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INTERNATIONAL LAW ASSOCIATION

SYDNEY CONFERENCE (2018)

SUSTAINABLE DEVELOPMENT AND THE GREEN ECONOMY IN INTERNATIONAL TRADE LAW

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INTERIM REPORT OF THE COMMITTEE

by Professors Giovanna Adinolfi, Satoru Taira and Yuka Fukunaga (Part I: A),
Ms Amelia Porges (Part I: B and Part II: A), Professor Jacques Bourgeois,
Dr Dominic Coppens, Dr Tracey Epps, Mr Gary Horlick and
Professor Meredith Kolsky Lewis (Part II: A), Dr Henning Grosse Ruse-Khan
(Part II:B), Professor Locknie Hsu (Part II:B and Part IV:B) Dr Gregory Messenger and
Mr Stefan Amarasinha (Part III)*, Professor Markus Krajewski (Part IV: A),
Dr Irena Peterlin (Part IV: B).

INTRODUCTION

1. The Committee's mandate is two-fold. First, it is concerned with the analysis and study of how far the rules-based international trading system (including but not limited

* The views expressed in Part III are the authors' own and do not reflect the view of any institution with which either of them is affiliated.

to the WTO trading system) supports open, fair and development-friendly trade, which is both socially inclusive and environmentally sustainable. Secondly, based on its analysis and study, the Committee is involved in formulating 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 World Trade Organization, 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. Further details about these four themes, and a list of potential topics for the Committee to study, were presented during the public session of the Committee on 9 August 2016 at the 77th Biennial ILA Conference in Johannesburg.

3. From within these four thematic areas, the Committee selected a list of specific topics. Several Committee members presented papers on a number of those topics at two further meetings. One was the Committee's third meeting, held on 11 November 2016 at King's College Cambridge, England, and the other was the Committee's fourth meeting, held on 8 June 2017 at the offices of the Permanent Mission of the European Union to the WTO, Geneva.

4. The following report sets out our findings and recommendations, under the four thematic areas, broken down into four Parts and individual sections. They are: trade-related environmental issues in terms of the mutual supportiveness of trade and environmental measures, and environmental goods and services in the international trading system (Part I: sections A and B respectively); climate and energy, in the form of trade and green economy measures such as subsidies, and TRIPs flexibilities concerning access to green technology and innovation (Part II: sections A and B respectively); trade and agriculture with respect to fisheries subsidies and sustainable ocean and freshwater fisheries management (Part III); and trade and development, where it concerns trade and transfer of technology to developing countries, and trade and the interface with sustainable water usage, sanitation and health (Part IV: sections A and B respectively).

Part I. Trade-related environmental issues

5. The Committee has thus far focused on two areas within this thematic issue: the mutual supportiveness of trade and environmental measures, including the relationship between trade rules and specific trade obligations in multilateral environmental agreements (MEAs), which is dealt with under section A; and the issue of environmental goods and services in the international trading system, including the status of negotiations for a plurilateral Environmental Goods Agreement (EGA) conducted under the auspices of the WTO, which is taken up in section B.

A.1. The mutual supportiveness of trade and environmental measures: the harmonisation of WTO law and international environmental law

6. The typical problem of harmonisation between WTO law and international environmental law arises where one WTO member takes a trade restrictive measure for the purposes of environmental protection under international environmental law and other WTO Members litigate the consistency of it with WTO law. For the WTO judicial organs,

there appear to be two ways to deal with this particular problem. The first is to interpret WTO law harmoniously with international environmental law. The second, where WTO law conflicts with international environmental law, is to apply the law according to the available rules of international law on choice of law. The following paragraphs focus on the first of these forms of mutual supportiveness.¹

(i) *VCLT Article 31(3)(c) as an interface*

7. The Dispute Settlement Understanding (DSU) provides in Article 3.2 in relevant part that the dispute settlement system of the WTO serves ‘to clarify the existing provisions of [the covered] agreements in accordance with customary rules of interpretation of public international law’. This means that the WTO judicial organs must interpret WTO law in accordance with ‘customary rules of interpretation of public international law’. The Appellate Body, in its very first report in *US – Gasoline*, held that Article 3.2 was recognition that WTO law ‘[was] not to be read in clinical isolation from public international law’.² The Appellate Body in this case also recognised that the ‘general rule of interpretation’ set out in Article 31(1) of the Vienna Convention on the Law of Treaties (VCLT) had attained the status of a rule of customary or general international law and as such, it formed part of the ‘customary rules of interpretation of public international law’ which the WTO judicial organs must apply under DSU Article 3.2.³ Since this case the WTO judicial organs have affirmed consistently that the Articles 31–33 of the VCLT form part of the ‘customary rules of interpretation of public international law’.

8. Article 31(3)(c) VCLT requires taking into account, together with the context, ‘any relevant rules of international law applicable in the relations between the parties’. According to the ILC Study Group which published a report concerning ‘Fragmentation of International Law’ in 2006,⁴ this provision may be taken to express the so-called principle of ‘systemic integration’. This principle means that a treaty must be interpreted harmoniously by reference to its normative environment, that is, general international law and other treaties so as to ensure the coherency and meaningfulness of the system of international law.⁵ Therefore, it could be expected that this provision should assume the role of an interface connecting WTO law with international environmental law and thus, become the most important tool for the WTO judicial organs to interpret WTO law harmoniously with international environmental law.

¹ The opening sections of Part I: A are based on S. Taira, ‘WTO-ho to Tano Kokusaiho no Chowa – Kihanteki Wakugumi no Henyo to WTO Shiho Kikan no Taio’ (Harmonization between WTO Law and Other International Law – Transformation of Normative Framework and Response of WTO Judicial Organs) in Nihon Kokusai Keizaiho Gakkai Hen (The Japan Association of International Economic Law) (ed), *Kokusai Keizaiho Koza I (International Economic Law I)* (2012) at 142–162 (In Japanese).

² Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, adopted 20 May 1996, at 16.

³ *Ibid.*, at 15–16.

⁴ Report of the Study Group of the International Law Commission as finalized by the Chairman, M Koskenniemi, *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, ILC, UN Doc., A/CN.4/L.682 and Corr. 1 and Add. 1 (13 Apr. 2006) (ILC Study Group Report on Fragmentation).

⁵ *Ibid.*, paras. 413–414.

9. However, Article 31(3)(c) VCLT has raised a difficult problem concerning the scope of other treaties that shall be taken into account. The Panel in *EC-Biotech* held: ‘the rules of international law to be taken into account in interpreting the WTO agreements at issue in this dispute are those which are applicable in the relations between the WTO Members.’⁶ This interpretation has the result that the more parties there are to a treaty, the less relevant rules there are to which reference can be made. When we consider that the more there are important multilateral treaties in the international community, the greater demand there will be for cross-references to such treaties. ‘Yet, even though there is this greater demand, there is less supply, i.e. there are less “relevant rules” that can be referred’.⁷

10. This paradoxical situation is clearly acute when we talk about WTO law. As there are actually no other treaties that include all WTO members, nor which include non-State actors as parties, the WTO judicial organs cannot consider other important multilateral treaties in the area of international environmental law under Article 31(3)(c) VCLT.⁸ The Appellate Body in *EC and Certain Member States – Large Civil Aircraft* appears to accept the interpretation by the *Biotech* panel: ‘when recourse is had to a non-WTO rule for the purposes of interpreting provisions of the WTO agreements, a delicate balance must be struck between, on the one hand, taking due account of an individual WTO Member’s international obligations, and, on the other hand, ensuring a consistent and harmonious approach to the interpretation of WTO law among all WTO Members’.⁹

11. The Appellate Body in the *Peru-Agricultural Products* did not squarely address the interpretation by the *EC – Biotech* panel, leaving this issue potentially for re-examination in a future dispute. However, it did note that the interpretation of [a] treaty ‘must serve to establish the common intentions of the parties to the treaty being interpreted, and not just the intentions of some of the parties.’¹⁰ It had a further reservation, given that Peru had not yet ratified the relevant FTA with Guatemala (the other party in the dispute). More significantly, the Appellate Body had ‘express reservations as to whether the provisions of the FTA, which could arguably be construed as to allow Peru to maintain the [inconsistent measure] in its bilateral relations with Guatemala, ... can be used under Article 31(3) of the Vienna Convention in establishing the *common* intention of WTO Members underlying the provisions ... of the Agreement on Agriculture and ... of the GATT 1994.’¹¹ [*emphasis in original*] In interpreting WTO law, Article 31(3)(c) VCLT cannot necessarily be expected to fulfil its role as the interface and thus, the possibility of

⁶ Panel Report, *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*, WT/DS291/R, WT/DS292/R, WR/DS292/R, Add.1 to Add.9 and Corr. 1, adopted 21 November 2006, para. 7.68.

⁷ J Pauwelyn, ‘Remedies in the WTO: “First Set the Goal, then Fix the Instruments to Get There”’ in M Andenas and F Ortino (eds), *WTO law and Process* (2005), 196.

⁸ See M Young, ‘The WTO’s Use of Relevant Rules of International Law: An Analysis of the *Biotech* Case’, (2007) 56 *ICLQ* 901, 915–916.

⁹ Appellate Body Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/AB/R, adopted 1 June 2011, para.845.

¹⁰ Appellate Body Report, *Peru – Additional Duty on Imports of Certain Agricultural Products*, WT/DS457/AB/R, adopted 31 July 2015, para. 5.95.

¹¹ *Ibid.*, para. 5.106.

harmonious interpretation between WTO law and international environmental law may be seriously diminished.

(ii) *Possible solutions for the paradox*

12. A possible solution for the paradoxical situation was suggested by the ILC Study Group when it stated that , ‘it might be useful to take into account the extent to which [the] other treaty can be said to have been ‘implicitly’ accepted or at least tolerated by (an)other party or parties ‘in the sense that it can reasonably be considered to express the common intentions or understanding of all members as to the meaning of the... term concerned’.¹² This solution, which alleviates the strict principle of consent, is potentially a more practical and effective approach, especially for multilateral treaties as found in the WTO legal system.

(iii) *Other rules of interpretation under the VCLT and beyond*

13. Rules of international environmental law may be taken into account in the interpretation of the WTO Agreement, and its Annexes, under other rules of interpretation even if they do not fall within the scope of Article 31(3)(c) VCLT. First, rules under international environmental agreements¹³ ‘shall’ be taken into account as the ‘context’ of a WTO provision to be interpreted if they constitute evidence of ‘subsequent practice’ under Article 31(3)(b) VCLT. The meaning of the term ‘subsequent practice’ has been clarified, to some extent, by the draft conclusions on ‘subsequent agreements and subsequent practice in relation to the interpretation of treaties,’ which were adopted on first reading by the ILC in 2016.¹⁴ According to the draft conclusions, a subsequent practice ‘consists of conduct in the application of a treaty, after its conclusion, which establishes the agreement of the parties regarding the interpretation of the treaty,’¹⁵ and it ‘can take a variety of forms.’¹⁶

14. It could be inferred from these conclusions that not only an act of joining an international environmental agreement and implementing the obligations under the agreement, but also an act of taking measures in line with the obligations without becoming party to the agreement could constitute a ‘subsequent practice’ regarding the interpretation of the WTO Agreement, if such acts collectively establish the ‘agreement of the’ WTO Members that the WTO Agreement shall be interpreted harmoniously with the treaty.¹⁷ The question remains as to whether these acts can be regarded as conduct ‘in the application of’ the WTO Agreement. It suffices for the moment to note that such conduct is considered broad enough to encompass various kinds of acts.¹⁸

15. Second, even if the rules do not constitute evidence of ‘subsequent practice’ under Article 31(3)(b) VCLT, they may still be taken into account as supplementary means of

¹² ILC Study Group Report on Fragmentation (n 4), para. 472. This report cites J Pauwelyn, *Conflict of Norms in Public International Law. How WTO Law Relates to Other Rules of International Law* (2003), 257–263.

¹³ To be more precise, it is conduct of the WTO Members in relation to international environmental agreements that may constitute subsequent practice.

¹⁴ Report of the International Law Commission 2016, A/71/10 (ILC Report 2016), para.72.

¹⁵ *Ibid*, draft Conclusion 4(2).

¹⁶ *Ibid*, draft Conclusion 6(2).

¹⁷ According to draft Conclusion 10(2), ‘[s]ilence on the part of one or more parties can constitute acceptance of the subsequent practice when the circumstances call for some reaction.’

¹⁸ Commentary (18) to draft Conclusion 3(2), ILC Report 201 (n 14) at 142.

interpretation pursuant to Article 32 VCLT. In particular, the draft articles on the matter state that ‘conduct by one or more parties in the application of the treaty, after its conclusion,’ which does not necessarily establish the agreement of all the parties regarding the interpretation of the treaty, may still constitute ‘other’ supplementary practice under Article 32 VCLT.¹⁹ Accordingly, the acts of several WTO Members to join an international environmental agreement and implement the obligations thereof might be considered to constitute other subsequent practice under Article 32 VCLT.

16. An important caveat must be made: subsequent practice cannot amend or modify WTO law.²⁰ There is a fine line between conduct that could form subsequent practice regarding the interpretation of a treaty, thereby clarifying the[evolving]meaning of the treaty, and conduct that contradicts the meaning of a treaty, and therefore should be regarded as violating the treaty. More specifically, the fact that WTO Members take trade-related measures, to implement their obligations under an international environmental agreement, may indicate these Members’ understanding that WTO law should be interpreted harmoniously with the international environmental agreement. Alternatively, it could mean that these WTO Members violate WTO law by implementing the international environmental agreement.

17. Finally, there may be other customary rules of interpretation that require WTO law to be interpreted harmoniously with international environmental agreements. While the VCLT rules of interpretation are widely considered to have the status of customary international law, nothing in the VCLT suggests those rules are the sole rules of interpretation under customary international law. Most importantly, for the purpose of this report, Article 31(3)(c) VCLT, which is considered by the ILC Study Group to be ‘the’ expression of the principle of systemic integration,²¹ may, in fact, be only ‘an’ expression of the principle and may not capture the entire meaning of the principle. This reading appears to be endorsed by the Appellate Body’s pronouncement in *US – Gasoline* that WTO law ‘is not to be read in clinical isolation from public international law.’²²

A.2. The mutual supportiveness of trade and environmental measures, including the relationship between trade rules and specific trade obligations in MEAs

18. In recent decades, there has been a renewed focus on the inconsistency between international trade law and provisions included in environmental treaties providing for the adoption of trade-related measures.²³ Accepting a broad definition of ‘conflict of norms’, whereby a conflict may arise both in case of provisions imposing ‘mutually exclusive obligations’²⁴ and where, absent an explicit incompatibility, the implementation

¹⁹ *Ibid*, draft Conclusion 4(3).

²⁰ Cf., *ibid*, draft Conclusion 7(3).

²¹ ILC Study Group Report (n 4), paras.423 & 430.

²² *US – Gasoline* (n 2) at p 16.

²³ Matrix on Trade-Related Measures Pursuant to Selected Multilateral Environmental Agreements: Note by the Secretariat, WT/CTE/W/160/Rev.8, TN/TE/S/5/Rev., 9 October 2017.

²⁴ W Jenks, ‘The Conflict of Law-Making Treaties’ (1953) 30 *BYIL* 401; J Trachtman, ‘The Domain of WTO Dispute Settlement Resolution’ (1999) 40 *Harvard ILJ* 333; G. Marceau, ‘Conflicts of Norms and Conflicts of Jurisdiction. The Relationship between the WTO Agreement and MEAs and other Treaties’ (2001) 35 *JWT* 1081; and D Steger, ‘The Jurisdiction of the World Trade Organization’ (2004) 98 *ASIL Proceedings* 142.

of a treaty may 'frustrate the goals of another treaty',²⁵ several tools have been identified to avoid or to resolve the antinomies between trade and environmental rules. A first set of tools aims at favouring a consistent interpretation of different norms. It includes customary international law on treaty interpretation and general principles of law (e.g. good faith, *pacts sunt servanda* and the presumption against conflict). Should the application of these rules and principles not be conclusive, customary conflict rules come into play, such as the principles of *lex superior*, *lex posterior* or *lex specialis*.

19. Conflict rules can be also found in the relevant treaties, as in the case of subordination or supremacy clauses.²⁶ Likewise, a solution to a conflict of norms could be inferred from the use of exception clauses, which are usually included in trade agreements, to justify otherwise unlawful measures, if deemed to necessary, to pursue non-trade values. Finally, waiver clauses may also be invoked to request authorisation to suspend binding obligations for environmental purposes.

20. The principle of mutual supportiveness between trade and environmental policies or agreements may also inspire solutions to a conflict of norms. Included in the preamble of some multilateral environmental agreements (MEAs) (e.g. the 1998 Rotterdam Convention on Prior Informed Consent, the 2000 Cartagena Protocol and the 2001 Stockholm Convention on Persistent Organic Pollutants), the principle has been interpreted, alternatively, as a hermeneutic principle,²⁷ as a conflict clause establishing hierarchy in favour of non-environmental regimes,²⁸ or as a law-making principle implying a duty to negotiate in good faith when necessary to clarify the relationship between competing regimes.²⁹ In the 2001 Nagoya Protocol to the Biodiversity Convention mutual supportiveness has been given a new weight, as Contracting Parties decided to include it in the operative part of the agreement. This step ahead has been possible, however, at the expense of legal clarity.³⁰ Indeed, mutual supportiveness with other regimes in the Protocol's implementation (Article 4.3) is associated with clauses establishing the priority of other treaties (unless the exercise of rights and obligations under them triggers 'a serious damage or threat to biological diversity') (Article 4.1) and prohibiting, quite contradictorily, developing or implementing other agreements in a manner inconsistent with the Protocol's objective (Article 4.2).

²⁵ ILC Study Group Report on Fragmentation (n 4), para 24. See also Pauwelyn (n 12); E Vranes, *Trade and the Environment. Fundamental Issues in International Law, WTO Law, and Legal Theory* (2009); P J Kuijper, 'Conflicting Rules and Clashing Courts. The Case of Multilateral Environmental Agreements, Free Trade Agreements and the WTO', ICTSD Issue paper No. 10, Geneva, 2010.

²⁶ For example in the EU-Vietnam Free Trade Agreement (concluded in December 2015), it is established that 'unless otherwise specified under this Agreement, previous agreements between the parties shall not be superseded or terminated by this Agreement' (Chapter 17, Article 21.1).

²⁷ L Boisson de Chazournes, M Moïse Mbengue, 'A propos du soutien mutuel : les relations entre le Protocole de Cartagena et les accords de l'OMC' (2007) *RGDIP* 829; R Pavoni, 'Mutual Supportiveness as a Principle of International and Law-Making: A Watershed for the "WTO-and-Competing-Regimes" Debate?' (2010) 21 *EJIL* 641.

²⁸ S Safrin, 'Treaties in Collision? The Biosafety Protocol and the World Trade Organization Agreement' (2002) 96 *AJIL* 606.

²⁹ Pavoni (n 27).

³⁰ R Pavoni, 'The Nagoya Protocol and WTO Law' in E Morgera, M Buck, E Tsioumani (eds), *The 2010 Nagoya Protocol on Access and Benefit-sharing in Perspective: Implications for International Law and Implementation Challenges* (2013), 185.

21. As we have already seen in section A.1, mutual supportiveness has found its place in the multilateral trading system. The Preamble to the WTO Agreement recognises ‘the optimal use of world’s resources in accordance with the objective of sustainable development, seeking ... to protect and preserve the environment’, and the 2001 Doha Declaration envisages articulation of the principle of mutual supportiveness. In line with the mandate given in 1995 to the Committee on Trade and Environment,³¹ it endorses negotiations on the relationship between WTO rules and trade obligations set out in MEAs, ‘with a view to enhancing the mutual supportiveness between trade and environment’.³²

22. At a domestic policy level, both panel and Appellate Body reports have recognised the positive interaction between trade and environmental policies. For instance, when acknowledging that ‘conservation and economic development are not necessarily mutually exclusive goals’.³³ Normatively speaking, such dispute settlement reports have made reference to MEAs with the purpose of interpreting WTO rules,³⁴ and have not censured *in abstracto* the adoption of trade measures aiming at pursuing environmental and sustainable development purposes.

23. Developments on the interaction between trade and environmental policies and treaties may be found in a considerable number of free trade agreements (FTAs), recently concluded or still under negotiation. Indeed, they often include a chapter on Trade and Sustainable Development (TSD), wherein trade (and investment) liberalization is combined with environmental (and labour rights) protection. For the European Union (EU), negotiations over TSD chapters are deemed to be of particular importance, and the Council’s negotiating mandates usually require inclusion in the new FTAs of binding commitments on the environmental aspects of trade and sustainable development. From its side, the ECJ has strengthened the Commission’s negotiating stance. In its Opinion 2/15, the Court has confirmed that TSD chapters come under the scope of the Union’s exclusive competence on common commercial policy (Article 207 TFEU).³⁵

24. At the institutional level, these TSD chapters support the establishment of organs and committees allowing consultations between the parties on trade-related environmental issues (e.g. the interaction between MEAs and international trade rules or, more specifically, trade-related aspects of international regimes on climate change, ozone layer, biodiversity, forests and fisheries). The substantive provisions recognize the right of parties to set and pursue their own level of environmental protection (in line with the WTO Appellate Body report in *Brazil – Retreaded Tyres*),³⁶ to modify national environmental laws and regulations consistently, also with the purpose to properly implement the MEAs binding upon them. The obligation to enforce effectively national environmental laws

³¹ Marrakesh Ministerial Decision on Trade and Environment, adopted on 15 April 1994.

³² Doha Ministerial Declaration, WT/MIN(01)/DEC/1 (14 November 2001), para 31.

³³ Panel Report, *China – Measures Related to the Export of Certain Raw Materials*, WT/DS394/R, 30 January 2012, para 7.381; Panel Report, *China – Measures Related to the Export of Rare Earths, Tungsten and Molybdenum*, WT/DS431/R, 26 March 2014, paras 7.267 and 7.277.

³⁴ Appellate Body Report, *US – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, 12 October 1998, para 130 ff.

³⁵ Opinion 2/15 of the Court of Justice of the European Union (CJEU) on the Free Trade Agreement between the EU and Singapore (EUSFTA), 16 May 2017, ECLI:EU:C:2017:376.

³⁶ *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R, 17 December 2007, para. 210.

and regulations is envisaged, in connection with a parallel obligation on no-retrogression, i.e. not to lower domestic environmental law in order to encourage trade or investments.

25. As regards the interaction with MEAs, a common feature of FTAs is that they do not follow the 'TRIPS approach', whereby WTO Members have to comply with a number of international conventions on the protection of intellectual property rights, irrespective of whether or not they have accepted them. Rather, in modern FTAs parties reaffirm rights and obligations under MEAs they have adhered to and commit themselves to implementing them effectively. Some authors call into question the effectiveness of these provisions, claiming that they add nothing substantive to existing legal regimes.³⁷

26. Special exceptions clauses authorize parties to adopt or maintain measures implementing MEAs, if they are not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination or as a disguised restriction on trade. This focus on the discriminatory or restrictive impact may support the idea that with Article XX GATT 1994 in mind these provisions implicitly acknowledge the 'necessity' of measures implementing MEAs. Finally, some provisions deal with specific environmental issues, such as climate change, biodiversity, forest management and trade in forest products, protection of the ozone layer or pollution of the maritime environment from ships. A reference to relevant MEAs is included together with a commitment to implement them effectively, in case they bind all FTA parties.

27. Dispute settlement provisions deserve particular attention. EU FTAs typically exclude TSD chapters from the scope of the general State-to-State dispute settlement chapters, so the violation of TSD chapters may not be alleged before arbitration panels. Rather the parties may start consultations and, should they not find a solution, follow a conciliation procedure closing with the adoption of recommendations. This enforcement mechanism departs from the model recurring in the US FTAs, envisaging the recourse to the general dispute settlement mechanism for disputes claiming the lack of effective implementation of domestic environmental and labour law in a manner affecting trade. Consequently, the adoption of trade sanctions is not excluded, should a violation of implementation and enforcement obligations be found.

28. There has been limited practice under any FTA so far. There has been only one case under an FTA, to which the US is a party, where the dispute settlement procedure was activated. It concerned the failure to properly implement labour laws, and it showed the difficulties that may arise in establishing that a possible violation of TSD chapters has triggered trade distortions.³⁸ According to the European Commission in a 2018 non-paper on the TSD chapters in its FTAs, a sanction-based approach could compensate the economic damage suffered by the claiming party (should it be quantifiable), but it would not automatically guarantee a concrete improvement of environmental protection within the respondent party.³⁹

³⁷ L Bartels, 'Human Rights and Sustainable Development Obligations in EU Free Trade Agreements', Legal Studies Research Paper Series, University of Cambridge Faculty of Law, Paper no. 24/2012, September 2012, 14.

³⁸ *Guatemala – Issues Relating to the Obligations under Articles 16.2.1(a) of the CAFTA-DR*, Final Report of the Panel, 14 June 2017. See B Melo Araujo, 'Labour Provisions in EU and US Mega-regional Trade Agreements: Rhetoric and Reality' (2018) 67 *ICLQ* 233, 238.

³⁹ 'Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development Chapters in EU Free Trade Agreements', Non-paper of the Commission services, 26 February 2018.

B. Environmental goods and services in the international trading system

29. There have been efforts amongst some WTO members to negotiate a plurilateral Environmental Goods Agreement (EGA),⁴⁰ with the aim of arriving at a 'critical-mass' tariff elimination agreement for climate-related and other environmental goods. The stated purpose of EGA negotiations is to contribute to climate change mitigation and assist in implementation of the Paris Agreement,⁴¹ by promoting trade in goods that are (relatively) positive for the climate. The eventual EGA would reduce tariffs that tax trade in these goods but would likely not, and cannot, address other issues affecting trade, such as trade remedies.

30. Tariff cutting on environmentally-positive goods is an attractive idea. First, by eliminating tariffs on these goods, governments could, for example, facilitate more build-out of solar and wind projects. Second, it helps give domestic solar and wind developers access to the best solar and wind equipment in the world and incentivizes investment in production and sale of such goods. Third, since both solar and wind equipment are 'experience curve products', in which the cost of production declines linearly with experience, tariff elimination can help drive down prices and production costs.

(i) Background to the EGA

31. The idea of trade liberalization directed at environmental goods and services (EGS) first emerged in the WTO in paragraph 31(iii) of the 2001 Doha Declaration. It provided a mandate for negotiations 'with a view to enhancing the mutual supportiveness of trade and environment' on 'the reduction, or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.'⁴² Negotiations got off to a slow start, first due to conflict over the scope of the mandate, then due to the refusal by some Members to cooperate on other issues until agriculture was resolved.

(a) Definitional issues

32. From the beginning of Doha Round talks in the WTO Committee on Trade and Environment, there was considerable debate, and little consensus, on what 'environmental goods and services' might be. These issues persist to the present day. Focusing on goods: is an environmental good defined by its end-use, as in the case of waste-water treatment equipment? The OECD has categorized EGS under three headings – pollution management, cleaner technologies and products, and resource management. When an environmental good is determined by its end-use, a decision will need to be made concerning the situation when such a product has more than one use,⁴³ particularly when the other uses are not environmentally positive or are import-sensitive.

33. Some have argued that a product should qualify as 'environmental' if it is an 'environmentally preferable product' (EPP), which is produced using a less-polluting industrial process or if it has a better environmental impact, evaluated over the course of its life-cycle (including use and disposal). UNCTAD has defined EPPs as 'products which cause significantly less environmental harm at some stage of their life cycle than

⁴⁰ See for up-to-date information, WTO, https://www.wto.org/english/tratop_e/envir_e/ega_e.htm.

⁴¹ Paris Agreement under the United Nations Framework Convention on Climate Change, 12 December 2015, FCCC/CP/2015/10/Add., in force 4 November 2016.

⁴² Doha Ministerial Declaration (n 32), para. 31(iii).

⁴³ For details, see ICTSD Draft Background Paper, 'Environmental Goods and Services at the WTO: Key Issues and State of Play', 1 June 2005.

alternative products that serve the same purpose, or products the production and sale of which contribute significantly to the preservation of the environment.⁴⁴ When considering EPPs, product comparisons and life-cycle issues can be key issues. For example, is natural gas environmentally friendly because it displaces coal, even if it involves methane emissions?

34. NGOs have urged the use of environmentally responsible production and processing methods (PPMs) as a threshold condition for including a product in the EGA.⁴⁵ Developing countries have resisted the idea of using PPMs as a condition for favourable treatment of products because of the precedent it would set for market access restrictions based on PPMs. It is also the case that PPM-based distinctions can be quite challenging to implement at the border. The concept of EPPs is important if an EGA is to open markets for products that developing countries make and not just the capital- or technology-intensive products of advanced industrial countries.

35. The mechanics of tariff commitments constrain how products can be defined for a real-world EGA. Governments have agreed to tariff reductions and have bound them in their tariff schedules, using the tariff classification system prescribed under the Harmonized System (HS) Convention.⁴⁶ The HS requires each of its contracting parties to use an identical tariff nomenclature, subdivided decimally; uniformity is required down to the six-digit (subheading) level. However, if EGA negotiators want to focus trade liberalization on particular end-uses of a product, they will need to call for sub-division of or exceptions from, a 6-digit HS subheading. These 'ex-outs' or exceptions provide less certainty of continuing market access.

(b) Other issues

36. First while environmental benefits have provided the motivation and structure, for negotiations to succeed, an EGA must make *commercial* sense, in terms of the *commercial* benefits to be gained, relative to the commercial sensitivity of tariff cuts. Second, in the absence of a definitive definition of environmental goods, EGA negotiators have side-stepped the issue by using a list approach instead. Third, there remains the problem of dual-use goods. High-tariff countries want to use ex-outs to narrow the coverage of dual use goods and their tariff-cutting; ex-outs help focus tariff-cutting on environmentally positive goods. One study has argued that 46 out of 54 items on the APEC list (see below) reflect goods not primarily used for environmental purposes. Multiple-use products could be traded under HS headings not normally used in lists of environmental goods.

(ii) The EGA negotiations: an unfinished story

37. In the wake of the stalled Doha Round, the EU and the US discussed the elimination of tariffs and taxes on EGS during the preliminaries to the Copenhagen climate summit, as a part of the financial package to persuade China to cut its emissions.⁴⁷ Then in 2011,

⁴⁴ *Ibid.*

⁴⁵ 'Environmental, business groups at odds over green goods initiative', Inside US Trade, 23 May 2014.

⁴⁶ International Convention on the Harmonized Commodity Description and Coding System (1988), text and list of parties at <http://www.wcoomd.org/en/about-us/legal-instruments/conventions.aspx>.

⁴⁷ 'EU, US eye green goods tax pact in climate fight' Euractiv.com, 29 September 2009.

the US began talk of a plurilateral agreement on EGS, modelled on the 1996 Information Technology Agreement (ITA). As host of the APEC summit in 2011, it persuaded APEC leaders to make a non-binding political commitment to reduce tariffs to 5% or less by 2015 on a list of 54 environmental goods, most of them consisting of ex-outs within 6-digit HS subheadings.⁴⁸ The list included finished products and parts within the categories of renewable energy generation equipment; environmental monitoring, analysis and assessment equipment; air pollution control; management of solid and hazardous waste and water treatment and waste-water management. Many were dual-use goods, and the list included one item (bamboo flooring), which was justified as an environmentally preferable product.

38. EGA negotiations were launched in Geneva on 8 July 2014 by 18 participating economies, representing 46 WTO Members accounting for most trade environmental goods.⁴⁹ The focus was on tariffs only, while the EU continued to push for the talks to also address services and non-tariff barriers (NTBs). The negotiations proceeded in two stages, from July 2014–April 2015 (countries nominating products and listing 650 tariff lines), and from April–August 2015 (sorting out which goods should remain on the list, with a consensus list of 450 tariff lines). The core list included the so-called ‘APEC list’ of 54 environmental goods, and a staging mechanism was discussed. However, by December 2015 China had indicated its reluctance to go to zero on some of the items on the original APEC list. Although the list had been narrowed to 350–370 items, the negotiators were unable to reach a consensus deal in time for either the December 2015 Paris Climate Conference or 10th Ministerial Conference in Nairobi.

39. With negotiations continuing in March 2016, a customs technical group worked on tariff classification and ex-out issues, many of which were resolved that year. Delegations discussed the staging of tariff elimination, and the structure for an EGA deal including a review mechanism for future additions to the list. Negotiators also discussed a Chinese proposal on critical mass including ‘snapbacks’, and special and differential treatment (SDT) for developing countries within the EGA. However, product coverage remained unresolved, with particular controversy around bicycles, bamboo products, electric motors, batteries, wood flooring and some other dual use products.

40. At the G-20 summit in Hangzhou in September 2016, Ministers agreed on a landing zone or ‘L-list’, which by November 2016 included slightly over 300 tariff lines and related ex-outs. By that stage, participants had agreed to conclude the EGA negotiations at a special Ministerial Meeting in early December. Based on intensive discussions, the Australian chair of the EGA issued his own list. The L-list was divided into an A-list of around 260 items, with reasonable levels of consensus, and a B-list of around 50 more sensitive items, such as bicycles, wood products and gas turbines, which was still under discussion, with China and the EU in particular searching for a decision at the political level. Meanwhile, the EU was looking at full elimination and held a revised list that went

⁴⁸ For the APEC list see [http://www.apec.org/Meeting-Papers/Leaders Declarations/2012/2012_aelm/2012_aelm_annexC.aspx](http://www.apec.org/Meeting-Papers/Leaders%20Declarations/2012/2012_aelm/2012_aelm_annexC.aspx). Rene Vossenaar, ‘The APEC List of Environmental Goods: An Analysis of the Outcome and Expected Impact’, ICTSD Issue Paper No. 18, 15 June 2013, p.4.

⁴⁹ The current EGA participants are: Australia; Canada; China; Costa Rica; the European Union (representing its member states); Hong Kong, China; Iceland; Israel; Japan; Korea; New Zealand; Norway; Singapore; Switzerland; Liechtenstein; Chinese Taipei; Turkey; and the United States.

beyond APEC 54 list. The EU has also continued to push for a systems approach for the EGA whereby for environmental goods all aspects of the production are taken into consideration and not just the finished product.

41. The US election outcome coupled with the beginning of China market economy status (MES) has overshadowed the debate on an EGA. With the Trump administration's withdrawal from the Trans-Pacific Partnership (the forerunner to the current Comprehensive and Progressive Agreement for a Trans-Pacific Partnership or CPTPP), the Paris Agreement and its current attempts to re-negotiate NAFTA, there is little or no US administration interest in the EGA. Meanwhile, China has continued its One Belt One Road strategy on building commercial alliances across Asia and Europe while leading the world in clean energy investment.⁵⁰ Also during 2017, the US, at the request of petitioners, Suniva and Solar World (now insolvent or bankrupt), initiated various global safeguard investigations of solar panels, modules and cells.⁵¹ Meanwhile, the EGA negotiations have stalled.

II. Climate and energy, in the form of trade and green economy measures – subsidies, and TRIPs flexibilities

42. This part of the report focuses on two areas of climate change and energy that engage with the issue of policy space for green economy measures. Section A addresses the question whether Article XX GATT 1994, or another exclusionary measure, could be applied by a WTO Member to justify an otherwise WTO-inconsistent subsidy that promotes green energy. Section B examines the extent to which there is policy space for 'green' technology transfer under the TRIPS Agreement.

A. Focusing on whether Article XX applies to ASCM and, if not, whether a waiver to the ASCM for green energy policies could be realised

43. There is a generalized concern that WTO members should adopt new and effective green energy policies but may not be doing so due to potential inconsistencies with the covered agreements. In particular, there is a question as to whether members can grant subsidies to promote green energy, but then avoid having these subsidies being subject to challenge for removal or countervailed. Some have suggested that perhaps this policy space does exist via a determination that Article XX GATT 1994 (the general exceptions article) applies to the Agreement on Subsidies and Countervailing Measures (ASCM), and that if it does not, there are other paths leading to WTO-consistent policy. This portion of the report focuses on the possibility of subsidies as a tool of green energy policy. It considers whether Article XX GATT 1994 does, or should, apply to the ASCM discusses other possible ways to provide green energy subsidies consistent with the WTO Agreements.

⁵⁰ In 2015 China alone represented one-third of global investment in renewables (other than large hydro) at US \$ 102 bn., with the US behind at US \$ 44.bn. See Institute for Energy Economics and Financial Analysis, 'China set to Dominate US in Global Renewables: \$32 Billion in Overseas Investments in 2016 Alone', 6 January 2017.

⁵¹ US International Trade Commission (ITC), Global Safeguard Investigation Involving Imports of Crystalline Silicon Photovoltaic Cells (Whether or Not Partially or Fully Assembled into Other Products), Investigation No. TA-201-75 (2017).

(i) *Whether Article XX applies to the ASCM*

44. A question still unresolved is whether the general exceptions in Article XX of the GATT 1994 ('Article XX') could be invoked as a defence to justify a subsidy that is inconsistent with the obligations of the ASCM. No panel or the Appellate Body has yet shed light on this question, though panels do seem aware of its sensitivity. For instance, the panel in *Colombia-Port Restrictions* was careful *not* to suggest that Article XX applies to all other covered agreements. The panel stated that '[i]n any cases where a measure may violate a particular provision of the WTO Agreements, a number of *exceptions* – notably those included in Article XX of the GATT 1994 – allow WTO Members to justify a WTO-inconsistent measure'.⁵² The explicit reference to '*exceptions*' [plural] seems intended to avoid the inference that Article XX applies to all covered agreements.

45. If – one day – a panel or the Appellate Body is called to decide on this issue, there are strong grounds to believe that they would reject a defence based on Article XX.⁵³ *First*, the Appellate Body has found that the application of Article XX to a covered agreement other than the GATT 1994 requires *affirmative language*, in that other covered agreement, sufficient to incorporate Article XX into the other agreement.⁵⁴ No such affirmative language appears present in the ASCM. *Second*, the (temporary) exception for certain non-actionable (so called 'green light') subsidies, which has lapsed since 2000 pursuant to the explicit provision in Article 31 of the ASCM, provides contextual support to the view that members intended to construct the ASCM as a specific regime with its own exceptions and flexibilities. The specific taxonomy inscribed in the ASCM (with prohibited, actionable, and – previously – non-actionable subsidies) suggests indeed that recourse to Article XX was not intended. *Third*, and finally, it bears noting that, in *Canada – Renewable Energy*, the Appellate Body ruled that certain types of support measures for green energy are not a 'subsidy' within the meaning of the ASCM Agreement and are therefore not subject to its obligations.⁵⁵

⁵² Panel Report, *Colombia-Indicative Prices and Restrictions on Ports of Entry*, WT/DS366/R, 20 May 2009, para. 7.498.

⁵³ Most scholars agree that Article XX GATT 1994 is likely not available as a defence: see for example B J Condon, 'Climate Change and Unresolved Issues in WTO Law' (2009) 12 *JIEL* 895–926; D Coppens, *WTO Disciplines on Subsidies and Countervailing Measures – Balancing Policy Space and Legal Constraints* (2014), 192–195; A Green, 'Trade Rules and Climate Change Subsidies' (2006) 5 *WTR* 377, 407–410; G N Horlick, 'The WTO and Climate Change "Incentives"' in T Cottier, O Nartova, and S Z Bigdeli (eds), *International Trade Regulation and the Mitigation of Climate Change* (2009) 193, 194; C Tran, 'Using GATT, Article XX to justify climate change measures in claims under the WTO Agreements' (2010) 27 *Environmental and Planning Law Journal* 346. Scholars arguing that Article XX GATT 1994 is available as a defense include R Howse, 'Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis', *International Institute for Sustainable Development* (May 2010), 18 and 25.

⁵⁴ Appellate Body Report, *China – Measures Related to the Export of Certain Raw Materials*, WT/DS394/AB/R, 22 February 2012, paras. 303 – 306. See also Appellate Body Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Products*, WT/DS363/AB/R, 19 January 2010, para. 233; Appellate Body Report, *China – Measures Related to the Export of Rare Earths, Tungsten and Molybdenum*, WT/DS431/AB/R, 29 August 2014, para. 5.56, citing Appellate Body Report, *US – Measuring Affecting the Production and Sale of Clove Cigarettes*, WT/DS406/AB/R, 24 April 2012, paras. 96 and 101.

⁵⁵ *Canada – Certain Measures Affecting the Renewable Energy Generation Sector*, WT/DS412/AB/R, 24 May 2013, paras. 5.127–5.128.

46. To reach this conclusion, the Appellate Body had to deviate from its traditional definition of what constitutes a ‘subsidy’ under the ASCM, which explains why this ruling has been criticised in the literature.⁵⁶ Thus, the Appellate Body felt the need to create policy space for certain green support measures by excluding such support from the obligations of the ASCM. This suggests that the it considers recourse to Article XX is not available to create policy space for a subsidy inconsistent with the ASCM. Rather, as it did under the Technical Barriers to Trade (TBT) Agreement (where the Appellate Body foreclosed recourse to Article XX but read flexibility into the non-discrimination obligation under the TBT Agreement itself), it seems to look for different ways to inject flexibility into the ASCM, where the Appellate Body considers it warranted and justified.

(ii) *Whether, as a policy matter, Article XX should apply to the ASCM*

47. Not only do we believe that Article XX *does not apply* to the ASCM, we also feel it *should not so apply*. First, most, if not all, of the drafters of the various GATT-related agreements within WTO did not anticipate or intend that Article XX would apply. Second, some of the covered agreements have explicit language coordinating, to a greater or lesser degree, that agreement with the GATT, or have language similar to the GATT built in [such as the Sanitary and Phytosanitary (SPS) Agreement]. Yet none explicitly incorporate or disclaim Article XX, and it would be extreme for the Appellate Body to do so in case law. Third, an agreement by the Members by consensus to treat Article XX as part of the [WTO] agreement texts would undermine the WTO as contradictions between the [often 1947 or 1955] GATT language and the more recent agreements could even more frequently yield questionable findings such as in *US – Shrimp*⁵⁷ [large markets can impose their preferences on small markets as long as one molecule of air is circulating, or as Anatole France put it a hundred years ago, ‘The law in its majesty prohibits the rich and poor alike to sleep under the bridges of Paris’]. To put this concern into the modern context, consider the current administrations of various countries applying the public morals exception (Article XX(a) GATT 1994) to customs valuation.⁵⁸

(iii) *Other options*

a) *Adopt measures that are WTO-consistent already*

48. We note that, even if Article XX is not applicable as a defence, there are several ways for WTO Members to design a support program stimulating the green economy in a WTO-consistent fashion.⁵⁹ First, one way to design a WTO-consistent subsidy is to make the subsidy (e.g., an R&D subsidy) *generally available* among domestic producers, regardless of the industry or region in which they operate. If truly available across industries and regions, such a subsidy is not specific under Article 2 of the *SCM*

⁵⁶ See for example, Coppens (n 53), at 75–88 and 454–468; A Cosbey and P Mavroidis, ‘A turquoise mess: green subsidies, blue industrial policy and renewable energy: the case for redrafting the Subsidies Agreement of the WTO’ (2014) 17 *JIEL* 11; L Rubini, ‘The wide and the narrow gate – Benchmarking in the SCM Agreement after the Canada – Renewable Energy/FIT ruling’ (2015) 14 *WTR* 211.

⁵⁷ *US – Shrimp* (n 34).

⁵⁸ See D Ming, ‘Permitting Moral Imperialism? The Public Morals Exception to Free Trade at the Bar of the World Trade Organization’ (2016) 50 *JWT* 675–704.

⁵⁹ See also D Coppens and T Friedbacher, ‘Chapter Five: Subsidies’, in A Appleton and P Macrotty (eds.), *Business Guide to Trade and Investment*, ICC Publication, 2017.

Agreement, and, therefore, immune from multilateral WTO challenge and unilateral CVD action. Second, another way to design a WTO-consistent subsidy scheme is to subsidise *domestic consumers* (e.g., a tax credit to buy electric cars), instead of domestic producers (e.g., subsidising domestic electric car producers). Consumption subsidies, provided to consumers regardless whether they buy domestic products or imported products, do not violate the ASCM because such subsidies do not cause adverse effects to foreign competitors.⁶⁰ On the contrary, such subsidies bolster – rather than undermine – competitive opportunities for all producers, including foreign producers, which may see an increase in their export sales to the subsidizing country. Such a consumption subsidy is likewise GATT-consistent, as it is non-discriminatory (Article III GATT 1994). This means that the WTO rules provide an incentive for governments to turn gradually away from producer subsidies, which inherently favour domestic producers, to non-discriminatory consumer subsidies, and which put domestic and foreign producers on an equal footing. Third, and finally, it bears noting that developing countries have greater flexibility under the ASCM to subsidise their domestic producers. All developing countries (except China⁶¹) have greater flexibility to provide domestic subsidies (Article 27.9 ASCM), while a limited number thereof are still allowed to provide export subsidies (Articles 27.2-27.7 ASCM). This flexibility for developing countries makes such subsidies immune from multilateral WTO challenge, but *not* from unilateral countervailing duty (CVD) action that importing trading partners may wish to pursue.⁶²

b) Make adjustments to the rules and/or their application

49. If the WTO Members wish to change the WTO rules on subsidies, or change how they are applied, then as masters of the treaty they could certainly do so. A range of mechanisms exist. They could amend the WTO Agreement. They could adopt a waiver of the WTO provisions conflicting with these subsidies (possibly in conjunction with an amendment). They could adopt an authoritative interpretation of WTO rules. They could also negotiate a plurilateral agreement interpreting and applying WTO rules *inter se*, adopt a moratorium on dispute settlement in this area, or try to alter interpretation of the rules through WTO litigation. And they could act unilaterally in defiance of the WTO rules, and pay the price for their action through WTO-authorized retaliation. Each of these options has costs and benefits.

50. Amendment as a strategy would require serious engagement between WTO Members on which subsidies to accommodate; why a change in WTO rules is needed; and the impact of the change on Members' trade and economic interests. At present, any Member has a right to offset any subsidy by countervailing duties (if injury requirements are met). If Members wish to eliminate that right in respect of some group of green subsidies, they could do so by amending the ASCM. Since the amendment drafting process takes place by consensus, such an amendment will not move forward until the concerns of all Members have been satisfied. However, the recent successful WTO amendment,

⁶⁰ It could also be argued that such a subsidy is outside the scope of the ASCM because the subsidy is not specific to certain enterprises 'within the jurisdiction of the granting authority' (Article 2 ASCM).

⁶¹ Upon accession, China committed not to rely on this flexibility.

⁶² Only higher *de minimis* subsidy and volume thresholds apply before CVD action could be taken against subsidized imports from developing countries, viz. Article 27.10 ASCM.

adding a new Agreement on Trade Facilitation by means of a Protocol to the Marrakesh Agreement Establishing the WTO (WTO Agreement), shows that WTO amendments take time, but are not impossible. An amendment to the ASCM would enter into force only after two-thirds of all WTO Members have accepted it and would bind only those that accept.⁶³

51. To bridge the period before an amendment enters into force, or to substitute temporarily for an amendment, Members could adopt a waiver: a decision that waives SCM obligations conflicting with these subsidies. Waivers, like amendments, provide legal certainty but require consensus agreement arrived at by negotiations; they have been routinely used to accommodate Members' concerns. Article IX of the WTO Agreement provides for waivers in 'exceptional circumstances' (which climate change almost certainly is).⁶⁴ The effect of a waiver is to legally waive the application of the WTO obligation in question. A request for a waiver from the ASCM must be made to the Council for Trade in Goods for consideration during a time-period of 90 days. At the end of this time-period, the Council has to submit a report to the Ministerial Conference. A decision by the Ministerial conference granting a waiver must state the exceptional circumstances justifying the decision, the terms and conditions governing the application of the waiver, and the date on which the waiver will terminate. A waiver granted for a period of more than one year must be reviewed by the Ministerial Conference annually until it terminates to confirm that the exceptional circumstances justifying the waiver still exist.

52. In order to obtain a waiver, it would be necessary to define the exact measures that would fall within its scope. While it may be possible to define a set of measures, it would likely be very difficult to predict all measures that countries might want to use to promote green policies. There would likely also be other problematic aspects. Even if a waiver was made without prejudice to the consistency of the measures with the ASCM,⁶⁵ what would be the implications for similar measures not included? Would they be presumed to be WTO-inconsistent?

53. A further wrinkle is that it is not clear that the waiver power under Article IX:3 of the WTO Agreement could be used to eliminate an affirmative right under the WTO Agreements – in this case the right to countervail – even on a temporary basis. Nevertheless, the option of a waiver should not be ruled out entirely. In particular, there is useful precedent in the context of the public health amendment to the TRIPS Agreement where a waiver was used as a bridging mechanism until an amendment to the TRIPS Agreement entered into effect for each Member.

54. Less desirable options would include adoption of a formal authoritative interpretation by vote, or adoption of a decision of the SCM Committee interpreting the SCM Agreement. Decisions of this sort can be taken into account in interpreting the WTO Agreement but would not provide the certainty that WTO Member governments desire

⁶³ Marrakesh Agreement Establishing the WTO ('WTO Agreement'), Article X:3.

⁶⁴ WTO Agreement, Article IX:3(b).

⁶⁵ See for example the Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds, which states that the Decision 'does not prejudice the consistency of domestic measures taken consistent with the Kimberley Process Certification Scheme with provisions of the WTO Agreement, including any relevant WTO exceptions, and that the waiver is granted for reasons of legal certainty', WT/L/518 (27 May 2003).

when they legislate. A dispute settlement moratorium would also leave the ultimate legality of a green subsidy unresolved and would not affect CVDs. A plurilateral agreement would bind only its members; if it shelters a green subsidy that is inconsistent with the ASCM Agreement, any other WTO Member could challenge the subsidy in WTO dispute settlement or apply CVD to offset it. As for litigation, a government that perceives its WTO-inconsistent green subsidy as essential could simply enact it, wait for a challenge and defend it in a WTO dispute. But WTO litigation is expensive, risky, unpredictable, dependent on the particular facts of a case, and only legally affects the litigants. Finally, a government could simply adopt the subsidy and maintain it in defiance of WTO obligations. Such unilateralism in subsidies would not be exempt from CVDs by other Members, could be the subject of WTO-authorized suspension of trade concessions, and would erode the world trading system.

B. Policy Space for 'Green' Technology Transfer under the TRIPS

55. The following section briefly maps out and analyses the key provisions in the WTO TRIPS Agreement, which is the most important multilateral agreement on intellectual property (IP) concerning the IP aspects that are relevant to the transfer of 'green' or 'environmentally sound technologies (ESTs). IP is only one factor affecting trade and transfer of ESTs, next to, for example, tariffs and other non-tariff barriers, infrastructure, know-how, and the absorptive capacity of a country to implement and adapt ESTs to the local environment and local needs. Other aspects relating to the transfer of EST in the developing country context, as well the role of public-private partnerships (PPPs) in facilitating that transfer are taken up in Part IV.

(i) The policy debate: incentives to innovate versus access

56. The discussion over IP and ESTs is politically charged. One end of the spectrum is reflected in the following statement by Evo Morales, President of Bolivia: 'Innovation and technology related to climate changes must be within the public domain, not under any private monopolistic patent regime that obstructs and makes technology transfer more expensive to developing countries.'⁶⁶ At the other end, countries that host industries dependent on IP protection have been adamant about the positive role IP serves as an incentive mechanism, including for access and transfer of ESTs, especially via market-based foreign direct investment (FDI), technology licensing, and joint ventures. These broader political debates reflect an old question in international IP law and policy: Is the (internationally harmonised) protection of IP primarily a necessary incentive for R&D and the production of new technologies – or is it rather a barrier to the transfer and dissemination of such technology?

57. No attempt is made here to address this question further – primarily since there is arguably no uniform, globally applicable answer to it; and since IP (as incentive and/or barrier) needs to be assessed and appreciated together with a range of other factors. The most relevant insight into the economics of IP protection – namely that 'one size does not fit all' – is very much a truism for access to and transfer of ESTs. Thus, it seems particularly useful to highlight the policy space WTO Members enjoy to design a domestic IP system that is responsive and tailored towards the needs of the domestic economic,

⁶⁶ Evo Morales Ayma, Save the Planet from Capitalism, *International Journal of Socialist Renewal* (November 28, 2008) at <http://links.org.au/node/769>.

environmental and technological environment. The remaining paragraphs outline some key horizontal flexibilities that WTO Members can use to achieve IP protection of ESTs within TRIPS.

(ii) *Horizontal TRIPS Flexibilities*

58. The foremost horizontally applicable flexibility under the TRIPS Agreement relevant for ESTs, concerns the overarching approach of TRIPS to the interpretation and implementation of its provisions, as set out in Article 7 (with its focus on the overall balance between the interests of IP owners and users) and Article 8 (the permitted public health exception under domestic laws and regulation provided it is consistent with TRIPS).⁶⁷ While these provisions still await appropriate recognition within the WTO dispute settlement process, their essential role for the interpretation and implementation of TRIPS has been highlighted by WTO Members in the 2001 Doha Declaration on TRIPS and Public Health.⁶⁸

59. The first and foremost flexibility addressed in the Doha Declaration pertains to the general approach of interpreting TRIPS and so '[I]n applying the customary rules of interpretation of public international law, each provision of the TRIPS Agreement shall be read in the light of the object and purpose of the Agreement as expressed, in particular, in its objectives and principles.'⁶⁹ In *Australia — Tobacco Plain Packaging* the panel recognised that 'Article 8.1 sheds light on the types of societal interests that may provide a basis for the justification of measures under the specific terms of Article 20 [TRIPs], and expressly recognizes public health as such a societal interest.'⁷⁰ It went on to endorse the wording in paragraphs 4 and 5(a) of the Doha Declaration on TRIPS and Public Health and to apply them to the facts of the case.⁷¹

60. Since TRIPS does not feature a general exception clause akin to Article XX GATT, the principal mode that allows WTO Members to give effect to public interests is an interpretation and implementation of TRIPS driven by its objectives and principles, as set out in Articles 7 and 8. This approach provides for policy space especially in cases where ambiguous treaty terms are subject to interpretation and implementation in domestic law.⁷² The Doha Declaration in that sense is the TRIPS-specific reiteration of a State's right to regulate – a right that is well recognised under customary international law.⁷³ An interpretation and implementation of all TRIPS provisions therefore is meant to ensure that TRIPS does not prevent WTO Members from taking measures to protect public interests.

⁶⁷ See Articles 7 and 8 TRIPS *in extenso*.

⁶⁸ Doha Declaration on TRIPS and Public Health, WT/MIN(01)/DEC/2 (20 November 2001).

⁶⁹ *Ibid.*, para.5 (a).

⁷⁰ Panel Report, *Australia – Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging*, WT/DS435/R, WT/DS441/R, WT/DS458/R and WT/DS476/R, circulated 28 June 2018, para. 7.2588.

⁷¹ *Ibid.*

⁷² For a detailed discussion see for example, H Grosse Ruse-Khan, *The Protection of Intellectual Property in International Law* (2016), Chapter 13.

⁷³ For a comprehensive discussion of the recognition of the right to regulate (or police powers doctrine), see *Philip Morris Brands Sàrl and ors v Uruguay*, ICSID Case No. ARB/10/7, Award, 8 July 2016, paras.288–301.

61. Those measures are not limited to public health, since the approach highlighted in the Doha Declaration reflects the customary international law approach to treaty interpretation, which is in turn referred to in Article 3:2 DSU.⁷⁴ Patent-specific flexibilities, such as exceptions to patent rights under Article 30 TRIPS and compulsory licenses under Article 31 TRIPS, offer some examples as to where and how such an interpretation can make a difference. Furthermore, Articles 7 and 8 may assist in defining ambiguous terms in TRIPS obligations that otherwise could impact the preferential treatment of ESTs, such as the prohibition of discrimination between fields of technology in Article 27(1).

62. There are two further horizontal flexibilities in the specific EST context. Article 73 TRIPS provides for ‘security exceptions’ that, due to the drastic consequences climate change might have for some WTO Members, may merit consideration. Article 73 provides in relevant part that ‘[n]othing 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 (...) taken in time of war or other emergency in international relations (...).’⁷⁵ An important question concerns the degree of interpretative autonomy under Art. 73. One might argue for a substantial degree of autonomy in defining ‘necessity’ with regard to a Member’s essential security interest – which in turn then would determine which measures may be necessary to protect those interests. For WTO Members strongly affected by droughts, flooding, climate migration or other impacts of climate change, it would arguably not be too difficult to invoke Art.73(b); and if one then looks at the flexibility para.5(c) of Doha Declaration provides Members in defining ‘emergency’, taken together with the recent US withdrawal from the Paris Accord, then Art.73 may well serve as a tool for tackling climate change. The more difficult issue is whether IP-related measures affecting ESTs will be essential or even significant to address such emergencies.

63. Lastly, Article 66 of TRIPS provides for special treatment for least developed countries (LDCs) firstly in the form of a transition period to implement TRIPS.⁷⁶ This period has been extended twice for all LDC members; it currently runs until 1 July 2021, or when a particular country ceases to be in the least developed category if that happens before 2021. Hence, for the next couple of years there is no obligation for an LDC WTO Member to implement obligations to protect IP under TRIPS. This does not necessarily mean that IP rights cannot serve as an obstacle for accessing ESTs since LDC Members might depend on ESTs from other countries that do need to comply with TRIPS.

64. In addition, Article 66:2 TRIPS states that 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.’⁷⁷ However, despite a TRIPS Council decision from 2003 on the proper implementation of Art.66:2,⁷⁸

⁷⁴ See the implicit reference in Article 3.2. DSU to the object and purpose of a treaty, as found in Article 31 of the Vienna Convention on the Law of Treaties.

⁷⁵ Article 73 TRIPS.

⁷⁶ Article 66:1 TRIPS foresees special and differential treatment (SDT) for least-developed country (LDC) Members, including a transition period of 10 years for implementation of the Agreement.

⁷⁷ Article 66:2 TRIPS.

⁷⁸ Council for Trade-Related Aspects of Intellectual Property Rights – Implementation of Article 66.2 of the TRIPS Agreement – Decision of the Council for TRIPS of 19 February 2003, IP/C/28.

this obligation has not generated significant tailored technology transfer to LDCs.⁷⁹ The Committee could consider investigating how Article 66:2 could be more effectively implemented in relation to steps taken on EST access and transfer under the UNFCCC framework, in particular the Technology Mechanism and the Green Climate Fund.

(iii) *TRIPS-plus commitments on IP protection*

65. Over the past 20 years, there has developed a global, and increasingly dense, web of bilateral and regional agreements, in the form of free trade or economic partnership agreements, which include obligations to introduce typically stronger protections of IP. These ‘TRIPS-plus’ standards may affect flexibilities under TRIPS that are relevant in the context of access to and transfer of ESTs. Since these TRIPS-plus protections differ significantly from one agreement to another, it is not possible to offer a comprehensive account of TRIPS-plus rules that affect ESTs. In the broader context of analysing the impact of free trade agreements (FTAs) on measures to tackle climate change, further research could examine how TRIPS-plus protections affect the transfer of ESTs. A key question is the remaining role of the multilateral system, especially the WTO multilateral trade agreements and international climate change accords, for the implementation and interpretation of these bilateral and regional treaties. Existing research on fragmentation, systemic integration and *inter-se* agreements suggests that TRIPS and its common objectives for IP protection, as expressed in Articles 7 and 8, retain relevance for the implementation and proper construction of TRIPS-plus commitments in FTAs.

66. To reinforce this idea, an important policy consideration for states negotiating IP commitments in FTAs is to retain key flexibilities. Where the multilateral IP framework foresees – particularly in an area such as ESTs – reliance on the dynamic development of future technologies and their use in mitigating or adapting to climate change, IP provisions should be drafted accordingly. Experience in other fields of technology, such as digital networks, show that international IP law needs to be drafted to allow legislators and courts to adapt to fast-moving technological and social change.

67. In conclusion, it appears that overall IP protection is a factor but perhaps not the most important one, in addressing the development and transfer of ESTs. Since the role of IP protection, as an incentive for R&D, and/or as a barrier to access, is politically highly contested, new multilateral solutions for this issue cannot realistically be expected in the foreseeable future. In particular, the negotiating history of a successor to the Kyoto Protocol shows several failed attempts to address IP in the climate change context.⁸⁰ In view of this, the most sensible way forward is to work with the existing multilateral system (especially TRIPS) and to explore its policy space in developing solutions for EST transfer that are equally tailored to the non-IP factors. States should be careful not to bind themselves to TRIPS-plus commitments that will not afford sufficient flexibility to accommodate appropriate responses to the further development of ESTs and their transfer so as to mitigate and to adapt to climate change.

⁷⁹ S Moon, ‘Meaningful Technology Transfer to the LDCs: A Proposal for a Monitoring Mechanism for TRIPS Article 66.2’, ICTSD Policy brief Number 9 (April 2011), <https://www.ictsd.org/sites/default/files/downloads/2011/05/technology-transfer-to-the-ldcs.pdf>

⁸⁰ For a detailed discussion, see Grosse Ruse-Khan (n 72), Chapter 11.

III. Trade and agriculture with respect to fisheries subsidies and sustainable ocean and freshwater fisheries management

68. Presently the only subject of multilateral negotiations at the WTO is the disciplining of certain forms of harmful fisheries subsidies. In addition to the original negotiating mandate,⁸¹ fisheries subsidies are also specifically referred to under Sustainable Development Goal (SDG) 14 ('Conserve and sustainably use the oceans, seas and marine resources for sustainable development'). States are instructed as follows, in accordance with Goal 14.6:

By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.⁸²

Against this background, the principal worry for interest groups is that subsidization of the fisheries industry might encourage the overuse of fish stocks and/or contribute to illegal, unreported and unregulated (IUU) fishing.

(i) *The nature of fisheries management and the WTO*

69. The historic difficulty with regulating fisheries subsidies arises from a number of factors including the customary influence of rent-seeking industries, the reluctance of governments concerned over the impact of a decline in fisheries for dependent coastal communities, and the complex nature and effect of the subsidies themselves.⁸³ In particular, fisheries subsidies are not considered harmful only when injuring other industries and they need not be intended for export. Indeed, many fisheries industries are not targeted toward exports, but rather internal consumption.⁸⁴ Instead, the harm that fisheries subsidies cause *may* be of a kind foreseen by the ASCM but the principal concern is the harm that such subsidies cause for the resource upon which fishing industries depend, i.e., the depletion of shared resources, most clearly illustrated by migratory or straddling stocks.⁸⁵ While it could be possible to calculate the value of the subsidy in question, it would be more challenging to calculate the harm of the subsidy caused to the fish stocks.⁸⁶

⁸¹ Doha Ministerial Declaration (n 32), paras. 28 and 31 and Hong Kong Ministerial Declaration, WT/MIN(05)DEC (22 December 2005), para. 28 and Annex D.

⁸² 'Transforming our world: the 2030 Agenda for Sustainable Development', GA Res. 70/1, 25 September 2015 (2030 Sustainable Development Agenda), Goal 14.6. (footnote omitted).

⁸³ See U Rashid Sumaila V Lam, F Le Manach, W Swartz and D Pauly, 'Global fisheries subsidies: An updated estimate' (2016) 69 *Marine Policy* 189.

⁸⁴ See S W Chang, 'WTO Disciplines on Fisheries Subsidies: A Historic Step Towards Sustainability?' (2003) 6 *JIEL* 879; Y Chou and C-S Ou, 'The Opportunity to Regulate Domestic Fishery Subsidies Through International Agreements', (2016) 63 *Marine Policy* 118.

⁸⁵ Alice V. Tipping, A 'Clean Sheet' Approach to Fisheries Subsidies Disciplines, ICTSD (2015), http://e15initiative.org/wp-content/uploads/2015/04/E15_Subsidies_Tipping_final.pdf, 8.

⁸⁶ See L Bartels and T Morgandi, 'Options for the Legal Form of a WTO Agreement on Fisheries Subsidies' 4 (ICTSD 2017) <https://www.ictsd.org/themes/environment/research/options-for-the-legal-form-of-a-wto-agreement-on-fisheries-subsidies>.

70. This problem is compounded by the limited number of empirical studies on the contribution of fisheries subsidies to the fishing practices contemplated under SDG 14.6 and the current value of fisheries subsidies, or how they are best calculated.⁸⁷ An endemic lack of transparency in the provision of such subsidies by governments exacerbates this difficulty.⁸⁸ The principal concern from the perspective of SDG 14 is that by supporting fishing industries (whether on the high seas, territorial waters or inland) subsidies increase capacity and thus encourage overfishing, which in turn can have a dramatic impact on sustainability of stocks and diversity in the ecosystem.⁸⁹ Indeed, while capacity has increased in Asia, developing and underdeveloped economies, the global efficiency of the fishing sector has declined.⁹⁰ Yet subsidies may encourage sustainable fishing through the provision of more advanced boats, shoal detection equipment, or nets.⁹¹ Even so, interests in protecting fish stocks may well run against other competing interests such as protecting local communities from economic deprivation, guarding indigenous communities' pursuit of traditional practices, or the promotion of food security.⁹²

71. Members already have a number of key substantive obligations relating to fisheries management under the law of the sea, most notably, under the UN Convention on the Law of the Sea, the 1993 FAO Compliance Agreement, the 1995 FAO Code of Conduct for Responsible Fisheries, the 1992 UNCED Agenda 21, the 1995 UN Fish Stocks Agreement, and the 2009 FAO Agreement on Port State Measures.⁹³ These obligations exist irrespective of the proposed WTO disciplines, which are directed towards certain types of subsidy, rather than the practice of fishing *per se*.

72. The regulation of fisheries management is characterised by normative and institutional diversity with a web of multilateral, regional, and thematic institutions playing roles.⁹⁴ Much of the heavy-lifting is done by regional fisheries management organizations (RFMOs) that form a complex network of actors that cover geographic regions.⁹⁵ Those

⁸⁷ For discussion on this point, see Rashid Sumaila *et al* (n 83). Notable exceptions include the 'Sunken Billions' report of the World Bank and the FAO in 2009, and the 'Sunken Billions Revisited' report of the World Bank in 2017.

⁸⁸ In part due to a lack of compliance with existing notification obligations. C-J Chen, *Fisheries Subsidies under International Law* (2010) 6–7.

⁸⁹ See: European Parliament, DG for Internal Policies, 'Global Fisheries Subsidies: Note' (2013) [http://www.europarl.europa.eu/RegData/etudes/note/join/2013/513978/IPOL-PECH_NT\(2013\)513978_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/note/join/2013/513978/IPOL-PECH_NT(2013)513978_EN.pdf) at 23ff.

⁹⁰ J Bell, R Watson and Y Ye, 'Global Fishing Capacity and Fishing Effort from 1950 – 2012' (2017) 18 *Fish and Fisheries*, 489.

⁹¹ Acknowledged in UNCTAD-FAO-UNEP Joint Statement, *Regulating Fisheries Subsidies Must be an Integral Part of the Implementation of the 2030 Sustainable Development Agenda*, 20 July 2016, http://unctad.org/meetings/en/SessionalDocuments/U14ditc_d16_FishSub_Statement_en.pdf, para. 3

⁹² See: J He, 'Chinese public policy on fisheries subsidies: Reconciling trade, environmental and food security stakes' (2015) 56 *Marine Policy*, 106.

⁹³ See M A Young, 'The 'Law of the Sea' Obligations Underpinning Fisheries Subsidies Disciplines', ICTSD (2017) <https://www.ictsd.org/themes/environment/research/the-law-of-the-sea-obligations-underpinning-fisheries-subsidies>.

⁹⁴ For a concise overview: M A Young, *Trading Fish, Saving Fish: The Interaction between Regimes in International Law* (2011), Chapter 2.

⁹⁵ For example, the North-East Atlantic Fisheries Commission and the Indian Ocean Tuna Commission.

which are 'regional' are not strictly regional in the sense of membership, but instead in the area of interest thus ensuring that States with fishing interests in regions are also present. They are the cornerstone of fisheries management, with many have important powers in pursuing conservation and management of fish stocks, including designating total allowable catches, monitoring vessels (including for possible IUU activity), and sharing information and data, amongst others.⁹⁶ A key limitation of such bodies, aside from predictable issues arising from a lack of political will or resources, is their limited ability to affect management policies on the on the high seas.⁹⁷ Other challenges can arise from interaction with the authorities of non-members whose vessels have engaged in IUU activity within an area under the jurisdiction of an RFMO.

73. RFMOs are but one set of bodies within the fisheries management network, as part of a wider UN network under the UN Convention on the Law of the Sea (UNCLOS), where states are instructed to create further regional bodies where necessary.⁹⁸ Different UN bodies play a role, not only with RFMOs but also independently. The FAO, UNEP and UNCED are all participants in fisheries management, and have also contributed to the legal network of treaties and codes that seek to help conserve and manage fish stocks.⁹⁹

74. It is the WTO, however, that is charged with developing a set of global disciplines to ensure effective control over fisheries subsidies,¹⁰⁰ given also the existence of the WTO Agreement on Subsidies and Countervailing Measures (ASCM) and the WTO's binding dispute settlement system. What is often lost in discussions at the WTO is that it is the provision of certain subsidies which is to be disciplined, rather than the fishing activity itself. Eventually, the task will be to apply and adapt the ASCM to the context of certain forms of harmful fisheries subsidies, while at the same time avoiding any mission creep, i.e. WTO encroachment upon the area of RFMOs and other relevant parties.

(ii) *The history and mandate of the negotiations at the WTO*

75. The original mandate for negotiations on fisheries subsidies arose during the start of the Doha Round in 2001.¹⁰¹ A subsequent draft text was proposed in 2007 by the chair of the Negotiating Group on Rules (RNG) as the basis for further talks.¹⁰² This draft would prohibit some harmful subsidies subject to a set of exceptions.¹⁰³ A number of concerns were raised at the time, and subsequently, relating to the scope of the special

⁹⁶ FAO, *Report: The State of World Fisheries and Aquaculture* (2008) 69.

⁹⁷ On the challenges faced in tuna: FAO, *Performance Reviews by Regional Fishery Bodies: Introduction, Summaries, Synthesis and Best Practices*, Volume I (2012), 26.

⁹⁸ UN Convention on the Law of the Sea (UNCLOS) done at Montego Bay, 10 December 1982, 1833 UNTS 3, Article 118.

⁹⁹ See above, para 70; see also, UNCTAD-FAO-UNEP Joint Statement (n 91). Other international organizations play an important role in providing data and analysis. For example, the work of the OECD Fisheries Division, which is examined in A Cox and C-C Schmidt, 'Subsidies in the OECD Fisheries Sector: A Review of Recent Analysis and Future Directions', available at <http://www.oecd.org/tad/fisheries/2507604.pdf>.

¹⁰⁰ Regional developments have been taken in other *fora*, such as the CPTPP and within the EU.

¹⁰¹ Doha WTO Ministerial Declaration (n 32), paras. 28 and 31 and Hong Kong Ministerial Declaration (n 81), para. 28 and Annex D.

¹⁰² See Draft Consolidated Chair Texts of the AD and SCM Agreements, Negotiating Group on Rules, Annex VIII, TN/RL/W/213 (30 November 2007).

¹⁰³ *Ibid*, Article I.1.

and differential treatment (S&DT) provisions for developing members with smaller fisheries industries, the possibility of *de minimis* exceptions, and the role of fisheries management systems.¹⁰⁴ As a result progress was slow, held back by the need to agree on all Doha mandated topics at the RNG (reform of the Anti-Dumping and Subsidies Agreements, clarification and improvement of rules on regional trade agreements, and disciplines on fisheries subsidies) following the WTO tradition where ‘nothing is agreed until everything is agreed’.¹⁰⁵ Subsequently, work continued at the other fisheries bodies (UNCTAD, the FAO, and regionally under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership). Meanwhile, at the WTO advances ground to a halt until in May 2016, spurred by the adoption of the 2030 Agenda in September of the previous year, during an informal meeting of the Negotiating Group on Rules WTO Members indicated willingness to move forward on the topic.¹⁰⁶

76. While WTO members had been working towards a substantive deliverable at the 11th WTO Ministerial Conference in Buenos Aires¹⁰⁷, at least on IUU, this proved impossible. Failing that, members agreed ‘to continue to engage constructively in the fisheries subsidies negotiations, with a view to adopting, by the Ministerial Conference in 2019, an agreement on comprehensive and effective disciplines that prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU-fishing recognizing that appropriate and effective special and differential treatment for developing country Members and least developed country Members should be an integral part of these negotiations.’¹⁰⁸ Members also committed to enhance the notifications process under the ASCM to increase transparency in the fisheries sector.

77. Though there was no agreement on a new set of disciplines at the 11th Ministerial Conference, the work of the RNG in the run up to Buenos Aires identified a number of key issues and approaches that could be taken, with proposals (in varying degrees of specificity) put forward *inter alia* by the EU, New Zealand (and co-sponsors), Argentina/Peru (and co-sponsors),¹⁰⁹ Indonesia, the ACP¹¹⁰ and LDC groups,¹¹¹ and later on,

¹⁰⁴ See ‘Need for Effective Special and Differential Treatment for Developing Country Members in the Proposed Fisheries Subsidies Text’, Submission by India, Indonesia and China TN/RL/GEN/155/Rev.1 (22 April 2008); ‘Fisheries subsidies – special and differential treatment’, Communication from Brazil, China, India and Mexico, TN/RL/GEN/163 (11 February 2010); ‘Fisheries subsidies – Article II *de minimis* Exemption’, Communication from Canada, TN/RL/GEN/156/Rev.1 (18 January 2011).

¹⁰⁵ Doha Ministerial Declaration (n 32), paras. 28–29.

¹⁰⁶ WTO, 2016 News Item, ‘WTO members affirm interest in new international fisheries subsidies rules, but differ on way forward’ (29 June 2016) https://www.wto.org/english/news_e/news16_e/rule_06jul16_e.htm.

¹⁰⁷ For an account of the negotiations at the WTO and under the CPTPP to MC11, see: G Messenger, ‘Sustainable Development and the Commodities Challenge: The Eventual ‘Greening’ of the World Trade Organization?’ (2017) *IX Trade, Law & Development*, 54, 67–78.

¹⁰⁸ Ministerial Decision on Fisheries Subsidies, WT/MIN(17)/W/5 (13 December 2017).

¹⁰⁹ ‘Proposal for Disciplines on Fisheries Subsidies’, Communication from Argentina, Colombia, Costa Rica, Panama, Peru, and Uruguay, TN/RL/GEN/187 (25 July 2017).

¹¹⁰ ‘Principles and Elements for Concluding Negotiations on Fisheries Subsidies Rules in the WTO’, Rwanda on behalf of the ACP Group, TN/RL/GEN/182(15 November 2016).

¹¹¹ ‘LDC Group Submission on Elements for WTO Fisheries Subsidies Disciplines’, Benin on behalf of the LDC Group, TN/RL/GEN/184 22 December 2016).

Norway and China. A consolidated text allowed for more focused discussions.¹¹² At the Conference a number of further contributions were received from the floor (e.g., from India and the US). Post-Buenos Aires the RNG has been streamlining additional text, alongside thematic discussions on key issues. However, further text-based discussions are not expected until fall 2018.¹¹³

(iii) *The main unresolved or open issues at the negotiations*

(a) *An effects or a list-based approach*

78. Whether the most effective means of disciplining harmful subsidies in this context would be to list types of subsidy (for example, those that provide for the purchase of new vessels) or instead the effect of the subsidy (for example, those that encourage the fishing of overfished stocks), or a combination of the two (that is, a non-exhaustive illustrative list such as under Annex I ASCM).

(b) *The role of RFMOs and coastal states in making determinations and due process concerns*

79. In the case of IUU fishing, the principal approach is to use vessel lists from members and RFMOs (in line with FAO Port State Measures Agreement) to determine whether a vessel receiving a subsidy is engaged in IUU fishing. This is reflected in the proposals. However, there is also an awareness that the identification of a vessel as engaged in illegal fishing (and subsequently subsidised) will potentially have serious consequences for the vessel and its flag State. As such, the quality and reviewability of such determinations is key here. How such due process rights are to be protected, aside from general assurances under the disciplines, is still undetermined.¹¹⁴

(c) *The basis for assessing stocks and course of action where no assessments undertaken*

80. Members are seeking to identify the appropriate means for determining whether stocks are in an overfished condition. This determination is to be on the basis of the best scientific evidence available (e.g. relating to sustainable yields) by the relevant RFMO, by determination of the State with jurisdiction over the waters where the stocks are found, or potentially by other Members on the basis of sufficient scientific evidence.¹¹⁵ Echoing the principles of sanitary and phytosanitary regulation and the use of ‘sound science’ for the introduction and maintenance of such measures,¹¹⁶ the current proposals stress the importance of ensuring the use of a scientific evidence base, rather than mere information, for a determination that stocks are overfished.¹¹⁷ For situations where insufficient

¹¹² ‘Working Documents On: Prohibited Subsidies Relating to IUU Fishing, Overfished Stocks, Overcapacity, Capacity-Enhancing Subsidies, And Overfishing; Notifications And Transparency; And Special And Differential Treatment’, Communication from the Chair, TN/RL/W/274/Rev.2 (5 December 2017).

¹¹³ The most developed working documents are contained in the fourth revision of the Chair’s Communication, *ibid*, TN/RL/W/274/Rev.4 (15 June 2018).

¹¹⁴ The current proposals on identifying a vessel engaged in IUU fishing propose such safeguards for both members making determinations as well as RFMOs, *ibid*, Article 3.1(c)-(d).

¹¹⁵ *Ibid*, Article 1 and Article 3.6.

¹¹⁶ See in particular, Articles 2.2 and 5.2 SPS Agreement.

¹¹⁷ Working Documents On: Prohibited Subsidies Relating to IUU Fishing, Overfished Stocks, Overcapacity, Capacity-Enhancing Subsidies, And Overfishing; Notifications And Transparency;

scientific evidence exists, some proposals have included options to either presume an overfished status,¹¹⁸ or exclude application of the discipline until such a time that the capacity to conduct stock assessments has been developed.¹¹⁹

(d) The scope of carve-outs (if any) on geographical or practical grounds

81. A number of potential carve-outs have been proposed, often based on SDT. These include exclusions for artisanal or subsistence fishing, for example, but potentially broader exclusions for developing members. There are two general approaches: insisting that the exercise of flexibilities for developing members and LDCs be linked to fish stock management plans (these are strongly encouraged in the EU proposal)¹²⁰ or call for the wholesale exclusion of fishing activity and subsidisation of same within a member's jurisdiction, i.e. the exclusive economic zone (where applicable).¹²¹ Such an exclusion would be of particular concern given the SDG 14.6 mandate which does not specifically target fisheries subsidies for fishing outside of waters under national jurisdiction but rather IUU, overfishing, and overcapacity wherever, irrespective of SDT obligations which are second-order. Technical assistance and capacity-building form part of the SDT framework, and significant efforts are already made by multilateral institutions (FAO, World Bank and others), as well as regional and bilateral donors aimed at capacity building. The current proposals would use the SCM Committee as the body to review the provision of support and development of cooperation mechanisms, with the WTO working closely with relevant international organisations, including FAO, as required.¹²²

(e) The nature and calculation of remedies

82. Under the ASCM a WTO Member may either challenge a subsidy directly via the dispute settlement system, or use CVDs as a self-help remedy. The former can be applied in the context of fisheries subsidies with little difficulty, only requiring the need to clarify the level of the suspension of concessions in the formulation of an 'appropriate countermeasure'.¹²³ In the case of the latter, however, the situation is a singular one. CVDs are limited to the amount of the subsidy to 'offset' its effect, rather than too punish the subsidising Member *per se*.¹²⁴ Furthermore, where the vessel in question is involved in illegal fishing against the will of the subsidising Member, it seems inequitable to introduce duties on that Member's goods simply because a vessel acts outside the law.

(iv) Recommendations

83. There are a number of recommendations that we consider to be important in the current debate and the ongoing negotiations concerning fisheries subsidies. They include:

And Special And Differential Treatment', Communication from the Chair, TN/RL/W/274/Rev.4, Article 3.6; UNCLOS (n 98), Article 61.2 relating to 'Conservation of the Living Resources' refers to 'best scientific evidence available'.

¹¹⁸ Communication from the Chair, TN/RL/W/274/Rev.4, *ibid*, See Article 3 *bis* (EU proposal – incomplete reference), Article 1.1.2 (NZ+ proposal), Article 3.6 C Alt 1.

¹¹⁹ *Ibid*, Article 3.6, C Alt 2.

¹²⁰ Article 4.2 EU proposal [incomplete reference].

¹²¹ Communication from the Chair, TN/RL/W/274/Rev.4 (n 118), Articles 5.2–3.

¹²² *Ibid*, Article 5.1.

¹²³ See Bartels and Morgandi (n 86).

¹²⁴ Article VI:3 GATT 1994.

- retaining focus on the sustainability objective of the disciplines as the overarching principle;
- reaching agreement on the proposed standstill provision that would prohibit new or the renewal of existing harmful subsidies;
- focusing on capacity-enhancing subsidies as the key element leading to fishing of overfished stocks;
- insisting on fisheries management as condition for any flexibilities;
- avoiding carve-outs based on geography and/or type of fishing activity which could undermine the sustainability objective of the disciplines; and
- ensuring a structure that adequately addresses all major subsidisers, irrespective of developing status.

Furthermore, as matters currently stand, there needs to be greater clarity on the application of WTO dispute settlement and the potential for remedies and countermeasures.

IV. Trade and development –the interface with sustainable water usage, sanitation & health, and the transfer of green technology to developing countries

84. The final part of the report addresses issues that are primarily, but not exclusively, concerned with the linkage between trade and development. One is the interface between trade and development and the issue of sustainable water usage, sanitation and health, which is addressed in section A. The other is the issue of transfer of green technology to developing countries and the potential for implementing common goals of achieving a green economy and sustainable development by means of effective public-private partnerships, both of which are taken up in section B.

A.1. The interface between trade and development & sustainable water usage, sanitation and health

85. The original Committee mandate refers to sustainable water usage, sanitation and health, but given the broad range of issues related to health generally and in light of the focus on water and sanitation, this Part focuses on the health-related aspects of water and sanitation. It goes beyond the issue of supply and delivery of services to questions of water quality and health-related technical standards. At the same time, it looks at the effects of trade agreements in the narrow sense (i.e. elements found in the WTO or in trade-related chapters of bilateral trade agreements) and the wider economic policy agenda incorporating trade agreements, on the interface with water, sanitation and health.

(i) Normative framework for sustainable water usage, sanitation and health in international law

86. The normative framework for the international law of sustainable water usage, sanitation and health comprises different subfields of international law. One starting point is the human rights character of water and sanitation and health and their relevance in terms of the sustainable development goals (SDGs). SDG 6 aims to 'ensure availability and sustainable management of water and sanitation for all'.¹²⁵ Its specifications do not refer to any particular trade agreement. Echoing this perception, the WTO does not

¹²⁵ 2030 Sustainable Development Agenda (n 82), SDG Goal 6 (Clean water and sanitation).

mention SDG 6 in the list of SDGs it considers most relevant for its work.¹²⁶ SDG Goal 3 concerns ensuring healthy lives and promoting well-being for all at all ages. There is a concrete reference to trade in the specifications of this goal concerning ‘access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health’.¹²⁷ The accompanying documents of the SDG refer to trade agreements and trade policy in more general terms by pointing to the positive impact trade can have on development.¹²⁸ However, there are no concrete references to SDG 3 and 6 in this context.

87. The legal basis of the human right to health, and its normative content, are summarised in General Comment No. 15 on ‘The Right to Water (Articles 11 and 12 of the Covenant)’ of the Committee on Economic, Social and Cultural Rights (CESCR) of 2003.¹²⁹ It is still the leading document with regards to this right. Concerning the interplay between trade agreements and the human right to water, the General Comments holds that ‘[A]greements concerning trade liberalization should not curtail or inhibit a country’s capacity to ensure the full realization of the right to water.’¹³⁰

88. The CESCR holds the same view in its later General Comment No. 14 on ‘The Right to the Highest Attainable Standard of Health (Article 12)’ of 2000.¹³¹ It states that ‘[I]n relation to the conclusion of other international agreements, States parties should take steps to ensure that these instruments do not adversely impact upon the right to health.’¹³² The human rights approach therefore ensures that states maintain the necessary regulatory capacity and regulatory space to fulfil their human rights obligations. It means that international trade agreements should not unduly limit this space.

89. In summary, the international normative framework of water, sanitation and health recognises that trade and trade agreements can have negative and positive effects on the realization of these public policy objectives. While human rights instruments, and their related documentation, tend to focus on the potential negative effects, the SDGs appear to underline the potential positive effects. Below we consider some of the elements of trade and its regulation in trade agreements, which could have an impact on sustainable water usage, sanitation and health and warrant closer analysis by the Committee.

(ii) The impact of trade on sustainable water usage, sanitation and health

(a) Liberalisation of water and environmental services

90. Trade agreements typically include commitments concerning the liberalisation, i.e. market access and national treatment, of environmental services. Environmental services

¹²⁶ See for further information, ‘The WTO and the Sustainable Development Goals’ https://www.wto.org/english/thewto_e/coher_e/sdgs_e/sdgs_e.htm.

¹²⁷ 2030 Sustainable Development Agenda (n 82), SDG Goal 3 (Good health and well-being).

¹²⁸ *Ibid*, para 60 ‘international trade as an engine for development’; and, *ibid*, para. 68 ‘international trade is an engine for inclusive economic growth and poverty reduction, and contributes to the promotion of sustainable development.’

¹²⁹ Committee on Economic, Social and Cultural Rights, General Comment No. 15: The Right to Water (Articles 11 and 12 of the Covenant), E/C.12/2002/11 (20 January 2003).

¹³⁰ *Ibid*, para 35.

¹³¹ Committee on Economic, Social and Cultural Rights, General Comment No. 14: The Right to the Highest Attainable Standard of Health (Article 12), E/C.12/2000/4 (1 August 2000).

¹³² *Ibid*, para 39.

include sanitation services, but not necessarily the supply and distribution of water. So far, water services have not yet been subject to liberalisation commitments. The actual and potential impact of market opening needs study. One question for the Committee is whether, and how, market access obligations could be reconciled with regulatory objectives. For example, would it be necessary to exclude water distribution and other services related to water, sanitation and health from liberalisation commitments? Or alternatively, could regulatory obligations based on a regulatory reference paper be useful?

(b) Concessions and procurement rules

91. The WTO plurilateral Agreement on Government Procurement (GPA)¹³³ and procurement chapters in other regional or bilateral trade agreements could also have an impact on water and sanitation services if these services are covered by the respective obligations that participants in the GPA or other trade agreement have taken. While water services are usually not procured, their provision might be based on concessions covered by procurement chapters in trade agreements.

(c) Sustainable development or environmental chapters in trade agreements

92. Sustainable development or environmental chapters in trade agreements may include obligations targeted at the protection of water usage and conservation. However, the respective rules are often formulated as best endeavour obligations and are not subject to the same dispute settlement mechanism as regular trade obligations. This could lead to the perception that the former are less relevant than the latter.

(d) Exclusions or exemptions

93. In some recent trade agreements, water usage or water services are excluded from the scope of the agreement or – more often – from certain chapters of it. The use of general exceptions such as Article XX GATT 1994 for trade in goods or Article XIV GATS for trade in services could, however, soften the impact of trade obligations on water regulation.

(iii) Linkages

94. Certain linkages between trade agreements and sustainable water usage, sanitation and health encompass both the possibility for conflict and the potential for mutual supportiveness. One problem is that many assumptions about conflict or mutual supportiveness depend on economic and political assumptions. It is unclear how these can, and should, be relevant to a legal analysis of this subject matter. A possible means for the Committee to proceed further would be to develop a case study to examine the impact of trade and development agreements on sustainable water usage, sanitation and health. In this respect the Comprehensive Economic and Trade Agreement (CETA) between the Canada and the EU,¹³⁴ which is partially in force, could serve as an example of what could be achieved in other trade and development agreements. CETA contains a general

¹³³ See Protocol Amending the Agreement on Government Procurement and attached Annex [with text of the revised Agreement on Government Procurement, GPA/113 (2 April 2012), in force since 6 April 2014.

¹³⁴ European Commission, 'Consolidated Text of the Comprehensive Trade and Economic Agreement between the EU and Canada', 26 September 2014 http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf

article on rights and obligations relating to water.¹³⁵ Furthermore, a Joint Interpretative Instrument, makes it clear that ‘CETA does not oblige Canada or the European Union and its Member States to permit the commercial use of water if they do not wish to do so’, thereby underlining the importance of the impact of the trade agreement on water.¹³⁶

B.1. Trade and transfer of green technology to developing countries

95. The dissemination of environmentally sound technology (EST) or ‘green technology’ is affected by the intersection of a variety of technologies, policy areas and laws and regulations. This necessarily renders a discussion of such transfer as a multi-dimensional one. The United Nations Environment Programme (UNEP) explains ESTs as ‘technologies that have the potential for significantly improved environmental performance relative to other technologies.’ Moreover, ‘ESTs protect the environment, are less polluting, use resources in a sustainable manner, recycle more of their wastes and products, and handle all residual wastes in a more environmentally acceptable way than the technologies for which they are substitutes.’¹³⁷ UNEP explains that ‘ESTs are not just individual technologies. They can also be defined as total systems that include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures for promoting environmental sustainability.’¹³⁸

96. A complex matrix of institutional and policy networks brings into play a variety of national, regional and international agencies and policies having an impact on the transfer of such technology. One may not, for example, realistically focus only on one aspect of law that affects such transfer, such as patent or other IP laws. National laws which may provide for trade – tariff or non-tariff – barriers are also part of the equation when considering barriers and access to such technology. At the same time, national policy frameworks on the environment, FDI, procurement, economic development and finance can also have an impact on the flow of EST.¹³⁹ The often-polarized views of countries on the role of IP rights such as patents, and the potential use of methods, such as compulsory licensing in the area of EST, form part of the debate.

(i) International instruments, mechanisms and initiatives for environmentally sound technology

97. Many international instruments, mechanisms and initiatives exist to promote such transfers of technology. A number of challenges remain, including funding assistance for developing countries to access EST, information gaps and skills shortages in EST in such

¹³⁵ *Ibid*, Article 1.9 (Rights and obligations relating to water).

¹³⁶ Joint Interpretative Instrument on the Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union and its Member States, OJ L 11/3, 14.01.2017, para. 11.

¹³⁷ See UN Environment Programme (UNEP), at: <https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/environmentally-sound>.

¹³⁸ *Ibid*.

¹³⁹ See UNEP Background Paper, ‘The Trade-Technology Nexus: A Key Enabling Force for Achieving the Sustainable Development Goals’ (2016), at http://web.unep.org/greeneconomy/sites/unep.org/greeneconomy/files/technology-trade_nexus_workshop_background_paper.pdf and David Popp, ‘The Role of Technological Change in Green Growth’, World Bank policy research working paper (2012), http://www.enterprise-development.org/wp-content/uploads/The_Role_of_Technological_Change_in_Green_Growth.pdf. On channels of transfer of technology in general, see B M. Hoekman, K E Maskus and K Saggi, ‘Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options’ (2005) 33 *World Development* 1587.

countries. Other issues include the treatment of transfer of such technology by trade and investment treaties, particularly whether they might impede or promote such transfer.

98. The World Intellectual Property Organization (WIPO) has, apart from examining the role of IPRs in access to ESTs,¹⁴⁰ actively promoted transfer of EST through its ‘WIPO Green’ programme, which was established in 2013. This initiative facilitates access to intellectual property rights in EST through a fee-free, publicly-accessible database, and helps to match ‘technology seekers’ (including SMEs) with those which have relevant EST.¹⁴¹ The database includes information on technologies as well as needs, and negotiating guidance by way of a ‘licensing checklist’. An experts’ database is also being built into the facility. WIPO Green’s matchmaking activities have included a pilot project on wastewater management.¹⁴² In 2013, under the auspices of WIPO Green, the Japan Intellectual Property Association (JIPA) launched the Green Technology Package Platform (GTPP) as a separate platform to promote transfer of EST not only through patent licenses but also other means, as a ‘package’, such as transfer of knowhow, personnel training, production process knowledge and quality control.¹⁴³

99. The United Nations Framework Convention on Climate Change (UNFCCC), the 2030 Agenda for Sustainable Development and the SDGs, the Paris Climate Agreement, the Bali Action Plan and the Cancun agreements all make reference to such transfer of technology. Pursuant to Article 4(5) UNFCCC¹⁴⁴ the Technology Transfer Framework and an expert group on technology transfer (EGTT) were established in 2001.¹⁴⁵ The scope of work of the Framework extends to the following topics: technology needs and needs assessments; technology information; enabling environments for technology transfer; capacity-building for technology transfer; mechanisms for technology transfer; innovative financing; international cooperation; endogenous development of technologies; and collaborative research and development.

100. The EGTT’s mandate was further expanded with the establishment of the Technology Mechanism (TM) in 2010. The TM comprises the Technology Executive Committee (TEC)¹⁴⁶ and Climate Technology Centre and Network (CTCN).¹⁴⁷ The TEC

¹⁴⁰ For example, see WIPO, ‘Innovation and Diffusion of Green Technologies: The Role of Intellectual Property and Other Enabling Factors’ (2015).

¹⁴¹ See WIPO Green database at: <https://www3.wipo.int/wipogreen-database/>.

¹⁴² See WIPO, ‘Facilitating the Transfer and Diffusion of Clean Technology: Opportunities in Wastewater Treatment in South East Asia’ (2016). The countries in the pilot project are Indonesia, the Philippines and Vietnam.

¹⁴³ See Japan Intellectual Property Association (JIPA) <http://www.jipa.or.jp/english/advocacy/comments/pdf/GTPP.pdf>.

¹⁴⁴ The UN Framework Convention on Climate Change (UNFCCC) entered into force on 21 March 1994, for details see <http://unfccc.int/2860.php>.

¹⁴⁵ For the Technology Transfer Framework and Expert Group on Technology Transfer (EGTT), see <http://unfccc.int/tclear/tec/tech-transfer-framework.html>; ‘Climate Change: Technology Development and Technology Transfer’, Background Paper for Beijing High-level Conference on ‘Climate Change: Technology Development and Technology Transfer’, Beijing, China, 7–8 November 2008

¹⁴⁶ See the Technology Executive Committee (TEC), see, <http://unfccc.int/tclear/tec>.

¹⁴⁷ See the Climate Technology Centre and Network (CTCN), see <https://www.ctc-n.org/>; more generally, see I Monterosa, ‘Technology Mechanism after Marrakesh – Enhancing Climate Technology Development and Transfer to Developing Countries’, CUTS International (2017).

is the policy ‘arm’ while the CTCN is the operational ‘arm’ of the TM. The CTCN promotes accelerated transfer of EST and has a number of capacity-building activities.¹⁴⁸ Together, the ‘arms’ of the TM serve the goals of the Paris Climate Change Agreement in relation to technology development and transfer. The TEC examines a number of issues, including climate technology financing and technology needs assessments.

101. With regard to financial support for transfer of EST, the Global Environmental Facility (GEF) is a partnership of 18 UN multilateral, national and other agencies.¹⁴⁹ The Financial Mechanism (FM)¹⁵⁰ for climate change forms part of the GEF. The Green Climate Fund (GCF),¹⁵¹ which specifically supports developing countries in addressing climate change mitigation and adaptation, was established by parties to the UNFCCC in 2010, as an operating entity under the FM.

(ii) Other treaties where transfer of technology provisions/conflict with performance requirements

102. A number of treaties contain relevant transfer of technology provisions. These include the Energy Charter (ECT)¹⁵² and several free trade agreements (FTAs)¹⁵³ and international investment agreements (IIAs). While Article 8 of the ECT aims to encourage dissemination of technology,¹⁵⁴ some FTAs and IIAs contain protections – often under Performance Requirements provisions – for investors against transfer of technology requirements.¹⁵⁵ Among these protective provisions, some contain exceptions which may make transfer of technology measures/requirements possible. Furthermore, there are several EST initiatives in Asia and elsewhere, which the Committee could consider studying.

(iii) Financing the transfer of environmentally sound technology

103. Among the areas for further improvement are the exploration of new means of financing the transfer of EST and the role of national investment funds in this respect. Large infrastructure and other cross-regional initiatives (such as projects funded by development banks and projects under the auspices of the One Belt One Road Initiative) can be areas where new models or means of transfer of EST may be actively explored. As the Chair’s Report at the G8 Summit of 2008 aptly sums it up, for example, ‘[D]eveloping countries need better access to finance to develop and deploy technologies, which should be explored through proposals such as how a New Paradigm could be developed to address technology transfer barriers.’ The Report goes on to state that ‘[T]echnology

¹⁴⁸ For information about the CTCN’s capacity-building activities from 2016 onwards, see <http://sdg.iisd.org/news/capacity-building-and-technology-update-cop-22-side-events-publications-address-role-of-technology-build-capacity-for-paris-agreement-implementation/>.

¹⁴⁹ See the Global Environmental Facility (GEF), <http://www.thegef.org/>.

¹⁵⁰ See http://unfccc.int/cooperation_and_support/financial_mechanism/items/2807.php.

¹⁵¹ See Green Climate Fund (GCF), <https://www.greenclimate.fund/home>.

¹⁵² Energy Charter Treaty and its Protocol on Energy Efficiency and Related Environmental Aspects, 17 December 1994, 34 *ILM* 360 (1995), as updated and consolidated through 2015 (ECT), <https://energycharter.org/process/energy-charter-treaty-1994/energy-charter-treaty/>.

¹⁵³ See US-Peru Trade Promotion Agreement, 12 April 2006, in force 1 January 2009, Article 10.9.

¹⁵⁴ ECT (n 152), Article 8.

¹⁵⁵ See Canada-Chile Free Trade Agreement, 5 December 1996, in force 5 July 1997, 36 *ILM* 1067, Article G-06.6 on ‘Performance Requirements’.

transfer needs redefining. It is not just a matter of transferring Intellectual Property (IP) or capital equipment, but involves know-how and capacity building, something market forces do not address. Countries are not currently tackling these issues fast enough.¹⁵⁶

104. In considering such a New Paradigm, given the ubiquity of supply chains in global trade, participants, who have been described as having the capability of being ‘force multipliers’,¹⁵⁷ can be important contributors to the transfer of EST to developing countries where businesses form part of such supply chains. In building and construction, UNEP has made 16 recommendations.¹⁵⁸ Lead supply chain enterprises – not just in building and construction – in requiring satisfaction of various ‘green’ standards and practices along their supply chains, can act as agents of EST transfer by providing training and knowhow to their downstream suppliers, such as in farming and manufacturing technologies.¹⁵⁹ For other means to finance the transfer of EST, see section B.2, at (iii) below.

B.2. Implementing the common goals through effective public-private partnerships: towards a green economy and sustainable development

105. A growing awareness of environmental threats in both the public and private sector has led the international community to consider how to ‘create a shared future in a fractured world’.¹⁶⁰ Following adoption of the Paris Agreement¹⁶¹ and the 2030 Agenda for Sustainable Development¹⁶² in 2015, both of which set out a vision to mitigate the effects of climate change, there has been a new integrated approach to all questions of international trade and development. The focus has been on a model of economic growth that is both environmentally sustainable and socially inclusive. As we have seen in the previous section, the transfer of EST or ‘green technology’ from developed to developing countries is an important element in mitigating climate change.

106. Through the formation of public-private partnerships (PPPs), multilateral governmental organizations have increasingly turned to the private sector for financing, business models and knowledge. The new hybrid version of cooperation at the multilateral level is not only the creation of states but also involves multilateral organizations and the

¹⁵⁶ Chair’s Report to the G8 Hokkaido Toyako Summit: Gleneagles-Dialogue on Climate Change, Clean Energy and Sustainable Development, <http://worldjpn.grips.ac.jp/documents/texts/summit/20080708.OBE.html>.

¹⁵⁷ Wharton Special Report, ‘Greening the Supply Chain: Best Practices and Future Trends’ (2012) <http://d1c25a6gwz7q5e.cloudfront.net/reports/2012-06-01-IGEL-Supply-Chain-Sustainability-LR.pdf>, 3.

¹⁵⁸ UNEP, ‘Greening the Building Supply Chain’, (2014); and UNEP, ‘Green Economy and Trade’, (2013), at <http://web.unep.org/greeneconomy/sites/unep.org.greeneconomy/files/field/image/fullreport.pdf>.

¹⁵⁹ For a discussion on the ‘greening’ of manufacturing supply chains, see UNEP, ‘The Role of Supply Chains in Addressing the Global Seafood Crisis’ <http://unep.ch/etb/publications/Fish%20Supply%20Chains/UNEP%20fish%20supply%20chains%20report.pdf>, 179–182.

¹⁶⁰ See the World Economic Forum (WEF) message ‘Strengthening Cooperation in a Fractured World’, which is changing to ‘Creating a Shared Future in a Fractured World’, available at <https://www.weforum.org/press/2017/09/world-economic-forum-2018-to-call-for-strengtheningcooperation-in-a-fractured-world/>.

¹⁶¹ Paris Agreement (n 44).

¹⁶² 2030 Sustainable Development Agenda (n 82).

private sector. The more auspicious policies towards ‘green technologies’ have become new attributes of the change in law and global policy-making. Governments have opened up to PPP, as a new source of funding, for the delivery of public services and a revitalized global partnership under Agenda 2030.

107. One of the key benefits associated with PPP and private sector involvement is the effect of transfer of technology on the improvement of public infrastructure, higher technical standards, knowledge and environmental protection. There is a growing recognition that the PPP is an appropriate mechanism for the transfer of EST, examples of which may differ depending on the extent to which the private sector is participating in the technology transfer arrangement and may include partnership relationships and other economic components.¹⁶³

108. The following paragraphs draw attention to different concepts of PPP and regulatory frameworks in the context of international law to explore how the emerging challenges of economic globalization, sustainable development and climate change have ‘globalized’ the PPP’s dimensions. The analysis of selected discussions about regional and developing economies, and current PPP trends, serve as examples of how the model is developing as a part of ‘green economy’ and development agenda. It also briefly touches on the financing PPPs, including the new role of multilateral development banks (MDBs) in financing ‘green’ for development.

(i) Public-private partnership as a multilateral model – rationale, main concepts, definitions and transformation

109. The term PPP is an old one but its current use underscores a new approach for governments to achieve global goals, accelerate green transition, mitigate greenhouse gas emissions and adapt societies to climate change by promoting the sustainable use of resources and development. The origin of PPP in the 1990s is closely connected with development issues and an international strategy that focused on economic growth that encouraged FDI and private-sector involvement in developing countries, led by institutions in the World Bank Group.¹⁶⁴ Accelerated scientific and technical development together with the evolution of information and communications technologies (ICT) required adaptation to new sphere of common interests. In the new global economic order public infrastructure was recognised as a key driver to strengthen economic growth. Due to the lack of basic infrastructure in various sectors (such as the utility sector, telecommunications, transportation and railways, distribution of water), finance and knowledge in developing countries, governments in those countries have been open to inward FDI.

(ii) The promotion of public-private partnerships at the multilateral and regional levels

110. The World Bank introduced the PPP model as a long-term contract between a private party and a government entity so as to provide a public asset or service, in which

¹⁶³ See UN Economic Commission for Europe (UNECE), ‘Public-Private Partnerships in Trade Facilitation’, ECE/TRADE/C/CEFACT, 2017/9 https://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_430E_Rec41.pdf, Recommendation 41, at 5–6.

¹⁶⁴ The World Bank Group consists of the International Bank for Reconstruction and Development (IBRD) or World Bank, the International Development Association (IDA), the International Finance Corporation (IFC), the International Centre for Settlement of Investment Disputes (ICSID) and the Multilateral Investment Guarantee Agency (MIGA).

the private party bears significant risk and management responsibility, and remuneration, is linked to performance.¹⁶⁵ PPP forms of collaboration between the public and the private sector through public procurement law or different types of contracts have emerged at national and regional levels.¹⁶⁶ The first relevant attempt towards strengthening cooperation between the public and private sector for sustainable development and the 'green economy' at the multilateral level came in 1992 in key documents at the UN – Rio Conference on Environment and Development (UNCED) and the UNFCCC. The major turning point towards PPP in the international community was reflected in the UN Millennium Goals Declaration (MDG)¹⁶⁷ and the Johannesburg World Summit.¹⁶⁸ It led to a wide variety of international institutions beyond the World Bank being involved in creating PPP models, including many institutions in the UN system such as UNCED, UNDP, UNCTAD, UNIDO, UNEP, and WIPO. While the WB model of a PPP seeks commercial advantage for private actors, the majority of UN models are focused more on partnerships through funding, donations and philanthropic support from private partners.¹⁶⁹ Despite different concepts and a variety of definitions the UNECE has identified some common characteristics of the PPP, namely (a) public service which is financed in part or in whole through private sector contribution, (b) a procurement process that allows the public sector to choose the private sector partner, resulting in a contract between the public and private sectors in which the risks are distributed, and (c) the fact that the private sector will seek to find a return on investment during the operational phase of the project.¹⁷⁰ The Organization for Economic Cooperation and development (OECD) has created a set of guidelines¹⁷¹ and developed awareness, concerning the training and funding of PPPs, which have inspired Mediterranean governments to use them in achieving low carbon economies.¹⁷²

111. According to selected regional and developing economy 'green' discussions on climate adaptation policy and engagements through PPP, the focus is increasingly on global partnerships between multilateral agencies and private sector aimed at overcoming market challenges, such as risk, competition, source-capital, services for investment dispute settlement, etc. through technical assistance, knowledge sharing, risk guarantees and so on. At the regional level, the Eurasian Economic Union (EAEU)¹⁷³ has followed the EU in

¹⁶⁵ See PPPKnowledge Lab, *The PPPs Reference Guide*, Version 3 (2017), <https://pppknowledgelab.org/guide/sections/3-what-is-a-ppp-defining-public-private-partnership>, 5.

¹⁶⁶ For contract types see *ibid.*, at 6–8.

¹⁶⁷ UN Millennium Development Goals (MDGs), <http://www.un.org/millenniumgoals/>; MDG 8 foresaw 'Global partnerships for development'.

¹⁶⁸ For the Johannesburg Summit Declaration and Action Plan, see Report of the World Summit on Sustainable Development, UN Doc. A/CONF.199/20*.

¹⁶⁹ B Bull and D McNeill, *Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism*, (2nd edn 2015), 8–12.

¹⁷⁰ See UNECE (n 163), Recommendation 41, at 6.

¹⁷¹ OECD Principles for Public Governance of Public-Private Partnerships (2012), <http://www.oecd.org/governance/budgeting/PPP-Recommendation.pdf>.

¹⁷² See for example, the ClimaSouth Project that covers Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia; for further details, see 'Success stories from both sides of the Mediterranean initiatives' <http://www.climasouth.eu/en/node/480>.

¹⁷³ EAEU is regional economic integration established on Treaty on Eurasian Economic Union. Currently the Member-States of the Eurasian Economic Union are Armenia, Belarus, Russia, Kazakhstan and Kyrgyzstan. See official web site at <http://www.eaeunion.org/?lang=en#info>.

adopting its PPP model. EAEU countries have committed to climate action and have submitted their pledges to the UNFCCC.¹⁷⁴ The implementation of the Astana Green Bridge Initiative (AGBI) 2010, initiated by Kazakhstan, approved by UNECE Committee on Environmental Policy and adopted as an outcome of the Sixth Ministerial Conference on Environment and Development for Asia, is another voluntary initiatives towards further cooperation towards a green economy within Europe, Asia and the Pacific.¹⁷⁵

112. In the Middle East where the effects of climate change have begun to dramatically impact on societies, the United Arab Emirates (UAE) has taken a leading regional role in the field of energy consumption. According to the UAE Green Agenda 2030 the lower costs, promotion of eco-friendly brands and role of education and knowledge play an important role in attracting the private sector. In 2016 the World Green Economy Organization (WGEO) with the United Nations Development Programme (UNDP) was established by UAE support in Dubai as a global partnership, created to facilitate and demonstrate innovative projects in technology and PPP transactions.¹⁷⁶

(iii) 'Green' financing initiatives for development – resources, mechanisms and alternatives

113. Transfer of ESTs is often a step forward in the development stage and not always commercially viable, which makes it both riskier and more expensive. The private sector can be a source of green finance while the public sector supports the cost gap between conventional and green investment through policy-support mechanisms, through arguably (in)consistent-WTO measures such as feed-in tariffs (FITs) and subsidies.¹⁷⁷ Developing countries can support PPPs through different instruments such as tax revenues, transfer assets, guarantees, or contributions that ease the partnership's functioning.¹⁷⁸ PPP projects involving financing from various sources (commercial bank loans for investments, contractual project financing with the issuance of bank guarantees, bond financing, and other financial instruments) can be used to guarantee projects or payments.¹⁷⁹ Recently, 'green bond' project initiatives have become an alternative way of financing infrastructure, as in the case of the 2010 joint initiative of the European Investment Bank (EIB) and the European Commission-Europe 2020 Project Bond Initiative (PBI 2020).¹⁸⁰

¹⁷⁴ See for further information about the EAEU, the Sustain Europe Focus Comment <http://www.sustaineurope.com/caeu-focus.html>.

¹⁷⁵ See Review of implementation of Astana Green Bridge Initiative, Economic and Social Commission for Asia and the Pacific, 7th session, 28 August 2017, UN Doc. E/ESCAP/MCED (7)/INF/2, http://apministerialenv.org/document/MCED_INF2E.pdf.

¹⁷⁶ The UAE Ministry of Climate Change and Environment (MOCCAE) UAE State of Green Economy Report (2017), slide 32, http://un-page.org/files/public/uae_state_of_green_economy_report_2017_0.pdf, at 62–66.

¹⁷⁷ 'The incremental cost gap between conventional and green investments needs to be justified and filled, especially at the earlier stages in technology development', World Economic Forum (WEF) Report at <http://reports.weforum.org/green-investing-2013/reducing-the-cost-of-capital-for-green-projects/>.

¹⁷⁸ See E Ahmad, A Bhattacharya, A Vinella and K Xiao, 'Infrastructure Finance in the Developing World, Involving the Private Sector and Public-Private Partnerships in Financing Investments: Public Opportunities and Challenges,' GGGI IG group of 24, Working Paper (2015), 7.

¹⁷⁹ See C D Ordóñez, D Uzsocki, and S T Dotji, 'Green Bonds in Public-Private Partnerships, International Institute for Sustainable Development', IISD (2015), 5–7.

¹⁸⁰ *Ibid*, 9–11.

114. A variety of multilateral, regional and sub-regional banks and institutions exist and have been created to provide funding and offer advice on development projects to support LDCs and development through for example longer term loans below market rates and donations. In 2012 The World Bank's Green Infrastructure Finance Framework Report (GIFF Report) was published to stimulate ESTs or investments in low-emission and climate resilient technologies, in East Asia¹⁸¹ but the financing model is easily replicable in other regions of the world.¹⁸² The GIFF Report provides a list of a wide range of additional windows within the World Bank Group that can be used to introduce tools and instruments to improve financial viability, such as the Climate Investment Funds (CIF)¹⁸³ and the Clean Development Mechanism (CDM).¹⁸⁴ In 2016, at the 14th UNDEP FI Global Round Table (GRT) held in Dubai, eleven UAE-based financial institutions and banks voluntarily confirmed their financial and overall support for a climate-resilient and sustainable economy.¹⁸⁵

115. In 2015, at the 3rd International Conference on Financing for Development in Ethiopia, the Addis Ababa Action Agenda (AAAA) was adopted to facilitate implementation of Agenda 2030. It is a global framework for financing sustainable development that supports financing policies according to economic, social and environmental priorities.¹⁸⁶ It recognizes PPP as a finance instrument to lower investment-specific risks at all levels and sub-levels of government.¹⁸⁷ According to the AAAA, the new UN Technology Bank for the LDCs was established and started to operate in September 2017. It is being financed by voluntary contributions from developed UN Members and other stakeholders, including the private sector and foundations. The UN Technology Bank is focusing on growing transfer of EST and related IP across the 48 poorest LDCs.¹⁸⁸

116. Despite considerable interest in PPP and its increasing proliferation and relevance, the concept is under-researched in international law. There are a plenty of multilateral legally non-binding frameworks and guidelines on PPPs but there is no universal model of law or definition of PPP, which is used in practice. In some cases, the UNCITRAL

¹⁸¹ World Bank, 'Green Infrastructure Finance, Framework Report', World Bank Studies (2012), <https://openknowledge.worldbank.org/handle/10986/9367> License: CC BY 3.0 IGO.

¹⁸² See A Baietti, 'Comments on Report by GGKP', available at GGKP <http://www.greengrowthknowledge.org/resource/greeninfrastructure-finance-public-private-partnership-approach-climate-finance>.

¹⁸³ The Climate Investment Funds (CIF) provides large-scale, low-cost, long-term financing to developing countries and middle income countries to accelerate climate action by enabling transformations in clean technology, energy access, climate resilience, and sustainable forests, <https://www.climateinvestmentfunds.org/>.

¹⁸⁴ The Clean Development Mechanism CDM allows listed countries with an emission-reduction commitment under the Kyoto Protocol to implement an emission-reduction project in developing countries; see for details World Bank Studies (n 181), 36–37.

¹⁸⁵ Dubai Declaration on Sustainable Finance, MOCCA (2017) (n 176), slide 32, at 62–63.

¹⁸⁶ The 193 UN Members attending the Conference unanimously reached agreement. The global deal was subsequently confirmed in a General Assembly resolution and adopted without a vote. See UN Doc. A/RES/69/313 (27 July 2017).

¹⁸⁷ *Ibid.*, paras. 10, 48, and 120.

¹⁸⁸ UN doc. A/RES/71/327, 21 September 2017.

Model Legislative Provisions on Privately Financed Infrastructure Projects of 2003¹⁸⁹ may serve as a basic legal framework to assist PPPs. Presently, the lack of a universal model law and the limits of financial resources, technology and regulatory instruments erode the potential and actual benefits arising from PPP transactions and transfer of ESTs, in the effort towards achieving the SDGs and a 'green economy'.

¹⁸⁹ Model Legislative Provisions on Privately Financed Infrastructure Projects, adopted by UNICTRAL, 7 July 2003, http://www.uncitral.org/pdf/english/texts/procurem/pfip/model/03-90621_Ebook.pdf.

SUSTAINABLE DEVELOPMENT AND THE GREEN ECONOMY IN INTERNATIONAL TRADE LAW

WORKING SESSION

Tuesday, 21 August 2018, 11.00am

Chair: Professor Toshiyuki Kono (Japan)

The Chair introduced himself and the three officers of the Committee: Professor Mary Footer as Chair, Professor Locknie Hsu and Professor Meredith Kolsky Lewis, as co-rapporteurs.

Professor Mary Footer (UK) began by explaining the mandate of the Committee and how it came into being. Prior to the Committee's establishment, a separate committee on international trade law existed, of which Professor Footer was a member. This committee was wound up in 2014, and left a question as to how the work of the committee would continue and in what form. One of the most pressing issues at the time was the relationship between the environment and international trade. These deliberations took place before the Paris Agreement and as the new Sustainable Development Goals ('SDGs') were being developed.

The Committee was therefore established in 2014 with a mandate to analyse and study how far the rules-based trading system supports open, fair and development-friendly trade, which is both socially inclusive and environmentally sustainable.

The Committee is also time bound. The report before the working session is the interim report, and the Committee's work will be concluded at Kyoto in 2020. Because of this, the Committee's mandate is split into four parts:

1. Trade related environmental issues in terms of the mutual supportiveness of trade and environmental measures, and environmental goods and services in the international trading system;
2. Climate and energy – which is perhaps the most important area – in the form of trade and green economy measures such as subsidies and TRIPs flexibilities concerning access to green technology and innovation;
3. Trade and agriculture with respect to fisheries subsidies and sustainable ocean and freshwater fisheries management. This also extends to forestry (although work is yet to be done in this area) and waste minimisation;
4. Trade and development, concerning trade and the transfer of technology to developing countries, and the interface of trade with sustainable water usage, sanitation and health.

Members of the Committee are allocated to each topic. The Committee has already held two meetings, at Kings College, Cambridge in 2016 and Geneva in June 2017, and will hold two further meetings in 2019 and early 2020.

Professor Footer continued by stating that she and Professors Hsu and Lewis would briefly summarise the Committee's draft interim report. She first acknowledged the members of the Committee who were in the audience, some of whom had contributed to the draft interim report. This included Professor Markus Krajewski, Professor Satoru

Taira, Professor Deok-Young Park and Professor Tania Voon. A number of Committee members were present, equating to approximately 30 per cent of the Committee's overall membership.

Professor Footer stated that the first part of the report concerns trade-related environmental issues. This picks up on the theme in the Doha Development Round Declaration, including the ideas of mutual supportiveness of trade and environmental measures. Further, the Preamble to the Marrakesh Agreement recognises the objective of sustainable development in the trading system. The extent to which there is mutual supportiveness can be assessed through an examination of case law in the World Trade Organisation ('WTO') and whether Article 31(3) of the Vienna Convention on the Law of Treaties has encouraged WTO panels to interpret trade obligations in a way that is consistent with environmental obligations.

Professor Footer emphasised that international trade is not confined to the WTO. The European Union ('EU') has developed a number of free trade agreements that include trade and sustainable development (TSD) chapters. These are constantly evolving and being scrutinised by the European Commission and other European bodies. The EU is more consistently engaged with the issues associated with trade and sustainable development than other regional institutions. Another EU priority is the Paris Agreement, which the EU both belongs to and believes in. It believes that trade measures should be consistent with the Paris Agreement.

Additionally, in the context of the first part of the report, one of the Committee members is dealing with environmental goods and services. One current development in this area is an agreement that is being negotiated under the auspices of the WTO (but not linked specifically to it); it will come in the form of a plurilateral agreement. The fate of this agreement is rising and falling with the political agenda of the day. Professor Footer indicated that she would be willing to take questions on this later.

Professor Meredith Kolsky Lewis (New Zealand) continued to introduce the Committee's draft interim report. The Committee had focused on the fact that one of the things that might be preventing countries from adopting environmental measures was fear of breaching WTO provisions, especially the Agreement on Subsidies and Countervailing Measures ('SCM Agreement'). It therefore intends to explore what can be done to make green subsidies consistent with WTO provisions, and whether Article XX of the General Agreement on Tariffs and Trade ('GATT') could be used as a defence to the violation of the subsidies discipline.

The questions arising from this include whether Article XX does apply; if not, whether it should apply; and if not, what other options could apply to make these policy choices WTO consistent.

1. It is the consensus of academics that Article XX does not apply, and the Committee agrees with this conclusion for a variety of reasons. This includes the fact that WTO agreements build-in Article XX type exceptions. However, this structure does not marry very well with implied exceptions being built-in to agreements where there is not an express reference to Article XX. Ultimately, the Committee thinks that the WTO panel would conclude that Article XX does not apply.

2. As to whether Article XX should apply, the Committee decides that it should not. It would be too great a stretch, given the intent of the drafters, and for the Appellate Body or a panel to reach this conclusion it would depart from normal analysis.
3. As to other options, the Committee considers that one is to give subsidies that are consistent with the SCM Agreement. For example, a subsidy that is available to all producers including foreign producers; giving subsidies to domestic consumers for consuming clean energy products, which would leave them open to choosing to consume foreign or domestic products. However, foreign governments would generally not be interested in implementing subsidies consistent with the SCM Agreement.

Alternatively, changes could be made within the WTO. These could include amending the WTO agreement and having a temporary waiver in place until the amendment takes effect. Other, less optimal options include adopting an authoritative interpretation of the SCM Agreement, negotiating a plurilateral agreement, agreeing to a moratorium on dispute settlement, and other ideas along those lines. Ultimately, the Committee currently believes that none of these options are ideal, but that amendment coupled with a waiver may be the most feasible option. Professor Lewis stressed that any suggestion of changing the WTO agreement would nonetheless be an uphill battle.

Professor Lewis then moved on to address another part, out of sequence, of the draft interim report – Part III, relating to fisheries subsidies. This part was drafted by **Dr Gregory Messenger (UK)** and **Stefan Amarasingha (Denmark)**. One of the challenges facing the Committee – on which the Committee is open to suggestions – is that there is a vast range of topics that it could address, but fisheries subsidies have been taken up based on the interests of Committee Members. Another reason for choosing fisheries subsidies is that they are currently the subject of the only multilateral negotiation taking place in the WTO. The WTO has been working on this since the Doha Round, and it remains a live issue.

The chief concern with fisheries subsidies is that they lead to overfishing and the depletion of fish stocks. The Committee is grappling with how to address this within the WTO framework, as the SCM Agreement is tilted towards altering the international playing field – that is, it advantages a country participating in the international market. Yet fisheries subsidies do not fit into this category; unlike other subsidies, they usually lead to increased domestic consumption and overfishing in the country's own waters, and this type of scenario is not squarely addressed by the SCM Agreement. There is an additional question of how fisheries subsidies interface with different organisations, such as UNCLOS and other United Nations ('UN') related agencies that have some jurisdiction in the space.

Professor Lewis also noted that, within the WTO the remit is not to address fishing, but instead to address fisheries subsidies. There are also a number of open questions within the WTO negotiations, including how harmful subsidies that need to be phased out should be characterised – either by their type or their effect – and what processes should be put in place to give due process to those who are affected by prohibitions that are placed on particular activities. Another significant issue relates to how the particularities

of developing countries should be taken into account without being to the detriment of sustainability.

The Committee recommends that the areas of focus be chosen from among these issues, and that the highest priority issues be suggested to WTO negotiators. In particular, they should: (1) stress that sustainability should be the overarching objective; (2) include other suggestions on how to streamline negotiations; and (3) emphasise that special and differential treatment should not be offered where it is at the expense of sustainability.

Professor Locknie Hsu (Singapore) went on to summarise the parts of the Committee's draft interim report relating to trade and development. The starting point is the TRIPS Agreement, due to sensitive debates about whether innovation is hampered if patents are not adequately protected. TRIPS has open-ended provisions (including Articles 7 and 8) that allow for some policy space in relation to the intellectual property issues facing developing countries, which potentially has a bearing on green technology. The Committee recommends that this policy space be retained, and should be taken up when bilateral and other non-WTO trade agreements are being negotiated. Other aspects of TRIPS that the interim report highlights include Article 73, which provides for security exceptions. However, this provision has yet to be ruled on by the WTO so there remain questions as to the extent of its coverage. Importantly, TRIPS does not have an equivalent to Article XX of GATT.

Other relevant provisions of the TRIPS Agreement include Article 66 paragraph 1, which provides for transition periods for least developed countries, and Article 66 paragraph 2, which obliges developed countries to provide incentives to enterprises to promote technology transfers to developing countries. Another area is the TRIPS-plus commitments, through which countries may impose requirements in free trade agreements (FTAs) that are greater than those imposed by TRIPS.

Professor Hsu then turned to discuss trade and the transfer of green technologies to developing countries globally. Certain mechanisms have been developed to facilitate this, such as provisions in the UN Framework Convention on Climate Change (UNFCCC). She also noted that FTAs will sometimes contain provisions that touch on the transfer of technology. However, these provisions are very often included in the investment chapter of the agreement in the form of performance requirements, obliging one country not to force the other to transfer technology to it. Some exceptions appear in these FTAs, and one area of study for the Committee may be to explore how to develop these exceptions further.

Professor Hsu also referred to the financing of environmentally sound technology. She stated that this may present a new paradigm for engaging with large infrastructure banks to impose standards for environmental technology transfer. They might also function as a force multiplier by allowing these technologies to permeate.

This part of the interim report also touches on the role of public-private partnerships ('PPPs') in technology transfer. PPPs are relatively new structures and governments are seeing advantages in using them for environmental projects, particularly in Asia. They are also relatively under-researched in international law, and the report provides some examples of PPPs and explores how they can be used to promote environmental transfer of technology to developing countries.

Professor Footer introduced the final part of the report, dealing with trade and development and the interface with sustainable development, water, sanitation and health. These are important issues for the mandate of the Committee but in light of recent political developments in the area of trade and development people can tend to lose sight of the SDGs. Goal number six (SDG 6), for example, provides for access to water and sanitation for all. Because of their relation to water and sanitation, these SDGs also interface with human rights, for example the right to a healthy environment and water. These themes will be further developed by the Committee in the second part of its mandate, before the Kyoto Conference, as will the climate and energy sides of the Committee's work.

The interim report highlights the tension that exists between the liberalisation of trade and environmental law. This raises questions of how to make government procurement more sustainable, and how to deal with states that are party to the Agreement on Government Procurement or other procurement instruments. Generally, this will involve looking at the extent to which sustainable development and environmental chapters in trade agreements are taking into account water, sanitation and health, as well as the scope of these chapters and any exemptions. Professor Footer noted that this also links to other policy areas – and their interface with sustainable development more generally.

The Chair thanked Professor Footer and opened the floor to questions.

Professor Marie-Claire Cordonier-Segger (Canada) stated that she is very interested in the work of the Committee and is currently involved in a study that involves mapping regional trade agreements to the SDGs, which has produced some interesting results. In light of this, and noting that the other Canadian member had left the Committee, she asked whether it would be helpful for her to join the Committee. Professor Footer agreed, stating that all contributions are appreciated.

Professor Michael Hahn (New Zealand) congratulated the Committee on their work on the report, and encouraged it to consider investigating whether international subsidies without provisions on environmental subsidies are unsustainable, and to consider possible solutions. These may include revising Article 8 of the SCM Agreement, over authoritative interpretations, waivers, and declarations. There is WTO practice available as precedent that shows how to adapt static WTO law to urgent concerns.

Professor Hahn also pointed out that the sanitation aspect of the SDGs is particularly interesting, perhaps more so than fisheries, and of great concern to large parts of the world. He suggested that it would be helpful to explore whether or not trade is conducive to achieving some of the SDGs.

Professor Lewis agreed with Professor Hahn's first comment, stating that this would definitely be an option for the future work of the Committee over the next two years.

Professor Tania Voon (Australia) raised three queries: first, could Article 8 of the SCM Agreement be revived without an amendment, by agreement, and would this be a useful step? Secondly, could Article XX of the GATT be applied through an interpretation, and would this be useful? Thirdly, would the application of Article XX of the GATT to the SCM Agreement affect countervailing measures? Could a subsidy justified under Article XX be countervailed?

Professor Lewis responded that reviving Article 8 of the SCM through agreement involves the question of whether removing the time limits on an article would count as an amendment or not. As to Professor Voon's third question, she indicated that the Committee had not gone down this track, but another Committee member had raised the question of whether an affirmative right could be waived.

Professor Markus Krajewski (Germany) queried whether the Committee should make a proposal for amendment to the WTO Agreement, as it appears that negotiations on WTO agreements are currently not moving anywhere. Suggestions for interpretation, jurisprudence, waivers or new FTAs should be formulated instead, as this is an area where innovative development is taking place.

Professor Lewis responded that the Committee should think of feasible proposals to make that are not simply academic. There is obviously room for innovation on FTAs but it may be challenging with respect to subsidies since there are free-riding issues associated with Members.

Professor Hahn agreed with Professor Krajewski, and emphasised that the law needs to be changed because green subsidies in their current state are unsustainable. The Committee could play an important role in raising these issues.

Professor Footer noted that these issues form part of the second major part of the Committee's mandate (climate and energy). Subsidies and TRIPS is one of the areas that the Committee will focus on in the next 24 months as there is still much work to do. At the next two meetings, the Committee will discuss what should be achieved, with the aim of coming to Kyoto with recommendations. The political climate at the moment is not amenable to trade or climate-related issues, so the Committee will have to be strategic in its approach.

Professor Lewis queried whether the Committee should narrow the scope of its mandate to enable it to focus in more detail on certain issues, or whether it remains important to acknowledge a range of issues.

Professor Footer responded that the mandate of the Committee should be kept sufficiently broad because some of the Committee's members are working on the private law aspects of sustainable development, green economy and technology transfer. Therefore, it cannot afford to narrow its scope, particularly since there are a variety of trade issues that need to be addressed (including the relationship of trade with food security).

She acknowledged that the Committee is in a difficult position, because the Doha Ministerial Round is essentially dead. However, there are still important issues, such as food security and developing countries, that governments are not interested in dealing with and that the Committee needs to address if it is to have any relevance.

Professor Krajewski queried whether there could be a middle ground. The Committee should not comment on issues that are already being discussed. It should focus on cutting-edge issues, yet it could still deal with the generic issues briefly.

Professor Footer agreed with this statement, and added that the new focus on private international law will be an important part of this.

The Chair asked whether the Committee will be expected to submit a report earlier than anticipated if it wishes to go in the direction of adopting a recommendation.

Professor Footer agreed, yet noted that the Committee has two further meetings in the near future (in the middle of 2019 and early in 2020), which will allow it to finalise the next report if it wishes to draft a new resolution.

Professor Krajewski queried the importance of drafting an ILA resolution, given their technical nature, and whether a report would suffice.

Professor Footer responded that it is the current practice of the organisation to have a resolution to wind up the Committee, which will state what it has achieved and to make proposals or recommendations. It should be recalled that ILA resolutions are not the same as Declarations, which a Committee can, but is not required to, adopt either during its existence or upon completion of its work.

This Committee has a different mandate, and occupies a different world to its predecessor where the number of multilateral trade agreements was increasing and there were strong moves towards integration. The decision of the US to pull out of the Paris Agreement, in particular, challenges the robustness of multilateral trade agreements. Ultimately, the trade-related challenges faced today will not disappear over the next 24 months. Thus, the Committee's work is currently more involved in a stock-taking exercise, with potential recommendations, if thought necessary.

Professor Giovanna Adinolfi (Italy) queried how trade and sustainable development issues should be tackled within different FTAs, and whether there is a risk of losing a common and consistent approach.

Professor Footer responded that she had not thought about this issue, and that it should be considered in greater detail. This is particularly so because the Doha Ministerial Round has ended and therefore development issues have been left unaddressed. There is a question now of whether those issues will be dealt with regionally or abandoned altogether.

Professor Hahn added that he did not think that these issues had been abandoned.

Professor Footer acknowledged that these issues do emerge when the EU develops its trade and sustainable development chapters in its FTAs. There is a question of whether this also occurs in other contexts, for example in the Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP).

Professor Hahn responded by suggesting that the Committee could look at China's Belt and Road Initiative.

Professor Krajewski challenged whether the end of the Doha Development Agenda should make a difference, since this occurred 12 years ago. The topic of trade and development will always be a topic in the multilateral system.

Professor Footer agreed with this comment, yet added that the question still remains as to whether the debate has moved to the regional level or on to other areas.

The Chair thanked the Committee members and audience, and closed the working session.

Reporters: Georgia Pick and Rose Vassel.