Triggering the Trade Transition:

The G20's Role in Reconciling Rules for Trade and Climate Change

James Bacchus

ICTSD

International Centre for Trade and Sustainable Development

White Paper

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James Bacchus
Senior Counsellor, ICTSD

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International Centre for Trade and Sustainable Development (ICTSD)
International Environment House 2
7 Chemin de Balexert, 1219 Geneva, Switzerland

Tel: +41 22 917 8492
ictsd@ictsd.ch

Fax: +41 22 917 8093
www.ictsd.org

Publisher and Chief Executive: Ricardo Meléndez-Ortiz
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Programme Officer: Sonja Hawkins

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LIST OF ABBREVIATIONS

EGA	Environmental Goods Agreement
G20	Group of Twenty major economies
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
LED	light emitting diode
OECD	Organisation for Economic Co-operation and Development
PPM	process and production method
TRIPS	Trade-Related Aspects of Intellectual Property Rights
SDG	Sustainable Development Goal
SETA	Sustainable Energy Trade Agreement
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization

FOREWORD

Climate change is happening now and it is happening fast. The past few years have been marked by record-high temperatures as well as more frequent and intense extreme weather events, causing immense human suffering, environmental degradation and large-scale destructions of infrastructure and productive capacities.

Tackling climate change is therefore not only an environmental imperative but also a social and economic one. However, countries' current climate pledges under the 2015 Paris Agreement on Climate Change are not enough to limit average global temperature increases to well below 2°C. A recent report by UN Environment shows that even if these voluntary targets are fully met, the world is still on a path for a 3.2°C warming by the end of the century—a truly devastating scenario. This outlook has become even more daunting as the United States, the world's largest emitter of greenhouse gases, last year announced its intention to withdraw from the Paris Agreement.

This year countries will conduct a facilitative dialogue under the United Nations Framework Convention on Climate Change to review progress towards the collective temperature goal, before submitting new targets in 2020. Countries must make bold new pledges and back these up with ambitious and transformative action on the ground to make the transition to a low-carbon society. This will encompass a whole range of climate measures, from carbon taxes and emissions trading systems, to fossil fuel subsidy reform, green subsidies, and enhanced cross-border access to environmental goods and services.

As efforts to combat climate change are scaled up, there will undoubtedly be increasing interactions with global economic activities and the rules underpinning them. The global trade system therefore has a crucial role to play in the fight against climate change. It will need to adapt to not only avoid a collision between climate action and trade rules, but also to provide space and clarity for countries to implement bold climate measures.

Making such changes requires strong leadership. As a powerful forum for discussion and policy coordination of the world's major economies and largest emitters, the G20 is well-placed to initiate and lead the process to make the global trade system fit for the climate challenge.

It is against this background that the present paper explores options for the G20 to trigger a transition of the trade system towards a regime that is part of the solution to tackle climate change. The author of this paper, James Bacchus, a distinguished international trade lawyer, makes ambitious proposals for initiating such a change in global trade rules.

This paper is part of a research project carried out by ICTSD with the generous support of the KR Foundation as well as ICTSD's core and thematic donors. The analysis builds on a background paper, two think pieces and a series of dialogues with climate and trade delegates, as well as experts throughout 2017. It is a valuable input for the current and upcoming G20 presidencies as they seek to enhance the stability and sustainability of our global economy.

Ricardo Meléndez-Ortiz

EXECUTIVE SUMMARY

During the depths of the global financial crisis nearly a decade ago, the heads of state of the Group of Twenty major economies (G20) declared the G20 "the premier forum for our international economic cooperation." Since then, the G20 has evolved into a would-be steering committee for a whole array of international institutions and global initiatives. In 2016, the G20 embraced the United Nations 2030 Agenda for Sustainable Development as the centerpiece for its ongoing global work. In 2018, during the presidency of Argentina, the G20 can advance the 2030 Agenda by triggering an essential transition in the World Trade Organization (WTO) that will reconcile the rules for trade with the rapidly enveloping reality of climate change.

The essential realisation that trade and climate change are inextricably intertwined is not yet reflected in the agendas of either the WTO or the United Nations Framework Convention on Climate Change (UNFCCC). Without new WTO rules addressing the overlap in global efforts to liberalise world trade and respond to climate change, a collision will soon occur in WTO dispute settlement in a legal clash over a national measure purportedly taken in response to climate change that restricts international trade. Any such collision will threaten to undermine the legitimacy and the efficiency of the ongoing work of both the trade and climate regimes.

During the presidency of Argentina, the G20 should initiate actions to prevent this legal collision between trade and climate change and, moreover, to move the WTO and the UNFCCC towards more affirmative actions to reimagine trade rules to support increased trade while also furthering the fight against climate change. These G20 actions should point towards a WTO waiver to help facilitate and further national and international climate actions. Topics of the needed reimagining of WTO rules through the adoption of a climate waiver and through other actions could include border tax adjustments, carbon markets and climate clubs, environmental goods and services, disciplines on fossil fuel subsides, renewable energy and other green subsidies, and a sustainable energy trade agreement.

Outside the WTO, the G20 could help inspire climate actions in the climate regime and other arenas on defining legitimate national climate "response measures," improving energy efficiency, promoting sustainable agriculture, and more. To trigger this transition, the G20, under the leadership of Argentina, should begin by reaffirming the central role of the WTO in global trade governance and the need to oppose protectionism, reaffirming the necessity for more international cooperation to forestall climate change in fulfillment of the Paris Agreement, and using the convening power of its combined global economic clout to bring the trade and climate regimes together to seek the international legal reconciliation that is required. It can be hoped that ways can be found to engage the United States with the other G20 members in this endeavor. If not, the others should go ahead without the United States as, in effect, a G19.

Dedicated to the memory of a towering advocate for sustainable development, Jean-Pierre Lehmann

1. INTRODUCTION

It has been nearly a decade since, at a summit in Pittsburgh during the depths of the global financial crisis in September, 2009, the assembled heads of state of the Group of Twenty major economies (G20) declared to an anxious world, "Today, we designated the G20 as the premier forum for our international economic cooperation" (G20 2009, Para 50). The G20 countries agreed then on spending measures totalling US$4 trillion to resurrect their economies, rejected trade protectionism, and implemented significant reforms of the global financial system. As Stewart Patrick of the Council on Foreign Relations in the United States has said, the G20 at that time "rescued a global financial system in freefall" (McBride 2017).

Since then, in succeeding summits, and in the intervals between those summits, the G20 has evolved from a self-styled overseer of global financial recovery and stability into something akin to a would-be steering committee for a whole array of international institutions and global initiatives. It "has struggled to achieve similar success on its goals of coordinating monetary and fiscal policies, achieving higher growth, and rooting out corruption and tax evasion" (McBride 2017). Moreover, it has widened its scope to include the overall and overarching goal of achieving global sustainable development. In 2016, in Hangzhou, during the presidency of China, the G20 embraced the United Nations 2030 Agenda for Sustainable Development as the centrepiece for its ongoing global work. In 2017, in Hamburg, during the presidency of Germany—and despite the new recalcitrance of the United States under the reactionary thrall of President Donald Trump—the G20 reaffirmed its support for the 2030 Agenda.

In 2018, during the presidency of Argentina, the G20 has the opportunity to match its pledge of support for the 2030 Agenda with actions in furthering international economic cooperation framed by a mutual understanding that the global economy exists within the global environment, and that the only economic development that can create a lasting global prosperity shared by all in the world is sustainable development. One action the G20 can take in furtherance of the 2030 Agenda is to trigger an essential transition in the World Trade Organization (WTO) that will reconcile the rules for trade with the rapidly enveloping reality of climate change. In the current geopolitical context, what follow are highly ambitious proposals, to say the least. Yet highly ambitious proposals are urgently needed now with the arrival and the acceleration of climate change.

There is an inescapable nexus between trade and climate change. Trade measures affect the climate. Climate measures affect trade. Thus, trade is a climate issue, and climate change is a trade issue. Economically, environmentally, and legally under international law, the two are intertwined. Yet this essential realisation is not yet reflected in the agendas of either the WTO or the United Nations Framework Convention on Climate Change (UNFCCC). Climate change is not on the WTO agenda. Trade is not on the UNFCCC agenda. Thus, the two international regimes are on a legal collision course. In the WTO's first two decades and more, WTO jurists have demonstrated a resolve and an ability to reconcile the competing concerns of trade and climate change in WTO dispute settlement. Yet many WTO rules are limited and outdated, and limited too is the discretion of WTO jurists to push the bounds of the trade rules to advance climate action. In the absence of the negotiation of new WTO rules on the overlap in the Venn diagram of global efforts to liberalise world trade and to respond to climate change, a legal clash will soon occur in WTO dispute settlement over a national measure purportedly taken in response to climate change that restricts

international trade. Any such legal collision will threaten to undermine the legitimacy and the efficacy of the ongoing work of both the trade and climate regimes.

The members of the G20 account for about 85 percent of gross world product, 80 percent of world trade, and two-thirds of the world population (ICTSD 2017a). The nineteen individual states plus the European Union—comprised of 28 member states—that are the members of the G20 do not constitute a majority of the world's countries or a majority of the membership of either the WTO or the UNFCCC. Their combined economic clout is, however, certainly sufficient to do much to sway both of these reluctant international institutions toward confronting the nexus between trade and climate change. In "taking forward" the G20 Action Plan on the 2030 Agenda on Sustainable Development during the Argentine presidency, the G20 should initiate actions intended to spur global rulemaking to prevent a collision between trade and climate change and, moreover, to move both the WTO and the UNFCCC toward more affirmative actions to reimagine trade rules to support increased trade while also furthering the fight against climate change. Such a bold initiative by the G20 would greatly enhance the chances of adding these urgently-needed actions to the agenda of global governance.

2. THE G20, TRADE, CLIMATE CHANGE, AND THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

In the wake of the adoption by the United Nations of the Sustainable Development Goals (SDGs) in September 2015 (UN 2015c), and the Paris Agreement on Climate Change under the UNFCCC in December 2015 (UNFCCC 2015), the G20 leaders, meeting on the mystic shore of the fabled West Lake in Hangzhou in September, 2016, adopted the "G20 Action Plan on the 2030 Agenda for Sustainable Development" (G20 2016a). With this action plan, the G20 committed to realigning the entirety of its work to follow and further the United Nations 2030 Agenda.[1] The first words of this action plan proclaim, "The G20 is committed to further aligning its work with the 2030 Agenda for Sustainable Development to ensure that no one is left behind in our efforts to eradicate poverty, achieve sustainable development and build an inclusive and sustainable future for all" (G20 2016a, 1). Toward this end, G20 leaders pledged that "efforts will continue to promote strong, sustainable and balanced growth, protect the planet from degradation, and further cooperate with low income and developing countries" (G20 2016a). In announcing this action plan, the heads of state promised, "The G20 will focus on sectors and themes of the 2030 Agenda where it has comparative advantage and can add value as a global forum for economic cooperation" (G20 2016a).

Trade and climate change are both featured in the G20 action plan on the 2030 Agenda (Das et al. 2017; Akman et al. 2017). Along with foreign direct investment, trade is identified as one of the "essential drivers of inclusive growth" (Das et al. 2017; Akman et al. 2017). The multilateral trading system of 164 member countries and other customs territories that is overseen by the WTO is endorsed without equivocation or qualification: "The G20 remains committed to a rules-based, transparent, non-discriminatory, open and inclusive multilateral trading system and G20 members are determined to work together to further strengthen the WTO" (Das et al. 2017; Akman et al. 2017). These affirmations in the action plan echo similar affirmations made by the G20 leaders in their communique at the conclusion of the 2016 Hangzhou summit, including a reiteration from previous communiques of "our opposition to protectionism on trade and investment in all its forms" (G20 2016d).

The G20 action plan on the 2030 Agenda is unequivocal and unqualified, too, in advocating action against climate change. The G20 leaders agree, "Climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development" (G20 2016a, 12). In addition, they promise, "The G20 will continue to cooperate closely to combat climate change and its impacts and promote the timely entry into force and implementation of the Paris Agreement, encourage more resources to be provided and mobilized to combat climate change, and encourage financial flows to be consistent with a pathway towards low greenhouse gas emissions and climate-resilient development" (G20 2016a, 13). In particular, the G20 leaders commit to pursue these aims through the encouragement and facilitation of "climate finance and green finance" (G20 2016a, 12). Here, too, they reinforce in the action plan their resolute statement in the concluding summit communique of their "commitment to sustainable development and strong and effective support and actions to address climate change" (G20 2016d, Para 43).

Unquestionably, both trade and climate change are central to the 2030 Agenda of the United Nations. The seventeenth of the 17 UN SDGs is to "strengthen the means of implementation and revitalize the global partnership for sustainable development" (UN 2015c, Goal 17). Partnerships—including international partnerships—are envisaged as

1 For various views, see Martens 2017; Fues 2017; Beisheim 2017; Lay et al. 2017; and Peppiate 2016.

a principal means of accomplishing the SDGs. Arguably, none of the other 16 global goals can be achieved without the achievement of Goal 17. The G20 can certainly be seen as an international partnership that can help implement and revitalise global efforts for sustainable development.

Trade is listed in the 2030 Agenda as one of the means of fulfilling the all-encompassing goal of a global partnership for sustainable development. One of the targets in trade is to "[p]romote a universal, rules-based, non-discriminatory and equitable multilateral trading system under the World Trade Organization…" (UN 2015c, Target 17.10). Thus, trade is linked to the fulfilment of numerous of the other 16 SDGs, including ending poverty (Goal 1), achieving food security and promoting sustainable agriculture (Goal 2), achieving gender equity and empowering all women and girls (Goal 5), ensuring sustainable energy (Goal 7), promoting full and productive employment and decent work for all through inclusive and sustainable economic growth (Goal 8), fostering innovation (Goal 9), and reducing inequality within and among countries (Goal 10).

Trade is, in addition, a means of implementation for Goal 13 of the SDGs, which affirms the need to "[t]ake urgent action to combat climate change and its impacts" while acknowledging that the primary international, intergovernmental forum for taking such action is the UNFCCC (UN 2015c, Goal 13). In approving the SDGs, all of the members of the United Nations agreed, in words that were later partly mirrored in the G20 action plan on the 2030 Agenda, "Climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development. Increases in global temperature, sea level rise, ocean acidification and other climate change impacts are seriously affecting coastal areas and low-lying coastal countries, including many least developed countries and small island developing States. The survival of many societies, and of the biological support systems of the planet, is at risk" (UN 2015c, Para 14).

One of the motivating forces for these strong statements by the G20 in support of multilateral cooperation to lower barriers to trade, confront climate change, and achieve sustainable development was the United States of America, led at the time by President Barack Obama. In the interim between the Hangzhou summit in 2016 and the Hamburg summit in 2017, however, the United States elected a new President. Despite losing the popular vote by several million votes nationwide, Donald Trump won the election in the United States electoral college by prevailing by narrow margins in several Midwestern states assailed by economic globalisation. President Trump believes in raising barriers to trade, not lowering them, and he has nothing but disdain for the WTO-based multilateral trading system. He denies that climate change is occurring, much less that we humans are causing it. And his views on economic growth are seemingly unburdened by any notion of sustainability. This sudden change in US policy presented a predicament for the other 19 members of the G20 in Hamburg.

The United States stood alone and decidedly so at the Hamburg summit. As one journalistic assessment of the outcome in Hamburg put it: "The growing international isolation of the United States under President Trump was starkly apparent…as the leaders of major world economies mounted a nearly united opposition front against Washington on issues ranging from climate to free trade" (Birnbaum and Paletta 2017). This united front of 19 of the 20 members of the G20 was able to preserve and to pronounce anew the G20 position in favour of freeing trade and fighting climate change—but not without qualifications occasioned by the adamant opposition of the United States as the one outlier to a consensus.

On trade, "the G20 stepped back from an unequivocal commitment to free trade for the first time since its inaugural summit…" (Peker and Horobin 2017). Omitted from the G20 Leaders' Declaration in Hamburg in 2017 was the promise made in previous summit communiques of "our opposition to protectionism on trade and investment in all its forms." Instead,

G20 leaders pledged in Hamburg, "We will keep markets open noting the importance of reciprocal and mutually advantageous trade and investment frameworks and the principle of non-discrimination, and continue to fight protectionism including all unfair trade practices and recognize the role of legitimate trade defence instruments in this regard" (G20 2017b, 3). There is, however, no explanation in their declaration of which trade defence instruments are "legitimate." Similarly, in Hamburg, the G20 declared, "We underline the crucial role of the rules-based international trading system" (G20 2017b, 4). Yet there is no mention of "multilateralism." Despite the steadfast opposition of the other 19, for the sake of securing a consensus, the bilateral, transactional, mercantilist, and "zero-sum" view of Donald Trump and his minions on trade was allowed to seep into the substance of the outcome communique of the G20 summit (Evenett 2016).

On climate, the intransigence of Trump was even more evident in the language of the outcome document. First is the declaration that, "We take note of the decision of the United States of America to withdraw from the Paris Agreement" (G20 2017b, 10). Then follows, "The United States of America announced it will immediately cease the implementation of its current nationally-determined contribution and affirms its strong commitment to an approach that lowers emissions while supporting economic growth and improving energy security needs. The United States of America states it will endeavour to work closely with other countries to help them access and use fossil fuels more cleanly and efficiently and help deploy renewable and other clean energy sources, given the importance of energy access and security in their nationally-determined contributions" (G20 2017b). Enabling access to fossil fuels and use of fossil fuels is the very opposite of the shift away from fossil fuels and toward renewable sources of energy sought in Goal 13 of the SDGs and in the Paris Agreement. Moreover, it is contradictory and counter-productive to the aim of "accelerating the reduction of global greenhouse gas emissions" set out in the 2030 Agenda (UN 2015c).

The Hamburg declaration then goes on to say,

> The Leaders of the other G20 Members state that the Paris Agreement is irreversible. We reiterate the importance of fulfilling the UNFCCC commitment by developed countries in providing means of implementation including financial resources to assist developing countries with respect to both mitigation and adaptation actions in line with Paris outcomes and note the OECD report 'Investing in Climate, Investing in Growth.' We reaffirm our strong commitment to the Paris Agreement, moving swiftly towards its full implementation in accordance with the principles of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances and, to this end, we agree to the G20 Hamburg Climate and Energy Action Plan for Growth as set out in the Annex (G20 2017b, 10).

The conflict between the 19 and the reluctant one in the G20 on addressing climate change is seen in stark display in a footnote to the accompanying G20 Hamburg Climate and Energy Action Plan for Growth. In full throat, the preamble to the action plan declares, "To facilitate the implementation of UNFCCC, the Paris Agreement and the 2030 Agenda for Sustainable Development, we will strive to move forward in a coherent and mutually supportive manner that will provide us with significant opportunities for modernizing our economies, enhancing competitiveness, stimulating employment and growth and ensuring socio-economic benefits of increased energy access" (G20 2017a, 2). But a footnote to the preamble states: "The United States is currently in the process of reviewing many of its policies related to climate change and continues to reserve its position on this document and its contents" (G20 2017a).

This conflict between the United States and the 19 other G20 members is further manifested in the "Hamburg Update" for "taking forward"

the G20 Action Plan on the 2030 Agenda for Sustainable Development (G20 2017c). In a lengthy paragraph on trade, the leaders of the G20, in part, commit through collective actions "to an open world economy and to further work towards trade and investment facilitation and liberalization…to a rules-based, transparent, non-discriminatory, open and inclusive multilateral trading-system with the WTO at its core," and to "[r]esist protectionism in all its forms by extending G20 commitments to standstill and rollback of protectionist measures by the end of 2018" (G20 2017c, 12-13). They commit also to "[w]ork with all WTO members to set the direction together towards achieving positive outcomes of the WTO Ministerial Conference 11 and beyond" (G20 2017c).

In an equally ambitious energy agenda, in part, the G20 leaders commit in the "Hamburg Update" that, through collective actions, they will "[b]uild well-functioning, open, competitive, efficient, stable, sustainable and transparent energy markets and promote energy collaboration towards sustainable energy security with a view to fostering inclusive economic growth and an energy future in line with the goals of the Paris Agreement on climate change," will "[d]evelop and implement energy strategies to increase substantially the share of renewable energy in the global energy mix," and will "[r]ationalize and phase out inefficient fossil fuel subsidies that encourage wasteful consumption building on the voluntary peer-review process" (G20 2017c).

In the "Hamburg Update," too, however, there is a telling footnote at the very beginning: "The United States is still reviewing the collective actions that were supported by previous leadership, which are listed starting on page 6 of this document" (G20 2017c, Footnote 1). This carve-out by the United States includes all the collective G20 actions contemplated by the "Hamburg Update." In effect, the update is a statement by the G20 minus a major one. Little wonder then that, departing Hamburg, there was much uncertainty about the likely course of the G20 on trade, climate change, and sustainable development during the upcoming Argentine presidency. This uncertainty remains as Argentina now assumes the leadership role.

3. REIMAGINING TRADE RULES TO HELP COMBAT CLIMATE CHANGE

There has been some progress lately in aligning trade and climate change through rules made at the bilateral and regional level (Morin, Michaud, and Bialais 2016). These international efforts can help inspire needed multilateral efforts. But, without successful cooperative action by the WTO and the UNFCCC to reimagine global trade rules so as to reconcile them with global efforts to address climate change, the approaching legal collision in WTO dispute settlement cannot be avoided. As Clara Brandi has reported, "[t]rade-related elements feature prominently in climate contributions under the Paris Agreement," and "around 45 percent of all climate contributions include a direct reference to trade or trade measures" (Brandi 2017; Elkahwagy, Gyanchandani, and Piselli 2017). As these and other national measures are applied for the ostensible purpose of addressing climate change, and as they impose a variety of distortive trade restrictions, the WTO and the UNFCCC alike will be faced squarely with a divisive issue they have not found the will so far to confront. Evasions will end and recriminations will begin as the world awaits a verdict from my successors on the WTO Appellate Body. Whatever the outcome of the legal dispute, both the trade and the climate regimes will be damaged and diminished as they continue thereafter to strive to weigh and balance competing trade and climate goals.

What is more, without a reimagining of trade rules to address climate change, a vital opportunity will be missed to take affirmative trade actions to facilitate mitigation and adaptation to climate change. As a means of implementing the SDG goal of "taking urgent action to address climate change and its impacts," trade can be employed to smooth a green transition for the world. Tariffs and non-tariff barriers to trade in environmental goods and services can be eliminated. Trade can be facilitated in products with lower embedded carbon. Market-distorting fossil fuel subsidies can be disciplined and market-correcting green subsidies can be permitted. These and other trade actions can demonstrate that trade need not be seen as an obstacle to confronting climate change. Quite the contrary, through a reimagining of trade rules, trade can be a crucial means of fighting climate change.

What form would such a reimagining of trade rules take?

Without question, the most pressing need in facilitating the necessary global transition from a global economy heavily dependent on the cheap and abundant fossil fuels that emit carbon and warm the earth's atmosphere in a hothouse of greenhouse gases is to put a price on carbon. The climate and other environmental harms caused by the use of fossil fuels in the production of traded goods are not included in their market prices. These harms are "externalities"—"market failures" where "economic resources are allocated inefficiently" (Ye 2015). The existence of such a negative "externality" not reflected in the price of a product is one of the societal circumstances that justifies—indeed necessitates—a qualification on the general virtue of a generous measure of market freedom. Sir Nicholas Stern, the eloquent climate economist and activist, maintains that emissions of greenhouse gases may be "the largest market failure the world has ever seen" (Stern 2014).

The failure to put a price on carbon leaves us with the illusion that fossil fuels offer only benefits and impose no societal costs. What is more, climate analysts for the International Monetary Fund say that, in the absence of a carbon price, there is, in effect, an "implicit subsidy from the failure to charge for environmental costs" (Farid et al. 2016). "Internalising" these external costs—including the hidden costs of the climate and other environmental harms caused by greenhouse gases—in the market price of traded products sends the needed economic signal to remedy this market failure. "Internalising" these costs causes energy producers and energy consumers alike to decide whether to cut their emissions or pay an economic price for not cutting them.

Where there is no price on carbon, emitters are free to continue to pour more carbon into the atmosphere at will—without paying the costs of the societal and environmental harm that is done. But where there is a price on carbon, emitters have an incentive to reduce their carbon emissions, and to do so at the lowest possible cost. Where there is a carbon price, energy and other producers have an economic incentive also to invest in the development and the deployment of cleaner and, therefore, more cost-efficient technologies. The introduction of a carbon price into the mix of economic decision-making helps spur and speed the shift of the green transition to a decarbonised world.

Trade rules do not prevent pricing carbon, but they also do not facilitate it. They should. Trade rules should be reimagined to help facilitate carbon pricing. Concerns about climate change must be integrated into all our economic policy (Stern 2014). This includes all our trade policy. In 2015, all the members of the United Nations—which includes all the members of the WTO—agreed in the Addis Ababa Action Plan for financing for development that they "will endeavor to significantly increase world trade in a manner consistent with the sustainable development goals" and that they "will integrate sustainable development into trade policy at all levels" (UN 2015a, Para 82). This certainly includes climate change. The Addis Ababa Action Plan "is an integral part of the 2030 Agenda for sustainable development" (UN 2015c, Para 62). It is referenced in the decision accompanying the adoption of the Paris Agreement (UN 2015b), and the success of the Paris Agreement as a global response to climate change is sought in SDG 13 of the United Nations 2030 Agenda (UN 2015c, Goal 13).

All this is perfectly consistent with the aims of the members of the WTO as expressed in the WTO treaty. Originally, in 1947, the 23 countries that signed the General Agreement on Tariffs and Trade (GATT) professed their shared desire, in the preamble to the GATT, for "developing the *full use* of the resources of the world and expanding the production and exchange of goods" (GATT 1947, Preamble).[2] In contrast, in 1994, the more than 100 countries that agreed to transform the GATT into the WTO through the conclusion of the Marrakesh Agreement expressed their common goal, in the preamble to that agreement, of conducting "trade and economic endeavor…while allowing for the *optimal use* of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs at different levels of economic development" (WTO 1994, Preamble).[3]

This clear distinction between a desire for "full use" and "optimal use" of the world's resources consistent with sustainable development is a distinction that makes a significant substantive difference for the WTO.[4] In pointing to the presence of a commitment to "sustainable development" in the Marrakesh Agreement, the WTO Appellate Body has observed that the signatories "to that Agreement were, in 1994, fully aware of the importance and legitimacy of environmental protection as a goal of national and international policy."[5] In the view of the Appellate Body,

> Those negotiators evidently believed…that the objective of 'full use of the resources of the world' set forth in the preamble of the GATT 1947 was no longer appropriate to

2 Emphasis added.

3 Emphasis added.

4 Those of us who served on the E15 Export Group on Measures to Address Climate Change and the Trade System reached the same conclusion. See Bacchus 2016.

5 Appellate Body Report, United States – Shrimp, WT/AB/R/DS58 (1998), para. 129 and footnote 107.

> the world trading system of the 1990's. As a result, they decided to qualify the original objectives of the GATT 1947 with…language (that) demonstrates a recognition by WTO negotiators that optimal use of the world's resources should be made in accordance with the objective of sustainable development. As this preambular language reflects the intentions of negotiators of the *WTO Agreement*, we believe it must add colour, texture and shading to our interpretation of the agreements annexed to the *WTO Agreement*, in this case, the GATT 1994.[6]

These words at the very outset of the WTO treaty have great value if the members of the WTO and the jurists in the WTO dispute settlement system choose to value them. More than two decades since the conclusion of the Marrakesh Agreement, the "colour, texture and shading to our interpretation of the agreements" that comprise the WTO treaty to ensure their consistency with the objective of sustainable development requires a singular approach to meeting the global challenge of reckoning with climate change. Without doubt, there is much more to attaining sustainable development than countering climate change. This acknowledged, the "High-Level Panel of Eminent Persons" that advised the United Nations on how to implement what has since become the UN's 2030 Agenda was nonetheless absolutely right in insisting that, "Above all, there is one trend—climate change—which will determine whether or not we can deliver on our ambitions" (UN 2013). If we do not save the climate, we will not achieve any of our ambitious goals for sustainable development. So, the reimagining of trade rules to support sustainable development must begin with a reimagining of those rules to counter climate change.

6 Ibid. at paras. 152-153 (emphasis added).

4. THE NEED FOR A WTO CLIMATE WAIVER

This legal reimagining by the WTO must begin with how we treat carbon. The integration of the global struggle against climate change into global trade rules must mean—at the very least—that, from now on, we will treat carbon differently. What is more, because carbon emissions present a unique threat to humanity and to the entire planet, it follows that carbon must be treated not only differently, but also uniquely. Unique ways must be found to craft and to construe trade rules so as to advance the flow of trade while also imposing a price on trade when it is fuelled by carbon through the continued use of fossil fuels.

Toward this end, carbon taxes and other trade restrictions in climate response measures arising from distinctions made on the basis of the amount of carbon used or emitted in making traded products must be permissible under WTO trade rules. At the same time, such climate-motivated trade restrictions must not be permitted to undermine, through some form of green protectionism, the foundations of the WTO-based multilateral trading system that underpin the ongoing hope for continued liberalisation of trade. Several solutions are possible. The solution that would provide the most benefit for the climate while posing the least risk to trade would be the adoption by the WTO of a climate waiver (Bacchus 2017).

A climate waiver is not the only possible solution.

One possible solution other than a climate waiver would be to redefine the basic concept of a "like product." At the most basic level, the "most-favoured-nation treatment" and "national treatment" obligations that are central to the WTO-based world trading system can work in the day-to-day commercial flow of international trade "only if we have some way of identifying which particular traded products are to be compared when determining whether these obligations are being respected" (Bacchus 2016). It is for this reason that trade rules have long required that the comparison must be between "like products." The concept of "likeness" is thus crucial to supporting the cornerstone of the global trading system, which is non-discrimination in trade.

What is, and is not, a "like product" has been the source of endless debate and dispute, case by case, in WTO dispute settlement. After seven decades of discernment by WTO jurists, the general trade rule in WTO jurisprudence is that the "likeness" of traded products will be determined on the basis of their physical characteristics, their end uses, their tariff classification, and consumers' tastes and habits (Van den Bossche and Zdouc 2013, 325-328). The general WTO rule is that a determination of "likeness" should be made solely on the basis of these four criteria. It therefore follows that this determination should *not* be made on the basis of how products are made or what goes into making them. In this view, "likeness" has nothing to do with a "process or production method" (PPM), whether it is "product-related" (having an impact on the quality of the product) or "non-product-related" (not showing any trace in the end product). Thus, "likeness" has nothing to do with the amount of carbon used or emitted in making a product.

With respect to "likeness," the widespread and legitimate concern of trade advocates is over what noted international economist Jagdish Bhagwati calls the "slippery slope." He explains that "the fear" in the WTO trading system is "that an open-ended grant of exception on values-related PPMs could lead to a slippery slope and to a flood of exclusions that could not be challenged as countries passed unilateral legislation and executive orders that asserted moral objection to a practice they did not like and denied others market access" (Bhagwati 2004). We would start, not a parade of "horribles," but a long parade of "laudables," and, issue by laudable issue, often with the very best of intentions, the solid ground of non-discrimination in trade would be worn away. Down Bhagwati's "slippery slope" could slide a long list of various non-commercial values imposed by some countries on some other countries—usually by rich countries on

poor countries—through the making of such distinctions on traded products. A solution to the approaching collision between trade and climate change that redefined a "like product" could have the unfortunate result of causing only more collisions between trade and other societal concerns in WTO dispute settlement.

Another possible solution other than a climate waiver would be a continued reliance on the general exceptions to trade obligations in Article XX of the GATT—an approach taken so far by WTO jurists in WTO dispute settlement. Instead of sliding down the "slippery slope" of making environmental distinctions by redefining the basic concept of "likeness," WTO jurists—so far—have largely preserved the traditional "likeness" criteria while relying instead on the environmental exceptions in Article XX when there have been legal clashes between trade and the environment in WTO disputes.[7] Here WTO members have helped by—so far—not squarely confronting WTO jurists with the necessity of rendering a judgment in those disputes on the definition of "likeness."[8] Written in 1947, Article XX of the GATT has proven to date to be remarkably resilient in accommodating the sundry complexities of the relationship between international trade and other sometimes competing concerns in the modern world.

But Article XX of the GATT is nevertheless a frail framework for bearing the entire burden of the impending collision between trade and climate change. To mention one shortcoming, it is far from clear that GATT Article XX offers the legal shelter of an environmental defence to what would otherwise be violations of WTO obligations in any of the WTO covered agreements other than the GATT. Consider, for a moment, green subsidies and the legal uncertainty about whether GATT Article XX can be a defence to a violation of the subsidy rules.[9] To mention another current conundrum in WTO jurisprudence, there is no clarity about whether a carbon tax is an indirect tax on a product that is eligible for a "border tax adjustment" under GATT Article II:2(a).[10]

Moreover, WTO disputes are discrete; WTO dispute settlement is case by case. The judgment in any one dispute will be shaped by the facts of that one dispute. Even if that judgment is thought to be right in drawing the legal line between trade and climate change, it will be only a partial judgment, and the line that is drawn will be incomplete. The fullness of WTO jurisprudence emerges only incrementally on a case-by-case basis. WTO jurists have shown time and again in the past two decades and more that they will not automatically allow trade to trump environmental and other societal concerns in WTO dispute settlement. I have every confidence that the Appellate Body is up to the challenge of drawing the right line in the right way. Even so, the world does not have a decade or two to await completion of the line-drawing between trade and climate change. Nor do the trade and climate regimes need the political uproar that will surely follow when WTO jurists are tasked with deciding whether a national climate measure is permissible under world trade rules.

In addition, there is the possibility of a "chilling effect" on needed national climate actions. The policy space reserved for WTO members in WTO rules is of little use to them if they are hesitant to act because of legal uncertainty.

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7 See, for example, the Appellate Body Report in United States – Shrimp.

8 Again, see, for example, United States – Shrimp.

9 See Appellate Body Report, United States – Measures Relating to Shrimp from Thailand/United States – Customs Bond Directive for Merchandise Subject to Anti-dumping/Countervailing Duties, WT/DS343/AB/R, WT/DS345/AB/R (2008); Appellate Body Report, China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products, WT/DS363/AB/R (2010), para. 229; Appellate Body Report, China – Measures Relating to the Export of Rare Earths, Tungsten, and Molybdenum, WT/ DS431, 432, 433/AB/R (2014), paras. 5.53-5.55, citing Appellate Body Report, Argentina – Safeguard Measures on Imports of Footwear, WT/DS121/AB/R (2000), para. 97.

10 See Report of the Working Party on Border Tax Adjustments, BISD 18S/97 (1970), para. 14. See also my discussion of these and other unanswered legal questions in WTO law in Bacchus 2017.

So long as policymakers are concerned that a climate measure they are considering might breach WTO rules—and they will only know for sure once this has been litigated in WTO dispute settlement—they may refrain from enacting and implementing it. Therefore, the greater clarity about the rules provided by a climate waiver could serve to clarify the extent of actual domestic space for policymaking, without having to change the rules. This alone could enhance national climate actions and could add to national climate ambitions.

Two more possibilities other than a climate waiver would be either to amend the provisions of the WTO covered agreements to address climate change (WTO 1994, Article X) or to adopt a formal legal "interpretation" of those agreements to do so (WTO 1994, Article IX:2). Simply amending WTO rules is not a practical political choice at this time. Amending the rules requires a consensus or, if one is not reached, a "two-thirds majority" to agree, for most WTO provisions, on a vote generally to be decided by acceptance by two-thirds of the WTO members (WTO 1994, Article X). Without question, the requisite support for amending WTO rules to assist in enabling action to address climate change does not exist now, and that support will not exist without the prolonged prelude of extensive political preparation (WTO 1994, Article IX). Similarly, adopting a formal legal "interpretation" of the existing rules is not now an attractive choice. A "decision to adopt an interpretation shall be taken by a three-fourths majority of the Members" (WTO 1994, Article IX:2). The "exclusive authority "of the Ministerial Conference and the General Council of the WTO to adopt legal "interpretations" of WTO obligations has never been used and thus has not yet been tested (WTO 1994, Article IX:2).

Like the adoption of an amendment to the covered agreements or a formal legal interpretation of those agreements, the adoption of a climate waiver as a solution by the members of the WTO would avoid the "slippery slope" of redefining "likeness," and it would avoid also an undue reliance on the slow script of the line-drawing between trade and climate change under GATT Article XX in WTO dispute settlement. But it would be more easily accomplished. For the members of the WTO, adopting a waiver is a familiar way of reassessing the application of WTO rules. Waivers have been employed frequently and successfully under Article IX:3 of the Marrakesh Agreement, which empowers the WTO Ministerial Conference "[i]n exceptional circumstances…to waive an obligation imposed on a Member by this Agreement or any of the Multilateral Trade Agreements, provided that such decision shall be taken by three-fourths of the Members" (WTO 1994, Article IX:3). The relatively frequent use of this legal authority has not been limited to the mundane matters of tariffs, tariff-rate quotas, and the like. It has extended to other issues that—while not as sweeping as climate change—are global in nature and extend far beyond traditional trade concerns.

There is, for instance, the "TRIPS Waiver" granted by the WTO in 2003, which, with respect to intellectual property rights, clarifies that the compulsory licensing of medicines is permitted without the permission of the patent holder if affordable medicines are not otherwise available when another WTO member faces a health crisis.[11] There is also the "Kimberley Waiver" granted by the WTO that same year to clarify that trade actions taken against non-participant WTO members to help suppress trade in so-called "conflict" or "blood" diamonds under the Kimberley Process Certification Scheme for Rough Diamonds are justified under the GATT.[12] These waivers were hard-won politically, to be sure. The same would be true of a climate waiver. Yet the success of these two waivers suggests that—though it will be undeniably difficult to achieve—a WTO climate waiver is possible.

11 WTO, General Council, Implementation of Paragraph 6 pf the Doha Declaration on the TRIPS Agreement and Public Health, Decision of 30 August 2003, WT/L/540 (2 September 2003).

12 WTO, General Council, Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds, Decision of 15 May 2003, WT/L/518 (27 May 2003).

A WTO climate waiver would be more extensive than these previous waivers. But how extensive should it be? What should be the content of a climate waiver? Domestic climate response measures may assume a whole range of forms, no doubt including some that cannot now be foreseen. The guises of domestic climate response measures will surely include carbon taxes, cap-and-trade programs, emission allowances for importers, clean-energy performance and technology standards, targeted sectoral and broad-based technical regulations, border tax adjustments, and a whole assortment of other border carbon adjustment measures that affect trade and thus fall within the scope of the WTO treaty and therefore the jurisdiction of WTO dispute settlement. The content of a WTO climate waiver should include all of these climate measures as well as others relating to climate mitigation and adaptation. A WTO climate waiver should declare that all domestic measures that impose trade restrictions based on the amount of carbon used or emitted in making a product and that are taken in fulfilment of and in compliance with international climate obligations are excused from what would otherwise be violations of WTO obligations and thus are permissible under WTO law.

5. THE NEED FOR MORE REIMAGINING

A WTO climate waiver could contain many additional provisions relating to numerous WTO obligations at the nexus of trade and climate change. Among them should be provisions addressing:

5.1 Border Tax Adjustments

The members of the WTO must eliminate altogether the current uncertainty over the legal status of carbon-based border tax adjustments. The price signal of a green transition is sharpest in the form of a carbon tax. For this reason, trade rules—at the very least—must not be obstacles to the success of carbon taxes. Nor should the existence of trade rules be an excuse for refusing to impose carbon taxes. As it is, it is unclear whether carbon taxes that affect trade are permissible under trade rules or not.

Generally, trade rules require that national tax measures must be applied consistently with the "national treatment" obligation of non-discrimination and with concessions made and then listed in each WTO member's schedule of trade concessions. However, since the origin of the GATT in 1947, the GATT rules have permitted what are called in international trade law "border tax adjustments." Under these rules, a border tax adjustment equivalent to an internal tax is permitted as a charge on imported products, and is permitted also as a remission on exported products (GATT 1994, Article II:2(a)).

But now (as so often with tax rules) it becomes complicated. Only indirect taxes on products—such as sales taxes—may be adjusted at the border. Direct taxes on producers—such as income taxes—may not be. Is a carbon tax a direct tax on a producer or an indirect tax on a product? To date, there is no WTO ruling that answers this key question. So there is no certainty as to whether a carbon tax is a permitted border tax adjustment under the WTO rules or not. Nor is there any climate-relevant WTO jurisprudence that tells us whether a tax on inputs—such as fossil fuels—that are not physically incorporated into an end product is a tax that can be adjusted at the border under WTO law. This uncertainty in international trade law is a disincentive to the enactment by any WTO member of a carbon price and thus to putting a price on carbon.

Through the adoption of a WTO climate waiver, WTO members should clarify that a carbon tax is an indirect tax on a product that is eligible for a border tax adjustment, and they should confirm as well that a tax on inputs that are not physically incorporated into an end product is a tax that can also be adjusted at the border.

5.2 Carbon Markets and Climate Clubs

The members of the WTO should also reimagine WTO rules and the WTO-based world trading system to transform them into more affirmative agents for addressing climate change. An immediate additional task is to help advance international cooperation in the formation of carbon markets that put a price on carbon, usually through the trading of carbon emissions units. Carbon markets reduce carbon emissions by enabling them to take place where they are most efficient (ICTSD 2017a). In particular, the reimagining of trade rules should help facilitate the formation of voluntary "climate clubs" of like-minded emitters that are willing to work together to do more to cut emissions now than can currently be agreed in a fully global consensus. Such a climate club could begin with an alliance of the "like-minded" that choose to share higher ambitions and go ahead now to make deeper carbon emissions cuts in exchange for mutual commercial, technological, and other concessions. The club could then build from there incrementally to include more emitters as more emitters witnessed the success of the club and wished to enlist in it and to secure its benefits while heightening their own climate ambitions.

A climate club could begin as either a plurilateral agreement within the WTO or a separate

agreement outside the legal framework of the WTO. It could then grow over time toward more fully global approaches, just as the GATT grew over time into the WTO (Keohane, Petsonk, and Hanafi 2015; Victor 2014). However structured and however developed, it would need to be compatible with WTO rules, else trade rules would become hindrances to the spread and the success of carbon pricing. Because a club of any kind can succeed only if the benefits of belonging to the club are reserved exclusively for its members, those not in a climate club would likely be denied that club's benefits. Conceivably, the benefits denied to non-members could include "WTO-plus" trade benefits over and above those provided by the WTO treaty, thus resulting in trade discrimination. Also, any sanctions applied by the club could include trade sanctions against WTO members that are not members of the club.

To ensure that WTO rules do not become obstacles to carbon pricing through climate clubs, the members of the WTO should affirm that an agreement by a climate club to provide "WTO-plus" benefits over and above those due under the WTO treaty to WTO members that are members of that club, and not to WTO members that are not club members, is permissible under WTO rules. In addition, WTO members should provide that trade sanctions taken by a WTO member pursuant to a plurilateral climate club or some other plurilateral climate agreement to which that WTO member is a party against another WTO member that is not a member of that club or a party to that climate agreement will be in compliance with WTO obligations so long as they are not applied in a manner that constitutes arbitrary or unjustifiable discrimination or a disguised restriction on international trade (Bacchus 2016, 16).

5.3 Environmental Goods and Services

Another important task of the WTO is to conclude successfully the prolonged negotiations on the liberalisation of trade in environmental goods, which would do much to speed the spread of new clean and climate-friendly technologies throughout the world, including to the developing countries where they are much needed to promote clean energy and help mitigate and adapt to climate change. Global trade in environmental goods is nearly US$1 trillion annually—and growing rapidly. Yet this vital trade is hindered because some countries charge tariffs as high as 50 percent on these goods (USTR 2017). Building on a list of 54 environmental goods identified by Asian and Pacific countries in 2012, 46 members of the WTO accounting for most of the world's trade in these goods have been negotiating without success for a number of years to conclude an agreement to eliminate the tariffs on them and extend the duty-free benefits to all other WTO members.

In 2014, in Toronto, the G20 agreed "to work together to…[e]nsure access to affordable and reliable energy for all" (G20 2014b, Para 1). The G20 Action Plan on the 2030 Agenda for Sustainable Development describes this "universal access goal" as including "access to energy, clean energy and energy efficiency" and places "an initial focus on the Sub-Saharan Africa region…" (G20 2016a, 9). This goal is reiterated in the "Hamburg Update" (G20 2017c, 12). One target of the SDGs toward achieving this goal is to "promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms…" (UN 2015c, Target 17.7). Toward this same end, climate negotiators decided in Paris to work toward "[t]he enhancement of enabling environments for and the addressing of barriers to the development and transfer of socially and environmentally sound technologies." (UNFCCC 2015, Decision 68(d)). Clearly, removing all tariffs on trade in environmental goods will help the world reach this goal.

In Hangzhou in 2016, the G20 leaders declared that they "welcome the landing zone achieved in WTO Environmental Goods Agreement (EGA) negotiations and reaffirm their aim to redouble efforts to bridge remaining gaps and conclude an ambitious, future-oriented EGA that seeks to eliminate tariffs on a broad range of environmental goods by the end of 2016, after finding effective ways to address

the core concerns of participants" (G20 2016d, Para 27). There was no landing by the WTO in the "landing zone" of the proposed EGA by the end of 2016. The G20 leaders' declaration at the Hamburg summit in July, 2017, omitted any mention of the EGA. And WTO members seemed nowhere close to concluding it at the WTO Ministerial Conference in Buenos Aires in December, 2017.

Like-minded WTO members could go ahead and conclude a plurilateral agreement freeing trade in environmental goods and multilateralise it by extending "most-favoured-nation" treatment to all those WTO members that have not yet agreed to it. They could also enhance the beneficial impacts of the environmental goods agreement on climate mitigation and on climate adaptation by expanding it to include trade in environmental services. Or they could instead choose to include the EGA in a WTO climate waiver.

5.4 Disciplines on Fossil Fuel Subsidies

Another urgent task for the WTO in reimagining trade rules is to impose trade disciplines on fossil fuel subsidies. In our warming world, subsidies for the production and consumption of fossil fuels perpetuate our dependency on the very energy sources that are causing climate change and all its dire consequences. They "discourage investments in clean energy and energy efficiency, tilting the balance in favor of fossil fuels and making it difficult for renewable energy and energy-efficient equipment to compete" (World Bank 2015, 80). They "lock societies into carbon-intensive pathways for decades to come at the expense of cleaner alternatives" (Sauvage 2015). Fossil fuel subsidies, for example, lock in our current dependency on carbon by encouraging "greater reliance on private vehicles and urban sprawl" (Stern 2014, 178).

Fossil fuel subsidies are likewise "locked in" to the inertia of domestic politics all over the world. Consumption subsidies for fossil fuels in particular are popular everywhere. Large-scale subsidies for the consumption of fossil fuels are frequently defended as a means to help the poor—especially those in poorer countries—by providing them with cheaper fuel through such means as inexpensive gasoline or fuel vouchers or heating energy grants. But such consumption subsidies, however popular, are in fact "highly inequitable;" one study of how these fossil fuel subsidies actually work in developing countries reveals that the wealthiest 20 percent of the people get 43 percent of the benefits (World Bank 2015, 82). The truth is, fossil fuel consumption subsidies do not favour the poor. Instead, they "tend to favour well-off urban middle classes, who can afford large cars and multiple electric appliances at the expense of taxpayers or the poor who would benefit more from targeted pro-poor public spending" (Stern 2014). We should help the poor in ways that do not encourage them to use fossil fuels.

Fossil fuel subsidies add to budget deficits. They crowd out public spending on education, health care, public safety, and other social services. They encourage excessive energy consumption. They distort energy choices and investments. They speed the depletion of natural resources and worsen climate change. Fossil fuel subsidies send the very opposite of the price signal that must be sent to the marketplace to speed the necessary transition to a decarbonised economy. And yet the amount spent worldwide on fossil fuel subsidies—by many of the same nations that have foresworn a continued reliance on fossil fuels by approving the Paris Agreement—is nothing less than astronomical.

The official tallies vary. The International Energy Agency reports that the total of consumer price subsidies and other forms of governmental support for fossil fuels is "in the vicinity of" between US$500 billion and US$800 billion per year (Sauvage 2015). When the cost of damage from pollution and climate change is factored into the calculation, the International Monetary Fund has estimated that the total of governmental subsidies for fossil fuels rises to the staggering amount of US$5.3 trillion a year—or US$10 million a minute (Carrington 2015). This sum "is greater than the total health spending of all the world's governments" (Carrington 2015).

As Ricardo Meléndez-Ortiz has noted, "The G20 has…consistently called for reform of inefficient fossil fuel subsidies as a matter of sound fiscal policy. In recent years, and in the run-up to the 2015 Paris climate conference, fossil fuel subsidies reform (was) explicitly embraced by the G20" (Meléndez-Ortiz 2017). At Pittsburgh in 2009, the G20 leaders promised to "[r]ationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption" (G20 2009, Para 29). That promise was repeated in succeeding G20 summits—but without setting a deadline. In 2016, at their summit in Japan, the G7 countries, a subset of the G20, set a deadline for ending "all inefficient fossil fuel subsidies" by 2025, and encouraged all other countries to go along (Mathiesen 2016). In May, 2017, at their next summit, in Sicily, with the new, pro-fossil fuel President of the United States in attendance, the G7 did not repeat this commitment in its summit communique (Timperley 2017). Then, the next month, in Hamburg, 19 of the G20 leaders stated in the G20 Hamburg Climate and Energy Action Plan for Growth: "We reaffirm our commitment to rationalize and phase out, over the medium term, inefficient fossil fuel subsidies that encourage wasteful consumption, recognizing the need to support the poor and we will endeavour to make further progress in moving forward toward this commitment" (G20 2017a, F.2). The United States did not join in this statement.

In the midst of missed opportunities and a malaise of general disappointment at the WTO Ministerial Conference in Buenos Aires, one potentially promising breakthrough was the endorsement by 12 WTO members of a ministerial statement on reforming fossil fuel subsidies.[13] Supporting the declaration were Chile, Costa Rica, Iceland, Liechtenstein, Mexico, Moldova, New Zealand, Norway, Samoa, Switzerland, the Separate Customs Territory of Taiwan, and Uruguay (ICTSD 2017b). Only one of the twelve—Mexico—is a member of the G20. These countries expressed their goal "to advance discussion in the World Trade Organization aimed at achieving ambitious and effective disciplines on inefficient fossil fuel subsidies that encourage wasteful consumption, including through enhanced World Trade Organization transparency and reporting that will enable the evaluation of the trade and resource effects of fossil fuel subsidies programmes" (ICTSD 2017b). They underscored the need in reforming fossil fuel subsidies to incorporate "the specific needs and conditions of developing countries and minimize the possible adverse effects on their development" (ibid). They seek to put disciplines for fossil fuel subsidies on the WTO negotiating agenda.

In so doing, these dozen WTO members are furthering the UN 2030 Agenda for Sustainable Development. Goal 12 of the SDGs is to "[e]nsure sustainable consumption and production patterns" (UN 2015c, Goal 12). One target of Goal 12 is to "[r]ationalize inefficient fossil fuel subsidies that encourage wasteful consumption…" (UN 2015c, Target 12.c). The aim is to do so by 2030 "by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities" (UN 2015c, Target 12.c).

Reaching this target will be no easy task, but reaching it will be much easier if the WTO singles out production and consumption subsidies for fossil fuels for new trade disciplines. All WTO members should be required to disclose the details of all their fossil fuel subsidies to the WTO or risk WTO dispute settlement if they do not. Categories and timetables should

13 The individual member states of the European Union were unable to sign because, under EU rules, they do not have the legal competence to do so.

be established for reducing and eventually eliminating different kinds of existing fossil fuel subsidies over time. New fossil fuel subsidies should be prohibited under WTO rules in the same way as subsidies conditioned on export performance or on domestic content. All this should be done in a way that does not harm the poor.[14] And all this could be included in a WTO climate waiver.

5.5 Renewable Energy and Other Green Subsidies

In furtherance of Goal 13 of the SDGs, the Paris Agreement aspires to "foster climate resilience and low greenhouse gas emission development" (UNFCCC 2015, Article 2b). Goal 7 aims to "[e]nsure access to affordable, reliable, sustainable and modern energy for all" (UN 2015c, Goal 7). One target of Goal 7 is to, "[b]y 2030, increase substantially the share of renewable energy in the global energy mix" (UN 2015c, Target 7.2). New sources of renewable energy are growing rapidly, but fossil fuels still comprise about 80 percent of the global energy mix. To help accelerate the development of "modern" renewable energy to achieve the global goals, many countries have been granting green subsidies. Renewable energy subsidies totalled US$121 billion in 2013 and are predicted to rise to US$230 billion in 2030 (IEA 2014).

Because WTO rules do not currently take into account any policy justification for a subsidy, the fact that these subsidies are meant to correct for a market failure does not provide a legal excuse for them in WTO dispute settlement (Charnovitz 2014, 17). As a result, international disputes over the trade effects of renewable energy subsidies have multiplied in the WTO. The proliferation of "tit for tat" trade disputes over solar and other renewable energy subsidies has hindered progress toward more renewable energy, while reinforcing the view that opposes national measures to protect the environment and to fight climate change.

For a brief time following the creation of the WTO, there were WTO rules that permitted distinctions among subsidies on the basis of their professed purpose by carving out limited exceptions from the subsidies rules for assistance to research, to disadvantaged regions, and "to promote adaptation of existing facilities to new environmental requirements…"[15] The last of these three exceptions seems especially relevant during this time of "new environmental requirements" due to the transitional challenges of climate change and sustainable development. There was, in addition, at the outset, an exception in the WTO subsidies rules for one-time-only subsidies "given merely to provide time for the development of long-term solutions and to avoid acute social problems."[16] This, too, seems highly relevant today. Unfortunately, these exceptions have long since lapsed and are no longer part of WTO law. (Ironically, efforts to negotiate an extension—and perhaps an expansion—of these developmental and environmental exceptions failed when the negotiations were halted due to the environmental protests against the WTO at its ministerial conference in Seattle in 1999.)

As part of reimagining trade rules to address climate change and promote overall sustainable development, these exceptions should be restored and modernised. This process can begin by including reimagined subsidies rules in a WTO climate waiver. These revised WTO subsidies rules should include exceptions for green subsidies that promote renewable energy. These exceptions should offset the price advantage provided to fossil fuels by the climate and other environmental harms they cause that are not included in their market prices. They should be limited in time, limited in scope, and limited as well in the latitude they allow for trade discrimination. They should be

14 For helpful suggestions on how the WTO should discipline fossil fuel subsidies, see Pereira 2017; Trachtman 2017; and Horlick 2017.

15 Article 8, Part IV, WTO Agreement on Subsidies and Countervailing Measures.

16 Article 6.1(c), WTO Agreement on Subsidies and Countervailing Measures.

structured in ways that will do the most for the green transition while doing the least to risk the basic integrity of the rule-based world trading system.

For example, "domestic content" requirements that condition the grant of subsidies on the use of domestic over imported inputs in final production are already illegal under WTO subsidies rules and should continue to be prohibited.[17] Discriminating sourcing requirements are tempting as devices to secure domestic support. But they distort trade while denying domestic producers and consumers alike the benefits of the competition, the lower prices, and the broader choices of the more effective and more efficient energy and environmental alternatives offered by being open to foreign trade and to foreign direct investment. Exceptions for green subsidies that promote renewable energy should not be available for measures that include "domestic content" requirements.

The distinguished Swiss trade scholar Thomas Cottier has observed that, "From the point of view of decarbonisation, a local content requirement does not make sense as it increases costs for hardware and installations. Imported and competitive products are likely to contribute to more rapid deployment of the technology" (Cottier 2015). Another lead thinker on the numerous interrelationships between trade and sustainable development, Rob Howse, has pointed out that "domestic content requirements and other discriminatory measures actually undermine environmental objectives, by shifting production to higher-cost jurisdictions, and therefore making clean energy, or clean energy technologies, more expensive than they need to be" (Howse 2013, 50, 53).

In addition, exceptions to the subsidies rules for green subsidies should be targeted to maximise their contribution to combating climate change and furthering sustainable development. As Michael Trebilcock and James Wilson have suggested, green subsidies should not target particular *technologies* but instead should target particular *outcomes* (Trebilcock and Wilson 2010). They recommend "a 'winner neutral' approach that prioritizes public investments from which many different market actors can benefit as they compete to discover and develop 'winning' (i.e. environmentally friendly and economically viable) energy technologies" (Trebilcock and Wilson 2010, 3-4). As they explain, the goal is not to develop renewable energy "for its own sake" but rather to reduce emissions of greenhouse gases (Trebilcock and Wilson 2010, 27). Therefore, subsidies should be provided to those in the market that achieve desired outcomes as measured by actual emissions cuts (Trebilcock and Wilson 2010).

In suggesting this approach, Trebilcock and Wilson (2010, 31) rightly reason that

> if our ultimate goal is to abate emissions as rapidly and cost-effectively as possible while laying the groundwork for a green energy future, as well as to advance ancillary goals that will help to sustain this progress, such as saving resources and creating green jobs, then providing technology-specific subsidies for renewable energy power generations ('picking winners') runs a considerable risk of failure, because some currently available clean energy technologies are not green in every jurisdiction, and because public investment in sub-optimal technologies may have the effect of 'locking in' these technologies due to interest group politics and other features of path dependence.

To warrant an exception from the trade rules that guard against the market distortions of subsidies, a green subsidy must truly have the effect of reducing greenhouse gas emissions. Subsidising specific existing green technologies may provide "opportunities for rent-seeking at the expense of social goals," and may also lead to unforeseen trade-offs (Trebilcock and Wilson 2010, 20). Moreover, subsidies for these technologies may not

17 See Appellate Body Report, Canada – Feed-in Tariff Program, WT/DS426/AB/R (2013).

actually lead to overall emissions cuts. They may end up "blowing climate change efforts off course" by crowding out other sources of renewable energy that are needed to maintain a stable supply of power – such as, for example, zero-carbon nuclear energy" (Porter 2016).

The targeting of particular technologies that seem most promising at the time to public decision-makers may have unforeseen and negative effects—such as happened when subsidies for corn-based ethanol displaced food production. Such targeting, moreover, may prevent the market from working as it should by elevating the best products. Subsidising a specific product of a specific technology may single out one favoured producer for special treatment at the expense of all other producers. And that subsidised product may turn out to be the wrong product for countering climate change and securing sustainable development (Trebilcock and Wilson 2010, 8-18).

Green subsidies that target specific emissions outcomes should be exempted not only from the WTO subsidies rules, but also from the general rules on trade in products in the GATT and the general rules on trade in services in the General Agreement on Trade in Services. As it is, whether there is such an exception for subsidies is an unanswered question in WTO jurisprudence as to trade in goods[18] and an un-negotiated question as to trade in services.[19] If the environmental exceptions to trade rules can apply to some national measures that distort and restrict trade, then why not allow those exceptions for other national measures with similar trade effects taken for similar environmental purposes—such as green subsidies targeting specific emissions outcomes? The reimagining of trade rules should allow exceptions for such green subsidies, while ensuring that—as with other claims to the shelter of those exceptions—such national measures "are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination…or a disguised restriction" on goods or services trade (GATT 1947, Article XIV and GATS 1994, Article XX).

5.6 Sustainable Energy Trade Agreement

There is no overarching framework for global energy governance. As Rafael Leal-Arcas and Andre Filis have lamented, "'Global energy governance' today is a theoretical concept that does not exist in actuality… [T]he currently fragmented and multi-layered global energy governance is not conducive to energy security that is truly global…(and) fails to address global energy security needs" (Leal-Arcas and Filis 2013, 2, 4). Nor does it begin to address in any comprehensive way the urgently needed transition from a high-carbon to a low-carbon and eventually a no-carbon global economy. Likewise, there are no WTO trade rules specifically related to energy. WTO rules apply to energy products as they do to all other traded products, but there are no specific WTO rules related to the energy sector.

Goal 7 of the UN SDGs—ensuring access to affordable, reliable, sustainable, and modern energy for all—can be achieved in part through international cooperation to correct these omissions. To help achieve this goal, in addressing the nexus between trade and climate change, like-minded WTO members should reimagine trade rules by negotiating a Sustainable Energy Trade Agreement (SETA). This should be done as a plurilateral

18 Whether Article XX of the GATT applies to the WTO subsidies agreement has not yet been clarified in WTO dispute settlement. In United States – Thai Shrimp in 2008, the Appellate Body considered solely *in arguendo* – for the sake of argument – a submission that Article XX could be used against allegations of inconsistencies with the WTO Anti-Dumping Agreement. Appellate Body Report, United States – Thai Shrimp, WT/DS343/AB/R, WT/DS345/AB/R (2008), paras. 308-310, 319. In China – Audio Visual Products in 2009, the Appellate Body ruled that Article XX was a defence to claims under paragraph 5.1 of China's Accession Protocol. Appellate Body Report, China – Audio Visual Products, WTO/DS363/AB/R (2009), paras. 205-233. To date, though, there is no definitive ruling in WTO dispute settlement establishing that Article XX can be used as a defence to the subsidies agreement.

19 Negotiations contemplated on subsidies for services in Article XV of the GATS have not yet been pursued.

agreement within the legal framework of the WTO. The proposed EGA could be concluded, expanded to include trade in environmental services, and made part of this SETA. Mutual recognition and harmonisation of the standards and technical regulations that can serve as non-tariff barriers to clean energy trade could also be included. Government procurement restrictions that distort clean energy trade could be addressed as well. So too could sustainable energy issues related to investment policy, competition policy, and intellectual property and other aspects of technology diffusion and transfer. Concluded initially by some WTO members, a SETA could, like other past trade agreements, be gradually extended in coverage to include all WTO members as they see its benefits and choose to become a part of it (Hufbauer, Melédenz-Ortiz, and Samans 2016; Bacchus 2011). To create the opportunity for these re-imaginings of WTO rules to have more immediate impact globally, the SETA could, in the alternative, be included in a WTO climate waiver. By the terms of the waiver, the SETA could apply only to those WTO members that choose to adhere to it; or, if the political will can be summoned to make it so, the SETA could apply from the outset to all the members.

5.7 Reimagining Outside the WTO

Additional reimagining through further international cooperation outside the legal framework of the WTO can reinforce the affirmative role of trade in addressing climate change. The International Energy Agency projects that, between now and 2050, additional energy efficiency alone will account for 38 percent of cumulative greenhouse gas emissions reductions (IEA 2016). As one example of how this shift toward more energy efficiency can be accelerated, a "global leapfrog" from inefficient incandescent light bulbs to light emitting diode (LED) lamps in all sectors would reduce global electricity consumption for lighting by more than 52 percent and prevent 752 million tons of carbon emissions per year—while allowing developing countries to skip over the old and embrace the new in energy efficiency (ICTSD 2017a).

Acknowledging the importance of energy efficiency to the global energy transition, in 2014 the G20 leaders endorsed the G20 Energy Efficiency Action Plan to enhance international cooperation in a number of areas of energy efficiency (G20 2014a). This plan was followed up by the adoption of the G20 Energy Efficiency Leading Programme expanding G20 collaboration on energy efficiency in Hangzhou in 2016 (G20 2016b). The likelihood of the success of these G20 actions in furtherance of Goal 7 of the SDGs will be significantly increased if efforts are made by the members of the WTO to lower tariffs on energy-efficient goods and to eliminate the non-tariff barriers to trade in those goods by moving toward voluntary harmonisation of domestic product energy efficiency standards (ICTSD 2017a, 3.2).

Outside the legal framework of the WTO, the G20 could add to its current efforts to facilitate the green transition by addressing the consumption as well as the production of carbon. This could be accomplished in part by encouraging consumption-side climate measures nationally and by making consumption-based reporting internationally an integral part of agreed national emissions reporting (ICTSD 2017a, 3.5). But this cannot be accomplished without an agreed common international standard to calculate the carbon emitted during the production of products. As it is, several different methodologies are used. The G20 could help build the consensus needed to initiate a joint effort by the WTO, the UNFCCC, and other relevant international institutions to establish an agreed international standard for calculating the amount of carbon used or emitted in making traded products (Bacchus 2016, 15).

International cooperation is also much needed in the UNFCCC to define a climate "response measure." The Paris Agreement provides that "[P]arties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties" (UNFCCC 2015, Article 4.15). In Paris, parties to

the UNFCCC decided that, in implementing the Paris Agreement, "[i]nformation on the social and economic impact of response measures" will be considered (UNFCCC 2015, Decision 95(f)). But the UNFCCC has not defined a "response measure." Originally, in the climate negotiations, the notion of a "response measure" arose as a means sought by Saudi Arabia and other major oil and gas producers to compensate them for their anticipated lost fossil fuel revenues due to proposed cuts in carbon emissions. Since then, the UNFCCC discussions have broadened in scope to cover much more, including especially the adaptation concerns of poorer developing counties vulnerable to climate change. These climate talks have not focused on measures that might include trade restrictions, much less on which ones are permissible and which are not. Nor do these talks seem close to any conclusion.

If there is no agreed definition of a "response measure" by the climate regime, it will be left not to the climate negotiators to the UNFCCC, but rather to WTO jurists, to define a climate "response measure" in WTO dispute settlement when what one WTO member claims is a climate "response measure" is challenged by another WTO member as an illegal restriction on trade. The issue will be resolved in WTO dispute settlement in the approaching legal collision between trade and climate change. The G20 could help prevent this by spurring the UNFCCC toward a consensus on a definition that deals with restrictions on trade. Ideally, such a consensus should be reached after consultations with the WTO. And certainly WTO jurists would undoubtedly respect and employ a UNFCCC definition in WTO dispute settlement.

What is more, the G20—accounting for 80 percent of world trade—could lead the way in taking other actions outside the WTO framework that would help employ trade in the furtherance of climate action. For instance, international commercial aviation emissions and ocean shipping emissions have been increasing as contributors to overall global greenhouse gas emissions. The current multilateral actions to curb aviation emissions by the International Civil Aviation Organization and to cut shipping emissions by the International Maritime Organization should be sped up and scaled up. As another example, black carbon—particulate matter from the incomplete combustion of fossil fuels, biofuels, and biomass which is commonly referred to as soot—is the second leading cause of global warming after carbon dioxide. Much more could be done globally to reduce the health and climate hazards of black carbon through the international sharing of best practices, the transfer of mitigation technologies, and policies that increase the use of particulate filters on the diesel engines that are a major source of black carbon emissions worldwide (ICTSD 2017a, 3.7).

Much more could be done as well to further climate adaptation both inside and outside the WTO. One significant example is agriculture, which is an important source of greenhouse gas emissions. As Hermann Lotze-Campen has recently observed, "An open trading system can help to balance staple food supply and demand between surplus and deficit regions," which in turn "may help to adapt to changing global production conditions in a changing climate" (Lotze-Campen, 2017). Moreover, "Open trade helps to allocate water-intensive crop production to water-abundant regions. These products can then be exchanged with other commodities or, in the future, with solar energy from hot and dry regions. Thus, overall water use in agriculture will be lower than in a situation where all countries try to achieve high self-sufficiency in many food products" (Lotze-Campen, 2017).

6. THE G20'S ROLE IN TRIGGERING THE TRADE TRANSITION

The International Centre for Trade and Sustainable Development has previously summed up the global situation confronting the Argentine presidency of the G20:

> Climate change represents a major risk for the viability of the global economy that cannot be ignored. At the same time, climate change mitigation efforts offer meaningful economic opportunities that governments would be wise to tap into. An ambitious response to these risks and opportunities will require coherent and mutually supportive climate and trade policies. This can revitalise the commitment to open trade and international economic integration, as well as respond to the environmental, economic, and social challenges of climate change, ultimately driving the transition to a sustainable, dynamic, and competitive low-carbon future (ICTSD 2017a, 4).

With the flexibility that comes from a combination of its combined economic clout and its constituting an international endeavour without any set and binding rules, the G20 should seize this chance to help the world find the best way forward. G20 leaders are well placed to help "facilitate the uptake of new and more challenging issues that can subsequently be taken forward to the global level" (ICTSD 2017a, 2.2). Examples have been accumulating. For instance, the Global Forum on Excess Steel Capacity created at the Hangzhou Summit in 2016 can be the prelude to new WTO rules dealing with over-supply to match those that deal with short supply. On this highly sensitive international economic issue, countries are striving in this forum to contain trade tensions and avoid trade confrontations by agreeing on ways to stabilise steel markets within the framework of the rule of law (GATT 1947, Article XI). These new rules on steel could be accompanied by an agreement on "best practices" in the steel sector to produce steel in ways that produce fewer carbon emissions. As another example, the "G20 Guiding Principles for Global Investment Policymaking" can be the genesis for much-needed and long-sought multilateral investment rules in a multilateral investment framework. These guidelines set out in broad terms the fundamental expectations for the treatment of foreign direct investment. Notably, they include, in the space of just two pages, three references to sustainable development (G20 2016c). In new negotiations, the members of the WTO should reimagine the current international investment rules to focus much more on encouraging *sustainable* foreign direct investment.

These and other initiatives illustrate the convening power and, potentially, the catalysing power of the G20. This convening and catalysing power of the G20 should now be employed by the G20 on the connections between trade and climate change. The G20 leaders have established a Sustainability Working Group (comprised of energy and climate change working groups) and a Trade and Investment Working Group. These G20 groups work increasingly closely with issue-oriented engagement groups consisting of a broad representation from global civil society. Drawing on this expertise and on the expertise from national capitals throughout the world, together, during the Argentine presidency, these two G20 groups should prepare the launch of a new G20 initiative to help trigger the trade transition that is so urgently needed to reconcile and unite international cooperation on trade and on climate change.

To trigger this transition, the G20 leaders should begin by reaffirming the need for maintaining the central role of the WTO in global trade governance," for supporting "a further strengthening of its functioning," and for opposing any form of protectionism (G20 2016e). At the same time, they must reaffirm the necessity for mustering more international cooperation to forestall climate change in fulfilment of the Paris Agreement. Toward these ends, and as part of taking forward the "G20 Action Plan on the 2030 Agenda for Sustainable Development," G20

leaders should take actions aimed at bringing more collaboration and more coherence to the trade and climate regimes. Seeing itself as it does as a "guardian of the global common good," (Fues 2017, 1) the G20 should use its considerable convening power to promote the common good by preventing the looming collision between trade and climate change.

To the bevy of conferences among international ministers that already precede each G20 summit and contribute to its outcome should be added one more: a *joint* conference of the G20 trade ministers and the G20 environmental and other ministers entrusted with confronting climate change. This joint conference should become an annual conference. And the first such joint conference should launch an initiative to reconcile international trade and climate rules as part of building a basis for joint trade and climate actions by the WTO, the UNFCCC, and other relevant international institutions. From a candid and thorough exchange of views, the assembled ministers should fashion an agreed agenda for further exploration of revisions and additions to the current WTO, UNFCCC, and other international rules that fall within the crucial nexus of trade and climate change. Among the topics on this agenda could be those that have been discussed here as well as more that have not been.

Having agreed on an agenda, this joint session of trade and climate ministers should then appoint a global commission of experts to take one year to prepare a proposal for them and ultimately for the G20 leaders. The members of the commission should be comprised of half climate-minded trade experts and half trade-minded climate experts. They should be broadly representative of the entire membership of the United Nations, including members from developing countries at different stages of development. All of them should be committed to and expert on the SDGs. They should be provided with staff support in equal measure by the WTO and the UNFCCC. The agreed agenda should constitute their terms of reference. Among their charges from the G20 ministers should be to seek out and consult extensively with the trade and climate ministries of countries that are not members of the G20. More generally, they should be instructed to seek the best advice they can find from wherever they can find it.

The commission should make recommendations for the reimagining of international rules on the nexus of trade and climate change in the form of a report presented to the G20 trade and climate ministers at their second annual conference. Like a working party report in the WTO, this report should include a list of the recommended changes, an explanation of the reasons for each of them, and the text of draft language to implement those changes. The G20 trade and climate ministers should then review these recommendations, revise them if need be, and approve them, ideally by consensus. With this ministerial approval, the recommendations should then be submitted to the G20 heads of states at the next G20 summit where, once again, they should be reviewed, revised if required, and then approved.

The G20 together should then take these recommendations for rules changes to the WTO, the UNFCCC, and other relevant international institutions and employ all of its vast political resources toward transforming each of them into global reality.

7. THE ELEPHANT AT THE SUMMIT

But what of the elephant in the room at the next G20 summit? What of Donald Trump?

American globalist and political commentator Fareed Zakaria has summarised the worrisome and ever-worsening approach of the United States to international affairs under its often capricious and reckless President: "The current administration seems intent on dismantling the United States' greatest achievements – as it is doing with the World Trade Organization – or to simply be uninterested in setting the global agenda" (Zakaria 2017). This includes the G20, where President Trump's loner tactics have marginalised the United States. In the G20, the United States seems now not only uninterested in setting the agenda, but also unable to set it. In the aftermath of the Hamburg summit, another dismayed American observer, Daniel Drezner, put it this way: "[T]o sum up: No other G20 member agreed with the United States on the two key issues at the summit, climate change and trade…. Maybe, just maybe, America First does mean America alone" (Drezner 2017). How, then, should the other bewildered 19 G20 heads of state deal with the belligerent American elephant in the room in trying to move ahead globally toward reconciling trade and climate change at the summit in Argentina in 2018?

There are three options. One is to do nothing on this critical issue for the world. A second is somehow to engage and enlist President Trump and the United States in some way on some version of a "trade and climate" agenda on which the Americans will be willing to join in a G20 consensus. A third is simply to go ahead without the United States as, in effect, a G19.

Choosing the first option would render the "G20 Action Plan on the 2030 Agenda for Sustainable Development" a meaningless document and would also do much to undermine the overall global efforts to fulfil the SDGs. If the G20 retreats from its commitment to achieving the SDGs, then the rest of the world will surely follow. If countries including two-thirds of the people in the world and accounting for 85 percent of global GDP opt out, then who else will continue to see any point in opting in? The first option is not an option for the G20.

Given the current unpredictability and unreliability of the United States under the erratic President Trump, choosing the second option will doubtless prove extremely difficult. There may be some limited aspects of the necessary reimagining of trade rules to help counter climate change on which the other 19 heads of state can find common ground with Donald Trump—but not many. In principle, the United States, which has long been a leader in trying to eliminate the tariffs on environmental goods, should continue to be, if only to increase US exports. With its considerable interest in services exports, the United States should likewise be in favour of eliminating barriers to trade in environmental services. In contrast, a fact-free American Administration subservient to the oil, gas, and coal industries will never support a G20 initiative to discipline fossil fuel subsidies. Where common ground can be found with the United States, of course it should be. It may be that if a G20 effort is framed as a search for energy security and for job creation, then President Trump may be enticed to participate. But investing efforts exclusively in trying to reach international consensus on this issue with a mercurial man who does not support freer trade, does not accept the reality of man-made climate change, does not believe in multilateral international cooperation, and seems to practise "the art of the deal" by changing his position from minute to minute, is likely only to delay and to dilute cooperative action on global change.

Choosing the third option may be the best and only way for the G20 to proceed—even though it means doing so—for now—as the G19. To trigger trade action, the other 19 heads of state may have to ignore the huffs and puffs and the tweets and bleats of Donald Trump and launch a reimagining of world trade rules

at the upcoming G20 summit in Argentina without the country that should, as so often in the past, be helping to lead the way. As in so much else, the hope in moving forward to reconcile the rules for trade and for climate change without the United States would be that the United States will in time return to its rightful role as a global leader for global cooperation and join anew in joint actions with the other 19 members of the G20 to confront this and other challenges that require multilateral solutions.

That time cannot come too soon.

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