#### **Chapter 4**

# WTO Reform: A Forward-looking Agenda on Environmental Sustainability

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#### 4.1 Introduction

As the WTO approaches its 25th anniversary in 2020, discussion of a reform agenda is taking centre stage. This chapter argues that environmental sustainability warrants a prominent position in any WTO reform agenda, especially in light of the UN's Sustainable Development Goals (SDGs).<sup>1</sup>

At present, deliberations on WTO reform have two main intersecting streams: the first considers what the substantive forward-looking agenda of the WTO should be (primarily in terms of the topics for negotiation); and the second looks at how the multilateral trading system's institutional design and processes could be improved.<sup>2</sup> Proponents hope that a WTO reform agenda may mitigate uncertainty about the WTO's future, address systemic challenges and make the organisation more relevant and 'fit for purpose'.

Calls for WTO reform are not new;<sup>3</sup> they have arisen in the wake of each successive crisis in WTO negotiations.<sup>4</sup> Environmental advocates have been at the forefront of such calls since the WTO's first days. Environmentalists, for instance, led the charge for improved transparency of WTO negotiations and dispute settlement and spurred many governments to take more seriously the need for stakeholder participation in domestic trade policy-making processes. Since 1999, failed efforts to launch a Millennium Round of negotiations at the Seattle WTO Ministerial have served as a reminder of the power of environmental constituencies to alter the political feasibility of new trade deals.

Over the subsequent 20 years, the economic relevance and environmental urgency of sustainability considerations has grown enormously. Mounting alarm about the pressing need for more concerted action to meet the Paris Agenda climate goals, environmental crises on multiple fronts, growing evidence that earth's 'planetary boundaries' are already being surpassed, and the UN's 2030 Sustainable Development

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Agenda all underscore the need for a more environmentally sustainable and resilient global economy.

The quest for greener global markets has clear trade and commercial dimensions. New business opportunities linked to a more sustainable global economy are estimated to reach US\$12 trillion or more by 2030 (Business & Sustainable Development Commission, 2017). Global trade in environmental goods alone is projected to reach US\$2–3 trillion by 2020. In addition, a range of international organisations have published reports outlining ways that the green economy could boost employment opportunities through green jobs, revitalize ailing economic sectors and regions, and aid progress on development, inclusiveness and poverty reduction.<sup>5</sup>

Although many companies continue to lobby to weaken or limit the scope of environmental legislation, many business leaders have rightly concluded that their long-term commercial success is intrinsically linked to sustainability considerations, such as ensuring reliable access to natural resources, reducing exposure to environmental risks, including climate-related natural disasters, and minimising reputational risks that can flow from poor environmental performance (Whelan and Fink, 2016). Already, a growing number of the world's largest businesses are working to improve the sustainability of their global value chains and to respond to growing demand for more sustainable consumption options. Environmental pressures on business to decarbonise, integrate environmental considerations across the life cycle of goods and services (from extraction to production, distribution and disposal) and promote 'circularity' (where businesses models better design, recover and reuse resources for maximum use throughout their production processes) (Circle Economy, 2019) each also have implications for trade officials charged with designing coherent trade policy frameworks (Yagamuchi, 2018).

In good news, there is now broad recognition in both the trade and environmental policy arenas, that trade and investment flows, rules and policies can both exacerbate environmental challenges and support environmental protection. The leaders of the WTO and the UN Environment Programme (UNEP) each argue, for instance, that greater coherence between trade and environmental policy-making is vital for boosting sustainable trade<sup>6</sup> and for promoting innovation and markets in sustainable goods, services, technologies and business models. From across the spectrum of the WTO's membership, senior trade officials regularly highlight the role that trade must play in advancing progress on the SDGs, which include numerous trade-related goals, targets and indicators. Building on such statements, the time is ripe not only for renewed political attention to the trade–environment interface but also for updating the trade–environment agenda to 'see and treat the economy and environment as one' (Bacchus, 2018).<sup>7</sup>

In terms of the current WTO reform discussion, both the European Union and Canada have circulated papers that refer to the importance of sustainable development. The EU, for instance, argues that a modernised WTO needs to address the sustainability objectives of the global community. The fact that sustainable development is already on the table provides a further basis from which to strengthen the linkages between the need for WTO reform and a more prominent environmental agenda.

And yet, despite the clear imperatives for action, environmental priorities do not yet have the prominence they deserve with regard to either the substantive or the institutional aspects of current WTO reform discussions. To date, aside from ongoing efforts to conclude WTO negotiations on fisheries subsidies in 2019, few concrete recommendations have been advanced on how a WTO reform process could be harnessed to help advance the many environmental dimensions of the SDGs, or, indeed, any other environmental issues at all. Further, on WTO reform, as on WTO agenda-setting more broadly, the voice of the smallest and poorest countries that most urgently need action on trade opportunities, as well as on the SDGs and environmental challenges such as climate change, is missing.

Nonetheless, growing interest in a WTO reform agenda offers an opportunity to take stock of the trade–environment agenda in light of wider sustainable development goals, reinvigorate strategic thinking on how address long-standing environmental priorities, update the trade–environment agenda to reflect new and emerging sustainability concerns and opportunities, and set priorities. More focused attention among trade officials to key global environmental priorities may also provide a much-needed lever for building public support for a rules-based multilateral trading system and for re-energising negotiations.

This chapter aims to spur discussion on priorities for a forward-looking environmental agenda on WTO reform. The first part reviews the evolving trade and economic policy landscape, the evolution of tensions on the trade–environment interface and the current state of play on environment at the WTO. Drawing together an otherwise fragmented picture, the second part of the chapter takes stock of the broad range of trade-environment concerns as well as proposals and perspectives on how the WTO could better promote environmental sustainability. The chapter concludes with a set of specific recommendations for institutional improvements.

## 4.2 The evolving context and state of play on trade and environment

#### Evolving global trade context

Central among the factors contributing to revived interest in WTO reform is the widespread view that multilateral trade rules must be updated to respond to the evolving global trade context, 21st century economic realities, and pressing global challenges. <sup>10</sup> Strategic discussion of a future environmental agenda on trade must reflect ongoing changes in what is traded and among whom, as well as future trade trends.

The past three decades have seen tremendous growth of trade overall, and especially growth of trade in commodities and services (now representing more than a quarter of the value of world trade). This growth has been coupled with the expansion of logistics, shipping and airfreight industries, and increasing links between trade and investment flows. Since the Uruguay Round established prevailing WTO rules, the way trade happens has changed considerably, with important environmental implications. Together, the integration of supply and production networks through

global value chains (GVCs) and the rise of the digital economy have changed how many goods and services are produced and delivered around the world (WEF, 2018; WTO, 2018b, McKinsey & Co, 2016). The growing role in the global economy of new technologies – such as the Internet of Things, 3D printing, Artificial Intelligence, blockchain and big data – is transforming the context for trade policy-making, while also generating new environmental opportunities and challenges. Further, the top issues on the trade negotiation agenda increasingly intersect with decision-making at the border (such as on customs and trade facilitation) and 'behind the border' by national legislators, government agencies, regulatory authorities and courts, including on environmental matters.

Meanwhile, the economic dynamics and geo-political context for trade negotiations, including on environmental questions, has been complicated by the rise of developing countries' share of world trade in terms of both exports and imports; the growing role of China and emerging economies; the expansion of South–South trade; the retreat of the United States from leadership on trade; and the recent spate of tariffs imposed by the world's largest trading powers.

#### Trade and environment: An evolving debate with enduring tensions

In the 30 years since public concerns propelled 'trade and environment' into the global political and media spotlight, the range of issues on the table has expanded, the number of engaged stakeholders has grown, and the priorities, strategies and diversity of actors have evolved considerably. Despite initial resistance from most trade negotiators – especially from developing countries fearful of an environmental agenda dominated by Northern civil society groups – there is now broad acknowledgement that international trade rules and policies are directly and deeply relevant to environmental performance. In addition, this is growing understanding among trade officials that environmental considerations will increasingly impact commercial and trade prospects.

The potential and need for trade, environment and sustainable development to be 'mutually supportive' is now routinely integrated into numerous international declarations and high-level statements, <sup>12</sup> and is also reflected in repeated appeals to pursue win-win opportunities on trade and environment. <sup>13</sup> In 2018, the titles of two WTO publications – *Making Trade Work for the Environment, Prosperity and Resilience* (WTO and UNEP, 2018) and *Mainstreaming Trade to Attain Sustainable Development Goals* (WTO, 2018a) clearly convey recognition of the importance of greater coherence.

Recognition, however, falls far short of consensus on priorities or on concrete actions required. Faced with competitiveness concerns, pressing development priorities, pressures to promote economic growth and political shifts towards populism, governments continue to spar over which are the critical environmental priorities, who should be empowered to decide, how to share the economic costs of environmental action (and of failures to act), and the extent to which trade rules should be put at the service of environmental goals.

Underpinning these debates are a set of long-standing trade-environment tensions – most centrally those related to apprehensions that environmental measures can

disguise protectionism, distort trade, and limit market access. In particular, developing countries frequently express concern that sustainability requirements in importing countries can hamper the success of efforts to boost value-added production and exports, deemed vital to local development prospects. Recent trade disputes highlight the enduring relevance of arguments about the efficiency of trade measures as a means for achieving environmental goals and the challenges associated with crafting trade-related environmental measures that adhere to trade rules.

More broadly, there are ongoing debates about the most effective processes for cooperation on environment and trade matters, and which level of governance national, bilateral, regional or multilateral - is most appropriate. Although few dispute that key to success on environment-trade intersections is the strengthening of environmental laws, institutions and enforcement at the national level, questions abound about the 'right' trade policy solutions where national and international responses to shared environmental problems flounder. Further, frustration with traditional modes of global governance and policymaking on both trade and on the environment - has spurred a rising emphasis on citizen- and industry-led initiatives, private-public partnerships and 'bottom-up' solutions by cities, such as on climate change. On fisheries, trade-related instruments are being deployed at the regional level by fisheries management organisations and in multilateral environmental agreements.<sup>14</sup> Such examples have prompted calls for refocusing trade-environment efforts on 'bottom-up solutions through local and regional partnerships...' while supporting and linking these together through 'conducive, enabling international rules and frameworks' (Bacchus, 2018).

Finally, many environmental activists point to more profound tensions between sustainability imperatives and business as usual on trade policymaking, arguing that environmental imperatives demand a systemic transformation of the global trading system (FOE, 2018). The Our World Is Not For Sale global network of civil society groups, for instance, describes existing trade agreements as mercantilist exercises dominated by big business interests that entrench a model of capitalism – and associated investment, production and consumption patterns – that are fundamentally at odds with ecological sustainability (OWINFS, 2014, 2015). Amidst growing array of environmental crises, the cumulative scale effects of current economic models and the demands of an expanding global population, there is little doubt that protecting the environmental for future generations will demand difficult trade-offs, innovation, and radical changes in consumer behaviour, business strategy, and economic policymaking, with numerous implications for trade policy and rules as well.

#### State of play on trade and environment at the WTO

At the WTO, there are some encouraging signs of progress on the environment. The breadth of the WTO's engagement on environmental matters is expanding, as is the array of environmental topics under consideration.

A select set of environmental issues features on the WTO's current negotiating agenda and in recent years Members have made formal submissions on a number of trade-environment issues, including fisheries subsidies, environmental goods, fossil

fuels, intellectual property and genetic resources, and climate change adaptation. The WTO's Committee on Trade and Environment (CTE) has a regular agenda of mandated environmental topics for discussion<sup>15</sup> and also facilitates information sharing on an array of environmental topics beyond those formally on the table for discussion or negotiation.<sup>16</sup> In addition, a growing range of environmental topics also arise in other WTO Regular Committees (such as those charged with Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS)), negotiating sessions (e.g., some aspects of agricultural negotiations focus on environmental questions) and informal consultations (such as on fossil fuel subsidies). Meetings of the SPS Committee, for instance, cover a range health and safety measures that have environmental dimensions, such as those that restrict imports of biotech products and food bans (WTO, 2018d).<sup>17</sup> Environment issues are also the focus of WTO processes for notification of environmental standards, 18 and routinely arise as a subject of WTO training, capacity-building and Aid for Trade (such as to build capacity to meet environmental standards), 19 as well as research and ad hoc workshops.<sup>20</sup>

On the other hand, environmental advocates are rightly concerned about the slow pace of progress in the WTO on many longstanding trade-environment issues (such as environmentally-harmful subsidies and sustainable agriculture) and stress the need to update the WTO's environmental agenda (particularly on critical environmental challenges such as climate change).

Rooted in negotiations conducted over 25 years ago, the WTO's existing environmental provisions reflect political compromises on what environmental issues warranted attention and how.<sup>21</sup> Even on issues that have been on the WTO negotiation agenda since 2001 - such as fisheries subsidies in the rules negotiations - concrete solutions remain elusive, meaning that no practical benefit to the sustainability of the world's increasingly threatened fish stocks has emerged.<sup>22</sup> Similarly, negotiations to address the relationship between the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Convention on Biological Diversity (an issue of particular importance to developing countries) have not produced concrete outcomes. Widely hailed efforts to open trade in environmental goods and services have stalled. Interest in addressing the environmental dimensions of trade in services, agriculture and industrial products, weak to begin with, has dwindled along with the Doha negotiations on those topics. Meanwhile, both the environmental impacts of trade (such as scale effects) and the market access impacts of environmental measures are poorly understood, in large part because there is little by way of systematic assessment or reporting on tradeenvironment intersections at the WTO.

Although the track record of WTO dispute settlement proceedings has put to rest some of environmentalists' worst fears about WTO jurisprudence trumping or chilling national environmental regulation,<sup>23</sup> WTO rulings (such as on consumer labelling initiatives and national policies relevant to climate changes) prompt continuing calls to update and clarify trade rules to reflect pressing environmental

imperatives. Meanwhile, the clean energy industry is subject to an escalating number of retaliatory trade remedies at the WTO.<sup>24</sup> In 2018, China's ban on imports of non-industrial plastic waste (two thirds of the world's plastic waste had previously been shipped to China for recycling) was raised for discussion in the WTO's TBT Committee (WTO, 2018f) and is poised to renew wider debate on the opportunities, challenges and efficacy of using trade policy tools to advance environmental objectives, whether at the national level or in international environmental agreements (Grosz, 2011).

# 4.3 Updating the WTO trade and environment agenda: Taking stock

Priority setting on an environmental agenda on WTO reform demands a clear overview of the breadth of the trade–environment policy challenges and opportunities WTO members will face over the coming decade. Not every trade–environment issues demands or warrants multilateral attention at the WTO. Some issues may warrant inclusion on the WTO negotiation agenda, while others may benefit from attention through the WTO's other functions, such as through notifications, research, or a boosted WTO role in facilitating policy dialogue and assessment. Some issues may be more productively pursued through other international processes, while a focus on stronger policy action and coordination at the national or regional level would be most effective for others. Further, some trade-environment topics may be more swiftly addressed outside the policy-making arena through practical initiatives and partnerships led by business or civil society.

The following discussion takes stock of the range of issues that could form part of an updated and forward-looking trade and environment agenda at the WTO.<sup>25</sup> Importantly, the review is not limited to trade-environment topics already accepted by WTO members as worthy of attention or that arise in the context of WTO deliberations, but also steps back to consider proposals and ideas present in wider trade-environment discussions beyond the WTO. The review clusters tradeenvironment issues in five categories: 1) well-established topic-based negotiations; 2) long-standing cross-cutting issues of enduring relevance but in need of updating; 3) critical, established global environmental priorities; 4) vexed, neglected and (re)emerging topics; and 5) proposals for bolder, more systemic rethinking due to shifts in economic dynamics, technological trends as well as new environmental approaches. The review starts with topics that have the greatest 'maturity' in the WTO setting – namely those that already have a place on the agenda of WTO negotiations and committees, but this does not reflect an assessment of priorities in terms of urgency, the prospects of political success, or potential environmental pay-offs. Looking ahead, there are clearly strategic choices to be made about priorities in terms of where the environmental impacts or gains might be greatest, and how much to target 'lowhanging fruit' that could produce immediate environmental benefits versus more vexed trade-environment issues where positive environmental outcomes may be more significant but take longer to achieve.

#### Well-established and ongoing negotiation topics

• Concluding negotiations on fisheries subsidies. At the 2017 Buenos Aires Ministerial Conference (MC11), ministers decided on a work programme to conclude negotiations on WTO disciplines on fisheries subsidies launched in 2001,<sup>26</sup> with the goal of adopting an agreement at the 2019 WTO Ministerial Conference (MC12) that delivers on the multilateral commitment made in the SDG 14.6.<sup>27</sup>

• Negotiations on environmental goods. Over two years have lapsed since governments failed to conclude a plurilateral deal to eliminate tariffs on certain environmental products at the WTO. Although there are ongoing debates about definitions, methodologies, the appropriate scope of the negotiations, and the scale of anticipated environmental benefits, a number of participants in the negotiations say they remain fully committed and ready to re-engage when conditions are appropriate.<sup>28</sup>

#### Long-standing cross-cutting issues of enduring relevance

A number of long-standing crosscutting trade-environment issues warrant a fresh look and updating as part of a forward-looking agenda:

- WTO, MEAs and international standards. The relationship between WTO rules, MEAs, and the specific trade obligations some include have been on the WTO agenda in various forms since its creation, as has the status of international environmental organisations. From an environmental perspective, the underlying objective has been to ensure trade rules do not trump MEAs or trade-related provisions taken to implement them. In recent years, calls for trade benefits to be conditioned on ratification and implementation of certain MEAs, such as the Paris Agreement on climate change, signal that the 'old' issue of MEA-WTO linkages may re-emerge.<sup>29</sup> In addition, as the focus on environmental standards in the global market place grows, we can also expect greater scrutiny of international standards and standard-setting processes, particularly those referred to in WTO dispute settlement proceedings.
- Trade rules and environmental measures. A long-standing environmental priority on trade has been to ensure trade rules (such as on TBT, SPS, subsidies and government procurement) do not prevent, weaken or discourage governments and stakeholder groups from adopting and enforcing standards and other measures to protect the domestic environment. Although the environmental impacts of trade agreements are widely assessed in terms of the trade flows of international goods and services, their environmental impact is increasingly found in how they shape domestic regulatory environments, along with the organisation of production and consumption. While the expanding array of voluntary, private environmental standards has long been a focus of trade-environment discussions at the WTO, growing pressures on governments to be more active on environmental product standards and labels are likely to spur renewed discussion of the WTO's rules on labelling. Similarly, the trade implications of growing efforts by governments to use taxes and government procurement to advance environmental goals will also raise their profile as key trade-environment issues.

- Regulatory cooperation and the environment. As international trade negotiations increasingly focus on smoothing regulatory differences to reduce business costs, closer scrutiny of domestic regulation can be expected. This in turn is likely to reignite debate on how to balance efforts to strengthen regulatory cooperation with concerns for sovereignty, democratic decision-making by national legislatures, and the 'right to regulate' as well as different national preferences with regard to ethical concerns, environmental and health risks, the use of scientific evidence, and the precautionary principle.<sup>31</sup>
- 'Like products' and production and process methods (PPMs). Private environmental standards and voluntary labelling initiatives place growing emphasis on differentiating 'like' products based on the sustainability of production and process methods. Both consumers and governments alike are asking more questions about the sustainability of goods and services on matters as diverse as the carbon footprint of products, the greenhouse gas emissions of production, the amount of water used, product design, the amount of recycling of industrial materials used, the cost of cleaning up-related pollution, and packaging. This growing spotlight on production and processing methods, along with pressures for greater policy measures to promote greener global value chains, provide strong reasons to consider whether and how trade rules may need updating (Vogel, 2009). In the trade policy arena, efforts are already underway to promote coherence among schemes to minimise consumer confusion and market access barriers (particularly for developing countries), explore how some standards could create new market access opportunities, especially for developing countries (Lernoud et al, 2017; UNFSS, 2018), and encourage greater transparency and input from developing countries and the public.
- Dispute settlement and environmental protections. Here, a key focus of environmental groups is to ensure dispute settlement proceedings do not override national environmental laws or 'chill' environmental law making and implementation by reducing the scope or perceived scope to develop and apply environmental standards for products and services. Although many trade experts consider that legal questions related to the interpretation of Article XX exceptions in WTO Agreement have been settled, as new disputes arise we can expect continued discussion of how WTO rules can strike the balance between core WTO principles, such as non-discrimination, and environmental imperatives, as well as on the interpretation of WTO rules by the WTO's Appellate Body and possibilities for more cooperative approaches to dispute resolution on trade-environment issues.
- Trade barriers, liberalization and the environment. Key issues at hand include the environmental impacts of the recent spate of new tariff barriers, as well as the environmental efficacy and WTO compatibility of environment-related export restrictions and import bans. In terms of liberalization, the potential environmental gains from removing trade restrictions and distortions continue to merit focused attention. Key proposals at hand include trade liberalisation to boost flows of more innovative, environmentally beneficial goods or services, as well as the removal of measures, such as certain subsidies, that are both

trade distorting and that protect or support industries with environmentally harmful production/processes. A key challenge for discussions on stronger WTO disciplines on environmentally harmful subsidies is to adequately address development considerations, particularly for small-scale producers.

- WTO and Regional Trade Agreements (RTAs). The proliferation of regional, bilateral and plurilateral trade agreements has yielded a diversity of environmental provisions, which in turn signal an evolving set of environmental possibilities for the WTO. We can anticipate ongoing efforts to discern what lessons RTAs may provide for WTO negotiations and rules (Monteiro, 2016; Morin, 2018). The recent Canada-EU Trade Agreement (CETA) has the most comprehensive and innovative environmental chapter to date, as well as a chapter on trade and sustainable development, along with numerous environment-related provisions in other chapters. Despite important reservations from some environmental groups, the CETA is widely viewed as a new benchmark for future environment-trade efforts.<sup>32</sup>
- Assessment. Despite a flurry of *ad hoc* activity around Sustainability Impact Assessment in the early years of the Doha Round, there is no routine process in the WTO for assessing the environmental impacts of trade and investment flows, rules and policies or how trade rules address environmental goals,<sup>33</sup> and there are no mechanisms for systematically integrating such evidence into trade and investment decision-making processes. Efforts to monitor implementation of the UN's 2030 Agenda will add to political pressures on assessment.

#### Critical, established global environmental priorities

- **Progress on the SDGs.** A broad range of stakeholders and governments regularly appeal to the need for trade flows, rules and policies to contribute to the achievement of the SDGs. SDG 17 Partnerships for the Goals recognises trade as a means for implementation of the 2030 Agenda as a whole, and gives the WTO a clear role in promoting a 'universal, rules-based, open, non-discriminatory and equitable multilateral trading system.' In addition, specific SDGS are routinely cited at the WTO to build the political case for action on particular negotiating topics and proposals (Bellmann and Tipping, 2016). Specific environment–trade-related goals and targets in the SDGs include those related to fisheries and fossil fuel subsidies, for instance, as well as hunger, sustainable consumption, healthy oceans, <sup>34</sup> and illegal wildlife trade. <sup>35</sup> There are also efforts to harness Aid for Trade efforts to advance the SDGs and to engage the WTO in monitoring and reporting on progress (Tipping and Wolfe, 2015). To date, however, endorsements of the SDGs in the WTO context are yet to be matched by the range of concrete, practical actions that their achievement will demand. <sup>36</sup>
- **Disciplining fossil fuel subsidies.** SDG 12 includes a target to rationalise inefficient subsidies that encourage wasteful consumption. At the 2017 WTO Ministerial Conference in Buenos Aires, a group of 12 countries issued a Ministerial Declaration on Fossil Fuel Subsidy Reform (see Norway in Geneva, 2017), arguing that the WTO has a role to play as a forum for advancing negotiations on disciplines to

phase out subsidies offered for the production and consumption of fossil fuels, and through enhanced transparency and reporting. While opponents insist the WTO is not the appropriate venue to discuss climate matters, some delegations do support information sharing and discussion of the many methodological issues in the WTO's CTE.<sup>37</sup> Meanwhile environmental advocates are focused on consolidating political will and discerning the most effective modalities for addressing fossil fuel subsidies reform through trade disciplines.

**Wider climate action.** While many governments fear that climate action in the WTO arena could threaten their competitiveness, pressure is mounting. In addition to action on fossil fuel subsidies, stakeholders and governments have made numerous proposals on other ways in which trade and trade rules could assist climate change mitigation and adaptation and also facilitate more emissions-efficient production. These include proposals on the liberalisation of products with climate benefits (including but not limited to clean and renewable energy technologies); carbonpricing, including through emissions trading regimes, border taxes and other border carbon adjustments; trade-related transportation emissions; energy policy (such as proposals on a Sustainable Energy Trade Agreement and on biofuels); carbon passports; consumer-facing policy instruments such as labels, information campaigns and regulatory standards that differentiate products based on carbon footprints; and unilateral actions at the national level to restrict carbon emissions. Small island developing states (SIDS) have also highlighted the particular traderelated challenges they face in the context of climate change and extreme weather events, such as with regard to their tourism sectors.

#### Vexed, neglected, and (re)-emerging trade-environment topics

A number of trade-environment issues have been under discussion for many years, or even decades. In the case of some 'vexed issues,' a combination of complex technical challenges, divergent interests and/or political differences frustrates efforts to achieve solutions. Many trade-environment topics are relevant to more than one WTO Agreement, intersect with other trade-environment challenges, and have development dimensions, all of which are difficult to address in the context of long-established silos of WTO agreements, negotiating sessions and committees. Some new topics are emerging, although many of these represent updated versions of long-established trade-environment topics. Meanwhile, some important enduring trade-environment tensions continue to be neglected; they are routinely sidestepped, ignored or deferred for attention in other venues or at some future time. In some cases, this is because governments judge the topic too contentious, too complex, too premature, or beyond the remit of the WTO. In other cases, the political will or incentives to engage are missing, or proponents deem the chances of political success too slim to justify resource-intensive campaigns for action.

A clear example of a neglected crosscutting issue relates to **the scale effects of trade.** In a world where most governments still struggle to provide effective environmental governance, the long-standing environmental concern is that trade opening can expand market opportunities in ways that fuel and exacerbate unsustainable

production processes and environmental degradation, or facilitate a 'race to the bottom' whereby industries locate production where environmental regulations and institutions are weak. We can expect pressure to address the role trade policy should play with regard to the climate impacts of the growing scale of global trade, and in particular to the **emissions related to increased transportation** – by air, sea and land – as well as debate on the extent to which these may be offset by trade in more sustainably produced goods (Coe, 2014).<sup>38</sup>

The issue of **environmental taxes and charges** has been on the CTE's agenda for discussion since the creation of the WTO. While environmental taxes are not new, the push for greener growth and a more low-carbon future is prompting many governments to consider and implement a far more comprehensive set of environmental charges and taxes. The range of environmental taxes includes pollution taxes, energy taxes, transport taxes, and resource taxes.<sup>39</sup> On the trade policy front, there is already active discussion among experts and some governments of the implications of proposals for border taxes and other border carbon adjustment proposals that aim to price carbon.

On the agricultural front, there is a push for trade policy frameworks that better support **sustainable**, **regenerative agriculture and food systems** (Needelman, 2014; FOE, 2018). Amidst growing recognition of the links between global agricultural supply chains and trade flows as drivers of deforestation, <sup>40</sup> biodiversity loss, <sup>41</sup> land degradation, soil erosion and desertification (Brack et al, 2016), the vital importance of agricultural trade for many developing countries makes action on these issues politically complex. Already, concerns about the links between trade, deforestation, and expanding palm oil, beef and biofuel production have spurred calls for more integrated policy-making on energy-agriculture-forests and trade, as well as initiatives to promote 'deforestation-free' commodities. As climate advocates argue in favour of more plant-based diets, we can also expect calls for agricultural trade policy to the better address intersections between climate, environment, public health and animal welfare agendas.

Growing trade in commodities and natural resources is accompanied by concerns about environmental impacts of extractive industries, including on ecosystem services, and about the economic and commercial risks associated with uncertainties about long-term access to resources (Koellner, 2013; Lee et al, 2012). With global demand for both renewable and non-renewable resources growing, increased competition over natural resources has seen some governments use trade and investment policies as instruments to secure access at home and abroad. Given the heavily traded nature of fuels and non-renewable minerals, there is growing attention to the contribution that improved international trade and investment frameworks could make to greater sustainability (Bellmann, 2016), including with regard to PPMs in extractive industries (Cottier, 2016), local content requirements for sustainable development purposes (Ramdoo, 2015), and export restrictions (Espa, 2015).<sup>42</sup>

Meanwhile, developing country governments and civil society groups continue to call for action on the relationship between the TRIPS Agreement, biodiversity, the protection of traditional knowledge (TK) and folklore. They argue for the completion

of a review, mandated by the TRIPS Agreement, of its provision on exclusions from patentability in Article 27.3(b).<sup>43</sup> They have also called for negotiations to address the relationship between the TRIPS Agreement and the UN Convention on Biological Diversity, tabling proposals for requirements to disclose the source of biological material and associated traditional knowledge used in inventions. Developed countries on the other hand argue that the 2001 Doha Declaration called for discussion by the TRIPS Council of that relationship, but not negotiations.

Any resurgence of WTO services negotiations will likely revive debate about the intersection of **trade in services and the environment.** There is considerable optimism about the environmental opportunities that could emerge from more liberalised trade in environmental services (such as sewage services, waste disposal, recycling, reduced vehicles emissions, nature protection services, eco-tourism, and environmental construction and engineering). However, environmentalists have also voiced fears about the potential environmental impact of services liberalisation in certain sectors, most notably in regard to trade in water services (FOE, 2001).

A particularly vexed trade-environment issue relates to **investment provisions in trade agreements**. While the WTO's existing provisions on trade-related investment are not as comprehensive as those now regularly incorporated in bilateral, regional and plurilateral trade agreements, environmental concerns about investment provisions are an essential part of wider trade-environment discussions, and will undoubtedly arise were investment to emerge as a more prominent negotiation topic at the WTO. Prime concerns of environmental groups relate to investor-state dispute settlement provisions, and the right to regulate and uphold levels of environmental protection.

Growing public alarm about the scale of waste (especially plastic and e-waste) in the global economy – and the environmental and health implications of growing trade in waste – can be expected to prompt a new chapter of trade-environment discussions on waste. In the trade policy arena, discussions about trade in hazardous waste and exports of domestically prohibited goods pre-date the WTO, and were among the first trade-environment matters discussed under the auspices of the GATT; some aspects continue to feature in discussions of illegal trade in environmentally sensitive goods, including both hazardous waste and chemicals, such as ozone-depleting substances (OECD 2012). More recently, China's 2018 import ban on non-industrial plastic waste signals that the role of trade policy and rules is highly like to be part of debates on how to address the world's waste problem. In addition, in the wake of the UN's recent spotlight on the public health and economic costs of pollution (Landrigan et al., 2018), we can expect a revival of concerns about links between export-led growth, industrial pollution and chemicals regulation.<sup>45</sup> Already, a high number of notifications of environment-related measures at the WTO relate to pollution and chemical safety concerns.

Finally, the push to boost trade in environmentally friendly goods, services and technologies is prompting interest in harnessing **green industrial policy** to help countries insert themselves into green GVCs and deliver a low-carbon circular future (Altenburg and Assmann, 2017; Curiak and Singh, 2015; Low and Tijaja, 2015). In addition to efforts to promote tariff liberalisation and duty-free import arrangements

for environmental goods and services, the imperative of a green transition is also prompting discussion on how WTO rules on intellectual property, technology transfer, subsidies, government procurement and local content requirements could better facilitate the cost-competitiveness, availability and dissemination of sustainable technologies (Cosbey, 2013; Rodrik, 2014; Wu and Salzman, 2014; ICTSD and WEF, 2016a). In addition, interest of WTO members in promoting **micro**, **small and medium enterprises** (MSMEs) in the global economy is stimulating discussion of how updated trade policy frameworks could simultaneously promote environmentally positive trade and support MSMEs, which are recognised as leaders on sustainability in many sectors.<sup>46</sup>

### Beyond 'more of the same': The case for bolder vision and a more fundamental rethink

A number of 21st century issues and dynamics warrant specific consideration as part of a future environmental agenda, especially as they may challenge traditional ways of approaching environment–trade issues.

- The Fourth industrial revolution and major technological shifts. The rise of the digital economy and rapidly changing technological possibilities are not only reshaping trade trends and the trade policy context, but also environmental implications and opportunities. On sustainable sourcing, for instance, big data and blockchain technologies are already being used to provide information along GVCs about the source of products, potentially transforming trade policy debates on matters like environmental labelling. As noted above, new possibilities associated with the digital economy - including the Internet of Things and the rise of 3D printing – could redistribute the location of production of key products. New technological and scientific frontiers in Artificial Intelligence, biotechnology, nanotechnology, gene-editing, materials innovation and biomimicry (Murray, 2018) are not only expanding the range of goods and services that enter into global trade, but also the array of production methods. These technological advances are forcing governments to grapple with how to update intellectual property laws as well as fears around environment and health impacts (WEF, 2015), and raise uncertainties about the nature of 'like products' and the grounds on which countries can discriminate between products.
- Coherence between trade, investment and environmental law. Progress on many environmental challenges relies on coherent approaches to international policymaking on trade and investment, and environmental law.<sup>47</sup> Environmental campaigns on fossil fuels, for instance, already combine a focus on stronger trade disciplines on fossil fuels with calls for international investment rules that more explicitly promote sustainability, as well as campaigns calling on private investors, export promotion authorities, export credit agencies, and development banks to divest from fossil fuels and refrain from investing in related infrastructure (Viñuales, 2015).
- The power and global reach of multinational companies in GVCs. 48 We can expect a growing focus on the influence that major market-leading companies

can yield in favour of practical measures to address trade–environment intersections.<sup>49</sup> At the Worldwide Fund for Nature, one of the world's most powerful environmental groups, the significance of intra-company trade has prompted it to prioritise working directly with companies to improve environmental performance (through public–private partnerships, self-regulation schemes and corporate social responsibility systems, with the aid of consumer pressure) over campaigning for improvements in global trade and investment rules and policies. On the flipside, the global dominance of multinationals and the impacts of their cartels in key sectors where environmental concerns are high (such as natural resources, agriculture and commodities) add an environmental dimension to the case for stronger WTO attention to global-level anti-trust and competition policy (Murphy, 2017).

Further, the pursuit of more environmentally sustainable trade policy is just one part of a broader search for economic policy-making, systems and business models that are more in sync with the earths' environmental capacities. At a time of bold new thinking on environment-economy intersections, following are four cross-cutting issues that highlight the need for an equally bold rethink of how to better align trade policy with environmental imperatives:

- 1. Circularity, decarbonisation and de-materialisation (using fewer materials through greater efficiency). In addition to providing greater market access and trade opportunities for those producers advancing environmental sustainability (Cooper-Searle, 2017), calls for decarbonisation, de-materialisation and a more circular economy are both re-energising and reframing discussion on how trade rules could better incentivize resource efficiency and promote sustainability in sourcing, producing, transporting and disposal across value chains.
- 2. Sustainable consumption and the global ecological footprint of national consumption. SDG 12 on sustainable consumption is spurring greater interest in links between national consumption in one country and the trade, socioeconomic and environmental pressures on production regions in other countries. In addition to pressures for sustainability standards in global value chains, environmental taxes, and environmental labelling, the rise of consumption-based environmental accounting may be a game-changer for trade negotiations in the coming years. By making it possible to track the total internal and external environmental pressures associated with a country's domestic consumption and related imports of goods and services along global supply chains, efforts to track the global ecological footprint of national consumption are spurring new thinking about the definition of a country's imports and exports, how governments measure and allocate responsibility for environmental harm, and how to share the costs of solutions.
- 3. Moving beyond gross domestic product (GDP) growth. Over the past 10 years, growing interest in 'green growth' and what the transition to a 'green economy' demands in terms of greener trade and investment policies (UNEP, 2011, 2013; IISD and UNEP, 2015) has been accompanied by a wider rethinking of economics and economic growth in light of sustainability and social justice

considerations (Raworth, 2017). Beyond GDP growth as the overarching national economic imperative, there is rising interest (and use by some governments) of complementary and alternative indicators of national progress (such as indexes on human development, on happiness and on well-being). Together, mounting recognition of the need to focus less on GDP growth as the core goal, but rather on the pursuit of thriving economies that better support sustainability and social objectives, should also prompt new thinking on trade policy goals and the purpose of international trade rules.

4. Planetary boundaries, commons and environmental systems. Over the past decade, scientific understanding of environmental challenges and intersections has greatly evolved. Environmental literature on ecosystem approaches encourages policy-makers not to consider merely the health of fish stocks but also the health of the ecosystems they require to thrive. New thinking on environmental systems underlines that few contemporary environmental challenges can be addressed in isolation; rather, they demand attention to interactions, as in the case of a water-energy-food security-deforestation-climate nexus. In the trade policy arena, addressing this nexus calls for an approach that works across and beyond traditional categories of trade negotiations and agreements. Established concepts such as the global environmental commons and newer ones, such as shared planetary boundaries (Rockström et al., 2009), highlight the need for attention to the cross-border dimensions of nature's services and of environmental degradation, again raising questions about traditional approaches to trade policymaking.

#### 4.4 A forward-looking trade-environment agenda

This chapter has argued that evolving global economic, commercial and environmental trends give rise to new questions with regard to how the WTO can respond and should evolve to address the imperatives of environmental sustainability. Not only should greater environmental sustainability be a key component of the WTO reform agenda, it could also play a critical role in reviving the economic relevance, political credibility and dynamism of the multilateral trading system.

A forward-looking environmental agenda on WTO reform would link substance with appropriate processes and institutional improvements. Institutional elements already present in current discussions of WTO reform agenda include improvements to the organization's dispute settlement system and strengthening of the WTO's transparency, monitoring, and deliberative functions and capacities – each of which will be important elements in terms of advancing an environmental agenda at the WTO too. Further environment-specific dimensions that warrant consideration include:

1. **Strengthening the CTE.** The CTE could be given a stronger role in widening the scope of formal and informal discussion on trade–environment at the WTO, and as an incubator for ideas to advance the trade-environment agenda. This could include a broader mandate for research to explore emerging issues, a clearer

process for adding informal items for discussion, and greater initiative on the part of the Chair in facilitating informal processes for practical cooperation, consensus-building and policy dialogue.

- 2. Mainstreaming environment across WTO committees. All WTO committees could be called upon to include environmental issues as a standing agenda item, to report to the General Council on a regular basis on the environmental aspects of its work, and to boost opportunities for international environmental organisations to observe and participate in its work. In addition, governments could give all committees a standing environmental mandate, requiring them to report to the Ministerial Council every two years.
- 3. **Environmental news and information.** For each CTE meeting, the Secretariat could be called on to prepare a summary of the key environmental issues and reports that have arisen across the WTO's Regular and Negotiating Committees, and the organisation's other activities. <sup>50</sup> This could be collated on an annual basis to provide an organisation-wide picture of the environmental dimensions of the WTO's work.
- 4. **Policy dialogue.** The critical need for more dynamic formats and processes within and outside the WTO that better enable deliberation, dialogue, information-sharing, mutual understanding and problem-solving is widely recognised. At the CTE, more purposeful and innovative leadership from chairpersons could create opportunities for more informal policy dialogue. Further, in collaboration with other IGOs active on trade-environment issues, the WTO could co-host a regular forum for engagement among trade-environment policy leaders from IGOs, government, industry and civil society, as well as expert roundtables on critical trade-environment topics. As has occurred in the past, governments could also agree to a bi-annual trade and environment ministerial conference, either as part of or alongside the WTO Ministerial Conference.
- 5. Environmental notifications, transparency and assessment. There are numerous new empirical and methodological questions about trade–environment intersections that warrant research at the WTO, in partnership with other intergovernmental and non-governmental organisations with relevant expertise. Assessment of environment–trade linkages of existing and proposed agreements at the WTO could also be promoted, such as through an enhanced Trade Policy Review process or the creation of independent mechanism that draws on inputs from other international organisations, stakeholder groups and scholars (Casier et al., 2014). Improved notification and transparency of trade-related environmental measures could also be promoted as a key environmental component of the WTO reform agenda.
- 6. **Boosting public transparency and participation.** There is unfinished work at the WTO on public transparency (in terms of timely, easy and fuller public access to information about negotiations and impacts) and greater opportunities for public and parliamentary participation. An array of proposals already exists to regarding a greater role for observers to negotiations, Ministerial Meetings,

dispute settlement proceedings and Regular Committee meetings. The CETA provides several practical examples of ways to institutionalise stakeholder consultation regarding the implementation and evolution of trade agreements at the national and international level.

As in the past, agenda-setting on WTO reform will be shaped by underlying differences among the WTO's membership about the organisation's purpose and priorities in the context of geo-political tensions, efforts to secure competitive advantage and pressures from domestic stakeholders. As governments work to forge a practical way forward on WTO reform, environmental challenges and opportunities must also be high on the agenda. Critically, the smallest and poorest countries – most immediately affected by many of the environmental challenges at hand – must have a stronger voice in the discussions on WTO reform and on the urgent task of ensuring greater coherence on trade and sustainability.

#### **Endnotes**

- 1 The SDGs cover an expansive set of issues, including ending poverty in all its forms everywhere, tackling world hunger, achieving gender equality, ensuring access to modern energy, building resilient infrastructure, moving towards sustainable consumption and production patterns, conserving oceans and taking urgent action to combat climate change.
- 2 In the most high-level statement on WTO reform to date, the G20 noted in December 2018 that the multilateral trading system was currently falling short of its objectives, and declared the group's commitment to supporting the 'necessary reform of the WTO to improve its functioning' (G20, 2018). Notably, whereas earlier Declarations defended the multilateral trading system as a public good in its own right, the most recent Declaration's wording implies a pragmatic view that multilateralism is desirable 'where it works' to achieve objectives, and is worth defending and promoting only to the extent that it can be reformed to be more effective.
- 3 Calls from member states, scholars and analysts for attention to 'systemic' challenges facing the WTO have been most acute following the Seattle, Cancún and Hong Kong WTO Ministerial Conferences, and more recently in the face of the on-going failure of members to conclude the Doha Development Agenda and to forge a new negotiating agenda. Examples of proposals can be found in, for instance, Consultative Board (2004), Warwick Commission (2007), Deere (2009), Steger (2009), Deere Birkbeck (2011), WTO (2013), ICTSD and WEF (2015, 16). For a recent set of proposals, see Bertelsmann Stiftung (2018) and for a review of WTO reform proposals over the WTO's first 15 years, see Deere Birkbeck and Monagle (2009).
- 4 While there has never been sufficient political appetite for a comprehensive institutional overhaul, a number of incremental changes in formal procedures and informal practice at the WTO have strengthened the transparency of dispute settlement and negotiation and developing country participation.
- 5 In recent years, the World Bank, the ILO, UNEP, UNCTAD and OECD have each published flagship reports on these topics. See, for instance, (ILO 2018), Lange et al (2018), UNEP (2011), UNCTAD (2011a) and OECD (2017).
- 6 In early 2018, the heads of the WTO and UNEP along with 11 high-level government representatives launched an effort entitled Friends Advancing Sustainable Trade in Davos 2018, keen to engage private sectors and catalyse leadership on sustainable trade.
- 7 In 2018, for instance, the former head of UNEP highlighted the need to harness sustainable trade as a driver for achieving the SDGS, the importance of unlocking trade in long-term green solutions, and potential 'trade, investment and job opportunities resulting from the emerging shift towards more sustainable modes of production and consumption'. Arguing that a healthy environment is essential for prosperous and resilient economies, the WTO director general echoed his views, stating that, '[t]rade can make green technologies more affordable and help sustainable business expand'. See WTO (2018c).

- 8 The Canadian paper also refers to sustainable development under its priorities for modernising rule (WTO 2018e).
- 9 See, for instance, a September 2018 Canadian Discussion Paper submitted for the consideration of WTO member states on strengthening and modernizing the organisation (Canada, 2018).
- 10 Other factors that have revived interest in creating a WTO reform agenda include proliferating bilateral, regional and plurilateral trade arrangements, on-going tariff wars, a governance crisis in the WTO's dispute settlement mechanism, and unresolved tensions on how to apply WTO rules to the diversity of the WTO's developing country members especially to China and other emerging powers. A further key factor driving renewed discussion of a WTO Reform Agenda has been ailing confidence about the WTO's relevance as a forum for concluding trade negotiations.
- 11 For an expanding range of goods, the rise of 3D printing broadens the possibilities in terms of production processes and the geographical location of production, which may also alter the flows in intermediary and final products, with a range of potential environmental implications. The potential of blockchain technologies to help trace and verify the source of some sustainably produced products is already being tested.
- 12 At the WTO's 2018 Public Forum, for instance, the heads of UNEP and WTO jointly hosted the main high-level session. Each emphasised that linking trade and environment policies more closely together could deliver pro-trade and pro-environment benefits for both prosperity and sustainability, and propel action on the achievement of the SDGs. Also see Lydgate (2012) for a review of the concept of mutual supportiveness in the WTO context.
- 13 The salience of the trade–environment issue has been reinforced by burgeoning analysis from a range of international organisations including the *Trade and Green Economy Handbook* (IISD and UNEP, 2015), the OECD and its Joint Working Party on Trade and Environment, the UN Conference on Trade and Development (UNCTAD) (such as through its work to promote the idea of a development-led Green Economy (UNCTAD, 2011a, 2011b), the International Trade Centre (ITC), and the World Economic Forum (WEF) (on the environment and global value chains) (WEF, 2018), and regional developments such as the Asian Development Bank (see Andrew, 2017, as well as Helble and Shepherd, 2017).
- 14 Examples of the adoption or threat of trade-related 'compliance measures' include Convention on International Trade of Endangered Species (CITES) trade bans as well as trade measures undertaken through regional fisheries organisations to combat Illegal, Unreported and Unregulated fishing (Young, 2015).
- 15 As of December 2015, the CTE agenda items as per the 1994 CTE work programme and the updated following the 2001 Doha Ministerial were listed by the WTO as: 1) trade rules, multilateral environmental agreements (MEAs) and their dispute settlement mechanisms (in Doha Round negotiations); 2) environmental protection and measures with significant trade effects and the trading system; 3) environment charges and taxes and requirements for environmental purposes relating to products, such as standards and technical regulations, and packaging, labelling and recycling requirements (CTE Item of Focus); 4) transparency of environmental trade measures; 5) relationship of trade rules, MEAs and dispute settlement mechanisms (in the Doha Round); 6) environment and trade liberalisation (CTE Item of Focus); 7) exports of domestically prohibited goods, in particular hazardous waste; 8) intellectual property (CTE Item of Focus); 9) services and the environment; and 10) input to relevant WTO bodies on appropriate arrangements for relations with other intergovernmental organisations and non-governmental organisations (In Doha Round negotiations).
- 16 In 2018, the WTO's CTE took up topics as diverse as the trade-distorting and climate impacts of fossil fuel production and consumption; how trade and trade policy frameworks might help support the shift toward a circular economy; and trade policies that could encourage growth of ocean-based 'blue economy' industries, promote green technology and address challenges such as plastic and marine waste. In light of concerns about potential trade measures, palm oil-producing countries also provided information on their efforts to address environmental concerns. To keep members abreast of wider developments in environment–trade-related decision-making, CTE members also received briefings from observer organisations such as the UN Framework Convention on Climate Change and the International Maritime Organization (IMO) (on efforts to reduce emissions from shipping). See www.wto.org/cte.

17 At the July 2018 meeting of the WTO's SPS Committee, for instance, members took up a total of 26 specific trade concerns. These included import restrictions on apples and pears, papaya seeds and swine meat; fumigation requirements for cashew nuts; and import restrictions on poultry owing to highly pathogenic avian influenza. The Committee also heard previously raised concerns regarding import restrictions on processed fishery products; certification requirements for food imports; a proposal for categorisation of compounds as endocrine disruptors; dimethoate-related restrictions on imported cherries; regulations on the safety assessment of agricultural genetically modified organisms; and a seafood import monitoring programme. See WTO (2018d) and WTO (2017).

- 18 In 2018, the WTO Secretariat launched an online Environmental Database (https://edb.wto.org/), which contains all environment-related notifications submitted by WTO members as well as environmental measures and policies mentioned in their Trade Policy Reviews. The most common environment-related objectives included chemical, toxic and hazardous substances management; general environmental protection; and energy conservation and efficiency.
- 19 The WTO participates for instance, in the Standards Facility and also in the UN Sustainability Standards Forum. It provides technical support to the ITC's efforts to promote more sustainable trade flows and to help developing country governments and businesses integrate sustainability considerations into GVCs.
- 20 In 2018, for instance, the WTO hosted a symposium on climate change, the intensification of natural disasters, and climate-resilient approaches to development and trade. Approved by member states and financed by Australia, this work also engaged the Food and Agricultural Organization of the UN and the UN Office for Disaster Risk Reduction. See WTO (2018e).
- 21 See Foreword in IISD and UNEP (2015), p. ix.
- 22 Although negotiations have entered a promising new phase, 18 years of talks on a topic long-recognised as an urgent priority and win–win trade-environment opportunity represents a woeful track record from a sustainability viewpoint.
- 23 Disputes to date have shown that WTO agreements provide significant scope for environmental provided some requirements and principles are respected to avoid unnecessary barriers to trade, abuse and protectionism namely, non-discrimination (among partners and between imported and domestic products) and to promote transparency.
- 24 Between 2010 and 2015, for instance, countries imposed nine anti-dumping and seven countervailing duties on products associated with solar photovoltaic cells or wind energy, and launched more than two dozen WTO anti-dumping and countervailing measure investigations on these (Ang and Steenblik, 2015).
- 25 The following analysis draws on a wide literature on global environmental priorities, environmental economics and economic policy in light of sustainable development priorities; reports from stakeholders in business and civil society; and reports and statements of international organisations on ways forward.
- 26 Ministers agreed to negotiate with a view to adopting 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 illegal, unreported and unregulated (IUU) fishing. The Buenos Aires decision recognises that appropriate and effective special and differential treatment for developing country members and least developed country members should be an integral part of the negotiations.
- 27 SDG 14.6 calls for the prohibition, by 2020, of fisheries subsidies that contribute to overcapacity and overfishing, and the elimination of subsidies that contribute to IUU fishing, with special and differential treatment for developing and least developed country WTO members to be an integral part of the negotiations.
- 28 Sceptics contend that negotiations were primarily an economic agenda; although there were many potential environmental benefits, they argue that the negotiating agenda was far less ambitious than it could have been (by for instance failing to incorporating the services associated and embedded in goods).
- 29 Both the environment minister and the economy minister of France have, for instance, declared climate change a top challenge for the global trading system. In September 2018, France put the

- environment-trade issue squarely on the global political agenda, declaring at the UN General Assembly that new trade agreements and benefits should be conditioned on appropriate efforts by countries to implement the Paris Agreement.
- 30 In some markets, certified products account for an impressive 20 per cent of market share. However, many environmentalists argue that voluntary efforts do not appear likely to significantly expand the market share for sustainable products much further, and that government action will be required to achieve many environmental goals.
- 31 Beyond ministries of trade or commerce, the array of domestic actors that influence trade and investment opportunities includes national standard-setting bodies, national trade facilitation bodies, trade promotion agencies, consumer protection bodies and food and drug regulatory agencies, as well as sector-specific regulatory authorities. Other relevant policies include those related to special economic zones and exclusive economic zones, as well as decision-making processes related to tariff levels, anti-dumping duties, countervailing and safeguard duties, export credit and export financing initiatives.
- 32 The CETA, for instance, includes language on the integration of trade and sustainable development policy, the alignment of policy processes, and promotion of trade that supports sustainable development. It also includes provisions on impact assessment, stakeholder consultation and a civil society form, transparency, as well as issue-specific norms on trade and fisheries (beyond subsidies) and forests. It also establishes commitments for the Parties to promote trade in a manner that contributes to the objectives of sustainable development, for example by encouraging businesses to adopt voluntary practices of corporate social responsibility that promote economic, social and environmental objectives, and by promoting practices such as the use of eco-labeling and setting environmental performance goals and standards.
- 33 In 2006, for instance, the European Commission commissioned an independent Sustainability Impact Assessment of the Doha Development Agenda. See Kirkpatrick et al. (2006). For an overview, see http://www.sia-trade.org
- 34 Beyond work on fisheries subsidies, WTO member state engagement on healthy oceans (SDG 14) has included discussion of the 'blue economy' at the CTE, where several members affirmed their support for the sustainable use of ocean resources (with a focus on sustainable fisheries) and the integration of blue economy initiatives into national development strategies. The WTO Secretariat also participated in the Second Oceans Forum on trade-related aspects of SDG 14 on healthy oceans, which was hosted by UNCTAD and a range of other international organisations and focused on 'enabling sustainable and integrated seafood and living marine resources value chains and related services'.
- 35 The WTO is not directly engaged in illegal trade in wildlife, which is primarily addressed by CITES, with cooperation from customs authorities, Interpol and the UN Office on Drugs and Crime.
- 36 In 2015, a WTO decision to eliminate export subsidies in agriculture delivered on SDG target 2.B.
- 37 In September 2018, the UN's Inter-Agency Expert Group on SDGs agreed on a methodology to measure fossil fuel subsidies.
- 38 In 2018, the IMO announced an initial plan to substantially reduce greenhouse gas emissions from ships, seeking to reduce emissions by at least 50 per cent by 2050 compared with 2008, for instance. On trade and shipping, we can also expect discussion of environmental and geo-political challenges linked to the opening of new Artic sea lanes (Brewer, 2015).
- 39 The OECD has published an extensive array of working papers on environmental taxes and environmental fiscal reform. See, for instance OECD (2012).
- 40 Although governments and stakeholders have chosen other venues for policy action on illegal logging and trade in threatened timber, trade rules and WTO rules in particular remain a recurring concern for environmental activists (Brack, 2013; Gulbrandsen and Fauchald, 2015).
- 41 On biodiversity loss, Lenzen et al. (2012) conclude that 'some 30 per cent of global species threats are due to international trade', including demand from consumers in developed countries. The authors suggest some of these threats are specifically due to imports of coffee, tea, sugar, textiles, fish and other manufactured items that cause a large biodiversity footprint at origin.
- 42 The issue of export restrictions arose in WTO dispute between China and several countries led by the USA, concerned China's export restrictions on rare earth elements as well as tungsten and

molybdenum, which are used in the production of many electronics. While the USA, the EU and Japan argued that the restrictions violated WTO rules, China (which controls 97 per cent of the production) argued the restrictions aimed at resource conservation and environmental protection. In 2014, the WTO ruled against China, which removed the export quotas in 2015.

- 43 Key concerns relate to the patentability or non-patentability of plant and animal inventions, the definition of 'effective' protection of plant varieties, and the commercial use of genetic material and TK by those other than the communities or countries in which they originated, particularly when these are the subject of patent applications.
- 44 In 1994, the WTO Decision on Trade in Services and the Environment called on governments to determine whether any modification of Article XIV of the General Agreement on Trade in Services (GATS) was required to take account of measures necessary to protect the environment, calling on the CTE to examine and report, with recommendations if any, on the relationship between services trade and the environment, including the issue of sustainable development. The CTE was also asked to examine the relevance of inter-governmental agreements on the environment and their relationship to the GATS.
- 45 In 2017, the annual cost of pollution worldwide was estimated to be US\$4.6 trillion, or around 6 per cent of global gross domestic product.
- 46 In a significant first, for instance, the 2016 Canada-EU Trade Agreement includes specific provisions to promote practices that support corporate social responsibility and sustainability assurance schemes (such as eco-labelling).
- 47 Investment agreements, for instance, could be used to help mobilise and direct private investments to the green economy.
- 48 According to some estimates, multinationals may be linked to as much as 80 percent of gross global trade in one way or another, whereas intra-company trade accounts for around a third of world trade. Similarly, multinational companies are estimated to control around two thirds of the world's foreign direct investment stock, thus placing them at the heart of the further entwining of trade and investment (Sauvant and Hamdani, 2015).
- 49 At the Worldwide Fund for Nature, one of the world's most powerful environmental groups, the significance of intra-company trade has prompted the organisation to focus less on changes to global trade and investment rules and policies and more on direct efforts to work with companies to improve environmental performance through public-private partnerships, self-regulation schemes and corporate social responsibility systems, with the aid of consumer pressure.
- 50 There is precedent for such work. In 2006, for instance, the WTO reported to Member States on environment across the negotiations, although not in regard to the regular work of committees. See WT/CTE/W/243.

#### References

- Altenburg, T. and C. Assmann (eds.) (2017) *Green Industrial Policy. Concept, Policies, Country Experiences*, Geneva, Bonn: UN Environment and German Development Institute/Deutsches Institut Für Entwicklungspolitk (DIE).
- Andrew, D. (2017) "Trade and Environment", in Helble, M. and B. Shepherd (eds.), Win-Win: How International Trade Can Help Meet the Sustainable Development Goals, Tokyo: Asian Development Bank Institute.
- Ang, G. and R. Steenblik (2015) 'Breaking Down the Barriers to Clean Energy Trade and Investment'. *BioRes* 9(6): 8–11
- Bacchus, J. (2018) *The Willing World: Shaping and Sharing a Sustainable Global Prosperity.* Cambridge: Cambridge University Press.
- Baldwin, R. (2016) *The Great Convergence: Information Technology and the New Globalization*. Cambridge, MA: Harvard University Press.
- Bellmann, C. (2016) *Trade and Investment Frameworks in Extractive Industries: Challenges and Options.* E15 Initiative. Geneva: ICTSD and WEF.

- Bellmann, C. and A. Tipping (2016) 'The Role of Trade and Trade Policy in Advancing the 2030 Development Agenda'. *International Development Policy* 6(2).
- Bertelsmann Stiftung (2018) *Revitalizing Multilateral Governance at the World Trade Organization*. Report of the High-Level Board of Experts on the Future of Global Trade Governance. At https://www.bertelsmann-stiftung.de/en/publications/publication/did/revitalizing-multilateral-governance-at-the-world-trade-organization/ (accessed 10 September 2018).
- Brack, D. (2013) 'Combatting Illegal Logging: Interaction with WTO Rules'. Briefing Paper, May. London: Chatham House.
- Brack, D., with L. Wellesley and A. Grover (2016) 'Agricultural Commodity Supply Chains: Trade, Consumption and Deforestation'. Research Paper, January. London: Chatham House.
- Brewer, T. (2015) *Artic Back Carbon from Shipping: A Club Approach to Climate and Trade Governance.* ICTSD Series on Climate Change Architecture, October. Geneva: ICTSD.
- Business & Sustainable Development Commission (2017) *Better Business Better World*. At http://report.businesscommission.org/ (accessed 9 March 2019).
- Canada (2018) 'Strengthening and Modernizing the WTO'. Discussion Paper Communication from Canada, 21 September. JOB/GC/201, 21 September.
- Casier, L., R. Fraser, M. Halle and R. Wolfe (2014) 'Shining a Light on Fossil Fuel Subsidies at the WTO: How NGOs Can Contribute to WTO Notification and Surveillance'. *World Trade Review* 13(4): 603–632.
- Circle Economy (2019) *The Circularity Gap Report 2019*. At https://www.circularitygap.world (accessed 9 March 2019).
- Coe, N. (2014) 'Missing links: Logistics, governance and upgrading in a shifting global economy'. *Review of International Political Economy* 21(1): 224–256.
- Consultative Board (2004) *The Future of the WTO: Addressing Institutional Changes in the New Millennium*. Report of the Consultative Board. Geneva: WTO.
- Cooper-Searle, S. (2017) *Lower Carbon, Less Materials: A 'Systems' Approach*. London: Hoffman Centre for Sustainable Resource Economy, Chatham House.
- Cosbey, A. (2013) 'Green Industrial Policy and the World Trading System', Issue Brief 17. Entwinded: Stockholm.
- Cottier, T. (2016) *The Role of PPMs in Extractive Industries*. E15 Initiative. Geneva: ICTSD and WEF.
- Curiak, D. and H. Singh (2015) *Mega-Regionals and the Regulation of Trade: Implications for Industrial Policy*. E15 Initiative. Geneva: ICTSD and WEF.
- Deere Birkbeck, C. (2009) 'Reinvigorating Debate on WTO Reform: The Contours of a Functional and Normative Approach to Analysing the WTO System', in Steger, D. (ed.) *Redesigning the World Trade Organization for the Twenty-First Century*. Waterloo, Ont: Wilfred Laurier University Press.
- Deere Birkbeck, C. (ed.) (2011) Making Global Trade Governance Work for Development: Perspectives and Priorities from Developing Countries. Cambridge: Cambridge University Press.
- Deere Birkbeck, C. and C. Monagle (2009) Strengthening Multilateralism: A Mapping of Selected Proposals on WTO Reform and Improvements in Global Trade Governance. Geneva: ICTSD and Global Economic Governance Programme.

Espa, I. (2015) Export Restrictions on Critical Minerals and Metals: Testing the Adequacy of WTO Disciplines. Cambridge: Cambridge University Press.

- FOE (2001) Stealing our Water, Implications of GATS for Global Water Resources, Friends of the Earth Trust: London
- FOE (2018) Setting Course for Sustainable Trade: A New Trade Agenda that Serves People and the Environment. Brussels: FOE Europe.
- G20 (2018) 'Leaders' Declaration: Building Consensus for Fair and Sustainable Development'. Buenos Aires, 1 December. http://www.g20.utoronto.ca/2018/2018-leaders-declaration.html (accessed 11 March 2019).
- Grosz, M. (2011) Sustainable Waste Trade Under WTO Law: Chances and Risks of the Legal Frameworks' Regulation of Transboundary Movements of Wastes. Leiden: Martinus Njihoff.
- Gulbrandsen, L. and O. Fauchald (2015) 'Assessing the New York Declaration on Forests from a Trade Perspective'. *BioRes*, 9(4): 4–7.
- Helble, M. and B. Shepherd (2017) (eds.) Win-Win: How International Trade Can Help Meet the Sustainable Development Goals, Tokyo: Asian Development Bank Institute.
- ICTSD (International Centre for Trade and Sustainable Development) (2016) *Trade Policies and Sustainable Development in the Context of Global Value Chains: Framework Paper.* Geneva: ICTSD.
- ICTSD (International Centre for Trade and Sustainable Development) and WEF (World Economic Forum) (2015) *Functioning of the WTO: Options for Reform and Enhanced Performance*. E15 Initiative. Geneva: ICTSD and WEF.
- ICTSD and WEF (2016a) Strengthening the Global Trade and Investment System in the 21st Century, E15 Initiative. Geneva: ICTSD and WEF.
- ICTSD and WEF (2016b) *Trade and Investment Frameworks in Extractive Industries: Challenges and Options.* E15 Initiative. Geneva: ICTSD and WEF.
- ICTSD & WEF (2015) Functioning of the WTO: Options for Reform and Enhanced Performance, E15 Initiative, ICTSD & WEF: Geneva.
- IISD (International Institute for Sustainable Development) and UNEP (UN Environment Programme) (2015) *Trade and Green Economy Handbook*. Geneva: IISD and UNEP.
- ILO (2018) World Employment and Social Outlook: Greening with Jobs, International Labour Organization: Geneva.
- Kirkpatrick, C., C. George and S. Scrieciu (2006) 'Sustainability Impact Assessment of Proposed WTO Negotiations: Final Global Overview Trade SIA of the Doha Development Agenda'. Final Report to the European Commission. Manchester: IDPM.
- Koellner, T. (2013) *Ecosystem Services and Global Trade of Natural Resources: Ecology, Economics and Policies.* London: Routledge.
- Landrigan, P., R. Fuller, N. Acosta, O. Adeyi et al (2018) 'The Lancet Commission on Pollution and Health'. *The Lancet 391*.
- Lange, G., Q. Wodon and K. Carey (eds) (2018) *The Changing Wealth of Nations 2018: Building a Sustainable Future*, Washington, D.C.: World Bank.
- Lee, B., F. Preston, J. Kooroshy, R. Bailey and G. Lahn (eds) (2012) *Resources Futures: A Chatham House Report*, London: Chatham House.

- Lenzen, M., D. Moran, K. Kanemoto, B. Foran, L. Lobefaro and A. Geschke (2012) 'International Trade Drives Biodiversity Threats in Developing Nations'. *Nature* 486(7401): 109–112.
- Lernoud, J., J. Potts, G. Sampson, S. Garibay, M. Lynch, V. Voora, H. Willer, and J. Wozniak (2017) *The State of Sustainable Markets: Statistics and Emerging Trends 2017.* Geneva: International Trade Centre (ITC).
- Low, P. and J. Tijaja (2015) *Global Value Chains and Industrial Policies*. E15 Initiative. Geneva: ICTSD and WEF.
- Lydgate, E. (2012) 'Sustainable Development in the WTO: From Mutual Supportiveness to Balancing'. *World Trade Review* 11(4): 621–639.
- McKinsey & Co (2016) *Digital Globalization: The New Era of Global Flows*, McKinsey Global Institute.
- Monteiro, J. (2016) *Typology of Environment-related provisions in Regional Trade Agreements*. Working Paper ERSD-2016-13. Geneva: WTO.
- Morin, J.-F., A. Dur and L. Lechner (2018) 'Mapping the Trade and Environment Nexus: Insights from a New Data Set'. *Global Environmental Politics* 18(1): 122–139.
- Murphy (2017) 'The End of the WTO As We Know It? We Can Only Hope'. IATP Blog, 21 December. https://www.iatp.org/blog/201712/end-wto-we-know-it (accessed 11 March 2019).
- Murray, S. (2018) 'Biomimicry Unleashes Wave of Materials Innovation'. *Financial Times*, 8 January. At https://www.ft.com/content/8d09584a-cec8-11e7-947e-f1ea5435bcc7 (accessed 11 March 2019).
- Needelman, A. (2014) Whose Century Is It? The Trans-Pacific Partnership, Food and the '21st Century Trade Agreement'. Minneapolis, MN: IATP.
- Norway in Geneva (2017) 'MC11 Ministerial Declaration on Fossil Fuel Subsidy Reform'. 19 December. At https://www.norway.no/en/missions/wto-un/our-priorities/trade/wto-world-trade-organization/mc11-ministerial-declaration-on-fossil-fuel-subsidy-reform/ (accessed 11 March 2019).
- OECD (Organisation for Economic Cooperation and Development) (2012) *Illegal Trade in Environmentally Sensitive Goods*, OECD Trade Policy Studies, OECD: Paris.
- OECD (2017) Environmental Fiscal Reform: Progress, Prospects and Pitfalls, OECD: Paris.
- OECD (2017) Employment Implications of Green Growth: Linking jobs, growth, and green policies, OECD Report for the G7 Environmental Ministers, Paris: OECD.
- Our World Is Not For Sale (OWINFS) (2014) 'Some Changes that Must be Made to Global Trade Rules to Achieve the Sustainable Development Goals (SDGs) of the Post-2015 Development Agenda'. At http://www.ourworldisnotforsale.org/en/node/24387 (accessed 11 March 2019).
- OWINFS (2015) "20 Years of WTO is Enough! Junk WTO", Resistance: People Fighting Transnational Corporate Plunder. At http://peopleresist.net/junk-wto/ (accessed 11 March 2019).
- Ramdoo, I. (2015) *Unpacking Local Content Requirements in the Extractive Sector:* What Implications for the Global Trade and Investment Frameworks? E15 Initiative. Geneva: ICTSD and WEF.

Raworth, K. (2017) *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist.* London: Penguin Random House.

- Rockström, J., W. Steffen, K Noone, A. Persson et al (2009) 'Planetary Boundaries: Exploring the Safe Operating Space for Humanity'. *Ecology and Society* 14(2): 32.
- Rodrik, D. (2014) 'Green Industrial Policy'. *Oxford Review of Economic Policy* 30(3): 469–491.
- Sauvant, K. and K. Hamdani (2015) An International Support Programme for Sustainable Investment Facilitation, E15 Taskforce on Investment Policy. E15 Initiative. Geneva: ICTSD and WEF.
- Steger, D. (ed.) (2009) *Redesigning the World Trade Organization for the Twenty-First Century*. Waterloo, Ont: Wilfrid Laurier University Press.
- Tipping, A. and R. Wolfe (2015) *Trade and Sustainable Development: Options for Follow-up and Review of the Trade-related Elements of the Post-2015 Agenda and Financing for Development.* Geneva: IISD and ICTSD.
- UNEP (UN Environment Programme) (2011) Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication: A Synthesis for Policy Makers. Paris: UNEP.
- UNEP (2013) Green Economy and Trade Trends, Challenges and Opportunities. Paris: UNEP.
- UNEP (2015) *International Trade in Resources: A Biophysical Assessment*. Report of the International Resource Panel. Paris: UNEP.
- UNEP (2017) Towards a Pollution-Free Planet: Background Report. Nairobi: UNEP.
- UNCTAD (UN Conference on Trade and Development) (2011a) *The Road to Rio*+20: For a Development-Led Green Economy. Geneva: UNCTAD.
- UNCTAD (2011b) *The Green Economy: Trade and Sustainable Development Implications.* Geneva: UNCTAD.
- UNFSS (UN Forum on Sustainability Standards) (2018) *Voluntary Sustainability Standards (VSS), Trade and Sustainable Development.* Geneva: UNFSS.
- Viñuales, J. (2015) *International Investment Law and Natural Resource Governance*. Geneva: ICTSD and WEF.
- Vogel, D. (2009) Trading Up: Consumer and Environmental Regulation in a Global Economy. Cambridge, MA: Harvard University Press.
- Warwick Commission (2007) *The Multilateral Trade Regime: Which Way Forward?* Coventry: University of Warwick.
- WEF (World Economic Forum) (2015) The High and Low Politics of Trade: Can the World Trade Organization's Centrality Be Restored in a New Multi-Tiered Global Trading System? Geneva: WEF.
- WEF (2018) Global Value Chain Policy Series: Environment. Geneva: WEF.
- Whelan, T. and C. Fink (2016) 'The Comprehensive Business Case for Sustainability'. *Harvard Business Review*, 21 October.
- WTO (World Trade Organization) (2011) Harnessing Trade for Sustainable Development and a Green Economy. Geneva: WTO.
- WTO (2013) Panel on Defining the Future of Trade. WTO: Geneva.
- WTO (2017) 'Pesticide Residues Top of Agenda of WTO Food Safety Body'. 3 November, WTO News, WTO: Geneva.

- WTO (2018a) Mainstreaming Trade to Attain Sustainable Development Goals. Geneva: WTO.
- WTO (2018b) World Trade Report 2018: The Future of World Trade: How Digital Technologies are Transforming Global Commerce. Geneva: WTO.
- WTO (2018c) High-Level Session Highlights Need for Closer Links between Trade and Environment Policies. Geneva: WTO.
- WTO (2018d) 'Members Advance Discussion on the Fifth Review of the SPS Agreement'. 12 and 13 July. WTO News, WTO: Geneva.
- WTO (2018e) 'Symposium Examines Trade Issues Relating to Natural Disasters'. 14 December. WTO News, WTO: Geneva.
- WTO (2018f) China Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials: Statement by the United States to the Committee on Technical Barriers to Trade 21 and 22 March 2018, G/TBT/W/468, WTO: Geneva.
- WTO (World Trade Organization) and UNEP (UN Environment Programme) (2018) Making Trade Work for the Environment, Prosperity and Resilience. Geneva: WTO and UNEP.
- Wu, M. and J. Salzman (2014) 'The next generation of trade and environment conflicts: The rise of green industrial policy, Northwestern University Law Review. Vol. 108/2.
- Yagamuchi, S. (2018) International Trade and the Transition to a More Resource Efficient and Circular Economy, OECD Working Paper 2018/3, OECD: Paris
- Young, M. (2015) Trade-Related Measures to Address Illegal, Unreported and Unregulated Fishing. E15 Initiative. Geneva: ICTSD and WEF.