM indicates that the related product/service complies with the standards set by the certification body (e.g., the Carbon Trust Standard is a CTM of excellence). Several ecolabels are registered as CTMs (e.g., the wordmark ‘Energy Star’, awarded by the US Environmental Protection Agency (EPA)/ Department of Energy).

205. CTMs, like trademarks, are territorial because they confer nation- (and exceptionally in the EU, region-) wide rights. There is no common, cross-border regime for use of CTMs (e.g., on CO₂ emissions or ‘climate-friendly’ products or services) to ensure that the relevant CTM is registrable in all countries where it is meant to operate as a standard, although this can be facilitated via international trademark registration systems (such as Madrid Agreement or the Madrid Protocol). It is therefore also up to individual countries to ensure that trademark protection is contingent on eco-labels not misleading consumers (for example on the degree to which a product is climate or environmentally friendly).

206. Depending on the domestic socio-economic context and levels of (technological) development, the international system of intellectual property (IP) protection can serve as an enabler for domestic incentives for R&D and the production of ‘green’ or environmentally-sound technologies (ESTs) – or as a potential barrier to their transfer and dissemination. While many WTO Members recognise that there is considerable policy space for governments under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) to design a national IP system that is responsive and tailored towards the needs of their domestic economic, environmental, and technological environments, others argue that existing TRIPS flexibilities are insufficient to access and utilise ESTs, among other challenges

207. Within the existing policy space, WTO Members are encouraged to make full use of horizontal flexibilities under TRIPS to achieve IP protection of ESTs. Chief among them, concerning the overarching approach of TRIPS to the interpretation and implementation of its provisions, are Article 7 (focusing on the overall balance between the interests of IP owners and users) and Article 8 (permitting domestic measures to promote vital public interests for technological development, provided they are TRIPS-consistent).

208. In *Australia – Tobacco Plain Packaging*, the Appellate Body confirmed the relevance of Article 8.1 TRIPS (which allows Members to ‘adopt measures necessary to ... promote the public interest in sectors of vital importance to their socio-economic and technological development’) in interpreting other TRIPS provisions. Although such measures must be otherwise TRIPS-consistent, Articles 7 and

8 TRIPS do provide potential to support green interpretations of TRIPS provisions, particularly in case of ambiguity.

209. There are two further horizontal flexibilities under TRIPS which are specifically worth highlighting in the context of ESTs: namely Article 73 (the national security exception) and Article 66 (special treatment for least developed countries (LDCs)). The most relevant aspect of the security exceptions for green knowledge is Article 73(b)(iii) TRIPS, which nonetheless has various limitations, as explained by the WTO Panel in its unadopted report in *Saudi Arabia – Protection of IPRs*.

210. Aside from the longer transition periods for implementation of TRIPS in the case of LDCs (Article 66 TRIPS), developed country WTO Members ‘shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base.’ (Article 66:2 TRIPS) However, many WTO Members have expressed concerns that this obligation has not generated significant tailored transfers of ESTs to LDCs.

211. A matrix of institutional and policy networks, found in a variety of national, regional and international agencies and policies, governs the transfer of ‘green’ or environmentally-sound technologies (ESTs) to developing countries. The World Intellectual Property Organization (WIPO), through its ‘WIPO Green’ programme, addresses climate change by connecting providers and seekers (including SMEs) of ESTs and their related intellectual property rights (IPR), through a fee-free, publicly-accessible database. The Paris Agreement established a new Transfer of Technology Framework, which draws on the work of the UNFCCC over the previous two decades, with clear delineation for policy development (Technology Executive Committee or TEC) and the conduct of operations (the Climate Technology Centre and Network or CTCN), which is funded by the Global Environmental Facility (GEF).

212. Transfer of technology remains axiomatic to the development of small island developing states (SIDS)’ achievement of nationally determined contributions (NDCs), and mitigation and adaptation to climate change. Financial support for the transfer of ESTs to developing countries, especially in SIDS, which draws on the Green Climate Fund (GCF) and is part of the GEF, remains an issue.

213. The role of global public-private partnerships (PPPs) – often between multilateral agencies and the private sector – may facilitate the transfer of ESTs to developing countries. Regional organisations, such as ASEAN, have identified climate finance and transfer of technology as key priorities and have highlighted the pressing need for international cooperation and assistance on financing the transfer of ESTs to developing countries so as to address climate adaptation and mitigation policies.

214. An increasing number of bilateral and regional PTAs include obligations to introduce stronger protections of IP. A key policy issue is whether and, if so, to what extent ‘TRIPS-plus’ standards may affect flexibilities under the TRIPS Agreement that are relevant in the context of access to, and transfer of, ESTs. This is essentially a matter of carefully reviewing the individual commitments under a PTA, and how their implementation affects IP protection for ESTs.

215. Generally speaking, additional standards of IP protection in PTAs do not directly address environmental issues. However, TRIPS-plus standards in PTAs may well affect incentives for the development, production, and marketing of ESTs. At the same time, they are likely to affect access to and dissemination of these technologies, or can otherwise impact on the IP – environment interface. Since most PTAs do not undermine horizontal flexibilities under TRIPS, they may continue to afford policy space for WTO Members to adopt environmental measures – unless TRIPS-plus rules in particular trade agreements specifically diverge from these flexibilities.