

A photograph of a fishing boat on the water at sunset. The sky is a vibrant orange and red, while the water is a deep blue. The boat is dark, with a person visible in the cabin. A red buoy is attached to the side of the boat. The overall mood is serene and contemplative.

JANUARY 2021

# Toward a Climate-Driven Trade Agenda

AUTHORS

Jack Caporal

William Reinsch

A Report of the CSIS Scholl Chair in International Business

CSIS

CENTER FOR STRATEGIC &  
INTERNATIONAL STUDIES



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# Acknowledgments

The authors would like to thank the entire Energy Security & Climate Change Program for allowing the Scholl Chair to contribute to their work on a topic of immense importance, and for their invaluable support and input over the course of this project. In particular, Sarah Ladislaw and Nikos Tsafos offered critical thought leadership and direction. The authors thank Jasmine Lim for her irreplaceable administrative support and Patrick Saumell for his research contributions. The authors would also like to thank the experts who participated in instrumental roundtables and research interviews.

This report is part of the Climate Smart Foreign Policy project, a Center-wide initiative dedicated to unlocking new opportunities for the United States to lead and advance U.S. interests on climate change through international engagement. Climate change is changing all aspects of domestic and foreign policymaking from security to trade; development to global health; food security to energy; and all multilateral and bilateral relationships. Climate change is an issue without boundaries and with far-reaching effects. A coordinated global response will strengthen our collective capacity to respond to these challenges. Under this initiative, CSIS is creating a new platform for leadership on climate change as it relates to trade, security, data, foreign policy, and energy.

This project was made possible by support from the Hewlett Foundation.

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# Introduction

International trade and climate change have long been considered two distinct issues for the global community to address. However, taken individually, each can have unintended consequences that may impact the other: protectionism choking off access to competitive clean technology, subsidies that promote such technology in violation of trade rules, or increased trade causing additional greenhouse gas emissions. The global scale of the climate crisis, its urgent nature, and potentially existential impacts raise questions about whether trade rules written 25 or in some cases 70 years ago are suitable for today's challenges. Instead of compartmentalizing trade and climate change, decisionmakers should examine connections between them.

Those connections are more relevant now than ever before. The growing sense of urgency about global warming and the global economic downturn caused by the Covid-19 pandemic have created an opportunity for governments to embrace economic stimulus to jumpstart their economies and accelerate the adoption of clean energy, creating jobs in the process. Despite a decline in prices for fossil fuel driven by an overall decline in energy demand, renewables grew to compose 28 percent of global electricity supply in Q1 2020, up 2 percentage points year over year. However, growth in renewables is expected to slow in 2021 due to supply chain disruptions and the state of the global economy restricting finance.<sup>1</sup> The global economic slowdown driven by Covid-19 offers governments an opportunity to use economic stimulus to accelerate the clean energy transition and mitigate global warming. Publicly funded research and development into clean energy technology will also need to grow for economies to achieve net-zero emissions. However, not every stimulus prioritizes clean energy or is climate friendly.

That businesses, consumers, and governments continue to invest and, in some instances, prop up industries that generate substantial environmental damage suggests that the environment is

not adequately accounted for as an externality. Given that failure and that most actors remain primarily driven by maximizing wealth and value in the traditional sense, government incentives are necessary to spur a transition toward a greener economy. At the same time, the pandemic gives businesses an opportunity to reconstruct supply chains in a sustainable fashion if they are smart enough to seize it. However, moving toward sustainability—if it occurs—will happen within a framework of rules and institutions that were constructed years ago to deal with a very different world. Updating those rules is important, but change comes slowly. There is some recognition that updating is necessary, and there is a current test case—the effort to agree on new multilateral rules on fisheries and fishing subsidies—that will promote sustainability. Agreement requires consensus among all 164 World Trade Organization (WTO) members, which is proving very difficult to achieve. Success on the fisheries agreement would give an important boost to further multilateral negotiations, including on climate change. Failing that, narrower plurilateral agreements among a subset of WTO members could emerge, but reforming bedrock WTO rules will remain a long term project and waiting for such reform will set back efforts to deal with climate change globally. In the short term, a more constructive path is learning how trade policy can contribute to the fight against climate change within existing trade rules.

There have long been questions about whether the rules that form the foundation of the global trading system impede government policies to combat climate change and create other negative environmental externalities. Trade policy can augment green industrial policy through border measures, subsidies, standard setting, public procurement frameworks, and carveouts for environmental policy in free trade agreements.<sup>2</sup> The fundamental question is whether the current trade policy toolbox and the rulebook within it operates leave policymakers space to embark on a trade agenda that furthers the fight against climate change.

This paper will explain how trade policy can be a lever to strengthen climate policy. The trade toolbox and its climate utility will be reviewed, as will existing WTO jurisprudence on environmental measures that impact trade. The paper concludes with recommendations on how to design a climate-driven trade agenda that minimizes conflict with WTO rules and outlines specific proposals for policymakers to consider in the short-term.

# The Intersection of Trade and Environmental Policy

At least five trade policy tools can influence environmental policy: border measures, subsidies, standard setting, public procurement, and carveouts for environmental policy in free trade agreements. There are less-specific tools, such as broad language referencing sustainable development and the environment in preambles of trade agreements which can provide space for environmental policy to nudge against trade rules. The WTO has confirmed that preamble language regarding the environment carries weight in how specific rules are interpreted and applied.<sup>3</sup>

## Border Measures

Chief among border measures are tariffs, which the WTO requires to be applied on a most-favored nation basis unless products are covered by a free trade agreement. Agreements that slash tariffs on environmental goods, like the APEC Green Goods Agreement, can further environmental aims. Research shows there is a tariff (and non-tariff barrier) “bias” toward goods that have higher carbon dioxide emissions per dollar of output.<sup>4</sup> In other words, tariffs are lower on “dirtier” goods, which provides them an implicit subsidy.

On the other hand, some consideration has been given to imposing higher tariffs on carbon intensive products compared to a similar product made with a less carbon intensive process. A debate exists over whether this approach would breach WTO rules that require all “like products” to be treated the same or whether two products that are otherwise the same can be considered distinct due to how much CO<sub>2</sub> they embody. Many believe a carbon tax that applies to imports can be structured in accordance with WTO rules, however there are many complexities and considerations, particularly as the reach of the tax extends deeper into a goods’ supply chain. This debate is explored in Section 3 of this paper.



## Subsidies

The WTO considers a subsidy to be a “financial contribution” provided by a government which confers a benefit. Examples include a direct transfer of funds, such as a grant or loan; a potential transfer of funds or liability, such as a loan guarantee; and forgone government revenue, such as a tax credit. Action against subsidies can only be taken if the subsidy is “specific,” meaning it is provided to a specific company or particular group of companies.

The WTO further splits subsidies into two categories: actionable subsidies and prohibited subsidies. If a subsidy has harmed a WTO member’s domestic industry it is considered actionable and the affected government can impose countervailing duties on the subsidized product. Prohibited subsidies are a more egregious violation of WTO rules and are defined as either a subsidy contingent on export performance or contingent on the use of domestic products over foreign products. Green industrial policy often includes a range of different types of government support, not all of which are covered by WTO rules. For example, government funding for basic research and development into nuclear power would not be considered specific nor would it likely harm a foreign competitor. However, conditioning the disbursement of a government grant or tax credit for an offshore wind project on the rotors being domestically made would be a prohibited subsidy.

Aside from the overarching WTO subsidy rules, countries have imposed more detailed subsidy disciplines in free trade agreements. For example, the United States-Mexico-Canada Agreement (USMCA) prohibits certain subsidies which contribute to illegal, unreported, and unregulated fishing. The entire WTO membership is in the process of negotiating specific disciplines on fisheries subsidies as well.

Steve Charnovitz’s “Green Subsidies and the WTO” clarifies the jurisdiction of the WTO’s Agreement on Subsidies and Countervailing Measures (ASCM) agreement over environmental subsidies.<sup>5</sup> Charnovitz emphasizes that many green subsidies do not clearly meet the requirements for either an actionable or prohibited subsidy and instead fall under the category of gray measures, those with an unclear status in WTO law. This ambiguity stems from the vague WTO provisions defining subsidies and a measure’s status being dependent on its economic impact. Definitional questions arise because it is unclear if the ASCM covers certain types of assistance, such as income support, price support to foreign recipients, subnational entities, and individuals.

Legal uncertainty also stems from ambiguity regarding the scope of the ASCM’s Article 1 concept of provision of goods and services, considered under the agreement to be a financial contribution. The Appellate Body has interpreted this concept elastically to include non-monetary inputs.<sup>6</sup> In the *United States – Large Civil Aircrafts* case (DS353), the provision of intangible rights—patents, trademarks, intellectual property, and so on—was included in this definition and found to be a subsidy. The developing case law on intangible rights is especially important for future consideration of environmental policy tools such as government-issued emission allowances. These issues have not been ruled on at the WTO. Due to the lack of clarity, policymakers may be discouraged from backing environmentally friendly projects with certain support tools.

Finally, there are interpretive issues about which policy measures confer a benefit under the ASCM and the scope of the ASCM’s specificity consideration. WTO case law has provided little clarification

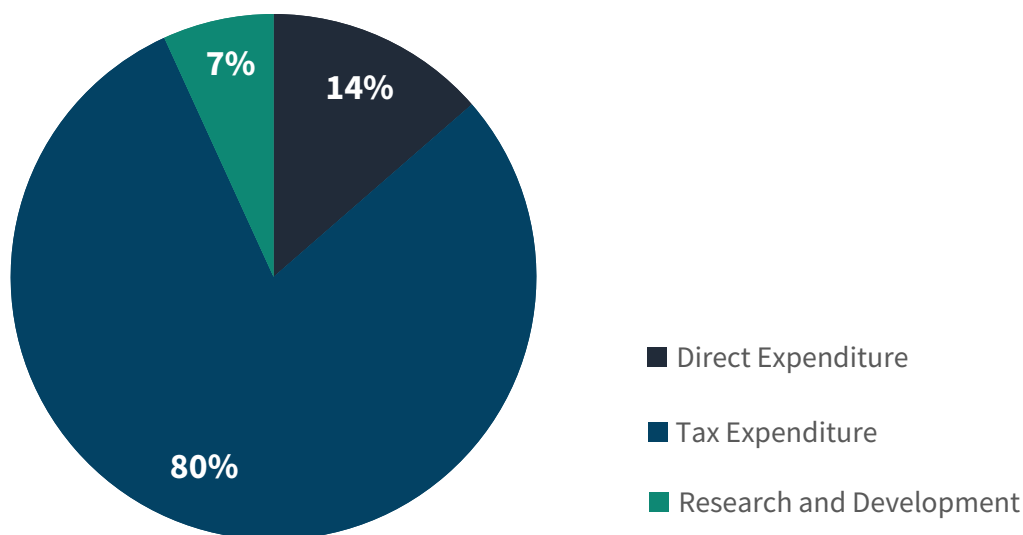
on these issues, leaving members largely uncertain about whether environmental measures and subsidies confer a benefit and whether they meet the threshold of specificity. With the expiration of ASCM Article 8—which provided temporarily for some non-actionable environmental subsidies—certain subsidies that could support environmental objectives will remain in gray space; however, Article 8’s intent may still be considered in interpreting environmental subsidies during WTO’s dispute settlement process.

As many WTO members seek to bring their emissions under control and move to accomplish green objectives, they will inevitably utilize government policy, including subsidies. Uncertainty over the ASCM’s scope and application carries two risks. First, governments may be wary of embracing certain types of support because they fear litigation at the WTO. Second, a WTO dispute over green subsidies which faults the subsidizing member could set a precedent that limits space for green subsidies. While giving more clarity to the relationship between the ASCM and green subsidies is likely not top of mind for governments given the absence of a functioning dispute settlement system at the WTO and the atrophied negotiating arm there, WTO members should still strive to make concrete progress on the issue.

## U.S. SUBSIDIES

On the federal level, the United States has provided support for the renewables sector through tax expenditure, direct expenditure, research and development, and loan guarantees. Tax expenditure has been the most substantial support, comprising nearly 80 percent of federal subsidization for renewables in 2016.<sup>7</sup> This is the practice of allowing “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.”<sup>8</sup> It has been estimated that, in 2019, roughly \$8.7 billion was allocated to renewable energy through tax expenditures.<sup>9</sup>

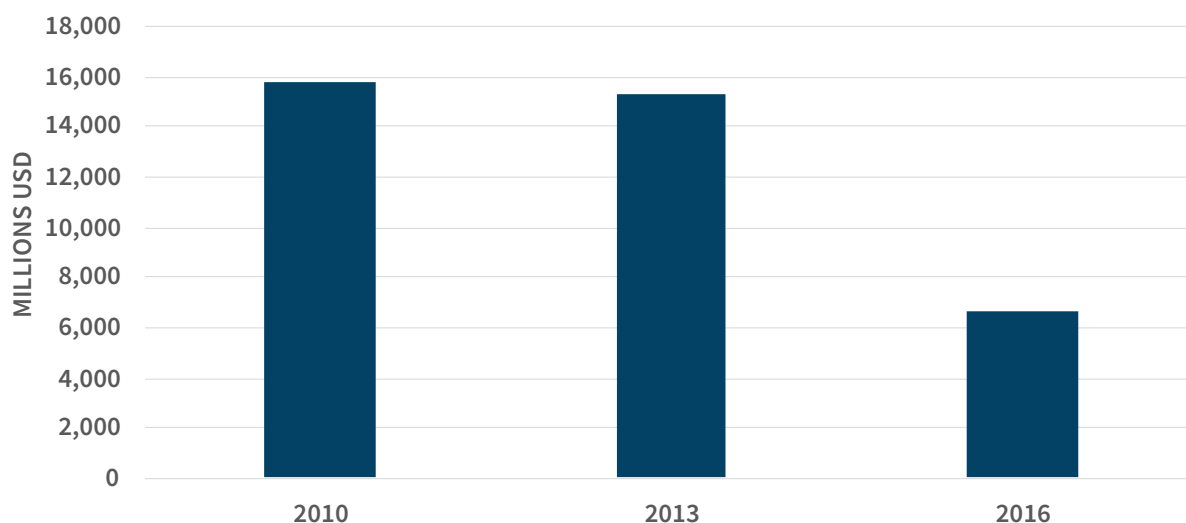
### U.S. Green Subsidies, 2016



Source: U.S. Energy Information Agency, *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2016* (Washington DC: U.S. Energy Information Agency, April 2018), <https://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>.

Between 2010 and 2016, federal subsidies for renewables fell by 59 percent from \$17.3 billion to \$7 billion.<sup>10</sup> This decline stemmed from reduced funding for programs that support renewable energy, such as the Advanced Research Projects Agency-Energy and Department of Energy's loan program.<sup>11</sup> Instead, the federal government prioritized fossil fuel and nuclear energy-related technology development.<sup>12</sup>

Total U.S. Renewable Energy Subsidies Millions USD



Source: U.S. Energy Information Agency, *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2016* (Washington DC: U.S. Energy Information Agency, April 2018), <https://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>.

Finally, as previously highlighted, the state's renewable portfolio standards (RPS) have acted as indirect subsidies to increase renewable energy competitiveness. The standards create artificial demand for the sector by requiring energy suppliers to provide a minimum amount of electricity from renewable sources.<sup>13</sup> India successfully challenged U.S. state renewable energy programs, including RPS, that conditioned government support on the use of local content; however, the more general question about the interaction between RPS and WTO rules was not opined on.<sup>14</sup> At this point, the case remains unresolved. The United States and India appealed separate aspects of the panel ruling, which overall favored India. With no Appellate Body to hear the case, the dispute is in limbo, and the states technically have no obligation to modify or end the measures subject to India's challenge.

## Standard Setting

Standard setting includes technical regulations, voluntary standards, and conformity assessments. Trade agreements can include language that commits parties not to lower environmental standards to seek competitive advantage or prevent them from raising standards even if doing so would impact trade and investment. In addition to prescriptive regulations and commitments to maintain or provide space to maintain certain standards, governments can use standard setting language to promote regulatory computability and certain practices. For example, the USMCA includes an annex on energy performance standards which encourages cooperation on standard setting and testing to facilitate trade and advance efficiency.



## Government Procurement

Government procurement can play a significant role in climate policy as governments can be significant drivers of demand. WTO rules and trade agreements both influence how government procurement can further or constrain environmental policy. The General Agreement on Tariffs and Trade (GATT)—which enshrines the most favored nation and national treatment principles—includes a provision that exempts government procurement from GATT obligations. In practice, this allows governments to favor domestic companies when making purchases. In two cases, WTO members have claimed the GATT government procurement derogation justified local content requirements as part of feed in tariff programs—schemes in which governments enter into long-term contracts with renewable energy producers. However, both of those defenses failed, as the local content requirement applied to the power generation equipment while the governments in question were procuring electricity.<sup>15</sup>

Government procurement obligations can incentivize firms to embrace sustainability. For example, through free trade agreements, governments can open up their procurement markets to foreign firms if they meet certain sustainability criteria.

## Biden's Infrastructure and Clean Energy Plan

In a campaign document “Biden Plan to Build a Modern, Sustainable Infrastructure and an Equitable Clean Energy Future,” the Biden team lays out an approach to a net-zero emissions economy by 2050. This plan proposes “a national effort aimed at creating the jobs we need to build a modern, sustainable infrastructure now and deliver an equitable clean energy future.”<sup>16</sup>

This plan outlines President-elect Biden’s strategy to create jobs that produce clean electric power. It commits to investments in energy efficiency, clean energy, and new battery storage. Three trillion dollars are allocated for the entire plan, but the plan does not specify how much is intended for direct expenditures on renewable subsidies. This section also highlights that these investments will be “built by American workers, using American-made materials.” However, no exact local content requirements are provided. Lastly, this section of the plan ends by stating an intention to “reform and extend the tax incentives we know generate energy efficiency and clean energy jobs.” But it does not specify which tax expenditures will be addressed.

The plan also outlines President-elect Biden’s approach to investments in clean energy innovation. The campaign commits to increasing federal procurement by \$400 billion, including purchases of clean energy inputs such as batteries and electric vehicles. Additionally, this section demonstrates the campaign’s intention to fund research and development on clean energy, transportation, industrial processes, and materials. This investment would be allocated to create a new Advanced Research Projects Agency on Climate (ARPA-C) and increase funding for national laboratories. This section concludes by also committing to improvements in the resilience of clean energy supply chains. This shift would be accomplished by funding research to increase the United States’ access to vulnerable materials, such as rare earth metals.

## Free Trade Agreements

Finally, trade agreements can include specific and broad carveouts for environmental policy. Agreements can require that members implement multilateral environmental agreements and make those agreements subject to dispute settlement under the free trade agreement. Derogation from a covered multilateral agreement would then be subject to potential trade retaliation.

### The European Green Deal Catch-All and U.S. Free Trade Agreements (FTAs)

The European Commission (EC) released its plan for “The European Green Deal” (EGD) on December 11, 2019.<sup>17</sup> The deal urges Europe’s economy to use resources more efficiently, take steps to restore biodiversity, and reduce pollution. Since the deal’s publication last year, the EC has periodically released documents that specify targets to achieve these goals by 2030, aligning with the UN 2030 Agenda.<sup>18</sup> Most recently, on September 17, 2020, the Commission published its 2030 Climate Target Plan, which calls for EU policies to cut emissions by 55 percent in ten years.<sup>19</sup>

One such policy included in the 2030 Climate Target Plan centers on updating the existing EU Emissions Trading System (ETS). Specifically, the EC seeks to improve the ETS by implementing a lower cap on overall emissions; possibly expanding emissions trading to the maritime, buildings, and road transport sectors; and considering integrating all emissions from fossil fuel combustion into the ETS. Still, the EC emphasizes that this new “growth strategy” maintains a distinction between economic growth and resource use.

An impact assessment of this 2030 plan confirms the complexity of its implementation.<sup>20</sup> It calls for coordinated action at the EU level to “[deploy] a broad mix of policy instruments, including carbon pricing and increased energy and transport sectoral regulatory policy ambition.” In other words, carbon pricing and more regulation in the energy and transport sectors are needed to render the 2030 implementation strategy effective, since emissions do not respect national borders.

The Commission intends to use trade policy to engage with partners on climate and environmental issues. It will continue to include a binding commitment in its free trade agreements that parties ratify and implement the Paris Agreement. The Commission will also use free trade agreements to expand trade and investment in green goods and services and promote EU “green” regulations and standards.

The centerpiece of the EU trade and environment nexus, however, will be a carbon border tax (CBT). Still in the works, the Commission favors an approach that applies the measure—at least initially—only to specific sectors that produce particularly high emissions—rather than to EU imports.<sup>21</sup> By targeting only the twelve sectors that account for 55 percent of EU emissions, the European Union would reduce the need to investigate complex value chain effects and prevent the creation of additional work for lower-emissions sectors, whose products constitute 98 percent of the value of EU imports.<sup>22</sup> The targeted sectors are likely to include steel, cement, and electricity.<sup>23</sup> For a CBT to be both functional and WTO-compliant, the EC might also consider granting exemptions for least-developed countries (LDCs) and gradually phasing out free carbon allowances in order to replace them with carbon levies.

However, CBTs provide most utility if the risk of significant carbon leakage is high. Many believe this risk to be low and not worth the hefty CBT implementation costs. Further, a CBT would be difficult to

reconcile with WTO rules (due to issues of defining like products or proving the tax's rationale to be environmental rather than economic, for example). Because the EC is interested in ensuring its actions bolster the WTO's credibility, this dissonance is problematic.

Lastly, research has shown that CBTs can worsen income inequality, as shifts in global terms of trade transfer the economic onus of “developed-world climate policies to the developing world.”<sup>24</sup> In today's social climate, alternative measures to CBTs might prove both more aligned with the European Union's professed values and more palatable to its politics. Potential alternative measures include returning a portion of ETS revenues to electricity-intensive firms, paying manufacturers for low-carbon production, and encouraging global decarbonization through “active climate diplomacy.”

Will other countries follow the European Union's approach? Alessio Terzi, who works on economic policy strategy at the Commission, has recently said that European trade policy (and foreign aid) could help incentivize other countries to speed up their transition to a green economy.<sup>25</sup> Similarly, though a CBT is difficult to enforce, Terzi suggested its use could encourage countries to follow in the European Union's green footsteps. The logic here is that even if the European Union reaches its goal of zero net emissions by 2050, only about 10 percent of the world's emissions will have been eliminated; climate change will continue unless green policies similar to the European Union's are implemented and enforced globally.

On the other side of the Atlantic, it is now common for the United States to enforce some multilateral environmental agreements through FTAs, but it has yet to incorporate provisions on climate change into its FTAs. Change, however, may be coming. The nine votes from Senate Democrats against the USMCA were cast on grounds that the agreement did not address climate change. Making environmental obligations more robust in U.S. FTAs is not unprecedented. The United States-Israel FTA, which entered into force in 1985, does not mention the environment. NAFTA, signed nearly a decade later, includes a side agreement on the environment which allowed parties to challenge failures of the other signatories to enforce environmental laws.

On May 10, 2007, House Democrats and the Bush administration reached the “May 10 Agreement.” Per the agreement, U.S. FTAs would include enforceable labor and environmental provisions in the body of FTAs. The May 10 Agreement led the United States to make the following seven MEAs subject to FTA dispute settlement: Convention on International Trade in Endangered Species; Montreal Protocol on Ozone Depleting Substances; Convention on Marine Pollution; Inter-American Tropical Tuna Convention; Ramsar Convention on the Wetlands; International Convention for the Regulation of Whaling; and the Convention on Conservation of Antarctic Marine Living Resources. After the first tranche of post-May 10 agreements with Peru, Colombia, and Korea, the United States negotiated more robust disciplines on harmful fisheries subsidies in the Trans-Pacific Partnership and United States-Mexico-Canada Agreement.

FTAs can also complicate efforts to strengthen environmental policies. U.S. FTAs emphasize the need for regulation to be based on strong scientific evidence and take a risk-based approach. The WTO agreements require that regulatory action taken to achieve non-trade objectives be done in the least trade-restrictive manner. These issues are at the heart of the emerging friction between U.S. business groups and Canada over Canada's proposed single-use plastics ban.



Canada plans to ban single-use plastics by the end of 2021 as part of its longer-term efforts to achieve zero plastic waste by 2030.<sup>26</sup> The ban will target checkout bags, straws, stir sticks, six-pack rings, cutlery, and some foodware because a scientific assessment has shown these plastic products to be particularly harmful to the environment, difficult and costly to recycle, and easily substitutable.<sup>27</sup> The ban and corresponding scientific assessment follow the Ocean Plastics Charter and Strategy on Zero Plastic Waste in a series of efforts to transition Canada to a more circular economy for plastics. Canada aims to reduce GHG emissions, costs, and plastic pollution, all while stimulating Canadian competitiveness, innovation, and job creation.

In September 2020, the U.S.-based Plastics Industry Association and other members of the U.S. chemical lobby—as well as the U.S. Chamber of Commerce—sent a complaint to Canada’s Minister of Small Business, Export Promotion and International Trade.<sup>28</sup> In it, the signatories took a firm, collective view that Canada should not take a regulatory approach to reducing its plastic waste. Further, the letter claimed that Canada’s proposed ban violated key provisions of both the Environment Chapter of the USMCA and the WTO’s TBT Agreement. Within the USMCA, it pointed to Sectoral Annex 12A.4.3’s requirement of a risk-based assessment and claimed that Canada’s approach “is not based on strong scientific evidence.” The letter also lamented that Canada had not consulted the United States or “other close trading partners” as required by the USMCA before making this decision. Within the TBT Agreement, the group of signatories claims that the proposed ban would violate Art. 2.2, which requires that measures be “not more trade-restrictive than necessary.” Lastly, the letter alleged that Canada’s proposed ban constitutes a non-tariff barrier, that it could “inspire global trade barriers against Canadian imports of plastics,” and that therefore the government should not include plastics in the list of “toxic substances” enumerated in Schedule 1 of its Canada Environmental Protection Act (CEPA, 1999).

This letter has drawn a fair number of critical responses. Canada’s environmental minister, Jonathan Wilkinson, has said, “I think those concerns that are being expressed are simply wrong . . . I don’t see a trade concern.”<sup>29</sup> A discussion paper released by Canada in early October—after the chemical lobby’s letter—refers to the scientific assessment, in which the precautionary principle embedded in CEPA 1999 (SC 1999, c 33, preamble) serves as justification for the proposed ban’s “lack of full scientific certainty.”<sup>30</sup> The discussion paper also makes clear that it aims to collect comments from interested stakeholders, which could include the United States and other trading partners “on the categorization and the proposed management approach described.” Some commentators have pointed out that USMCA does include a provision requiring parties to “take measures to prevent and reduce marine litter” such as plastic.<sup>31</sup> They argue that the plastics industry is “using the promise of its future voluntary cooperation to postpone or bar more effective regulatory measures now—relying on language in the USMCA to make its case” in the same way that the industry has tried to exert influence on the proposed United States-Kenya trade agreement in an attempt to roll back Kenya’s 2017 ban on plastic bags.<sup>32</sup>

## **The WTO: General Exceptions and Multilateral Environmental Agreements**

The WTO also sets out general exceptions to its rules that aim to provide members policy space to protect human, animal, and plant life, and conserve natural resources, among other objectives.

## Article XX: General Exceptions

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

[...] (b) necessary to protect human, animal, or plant life or health;

[...] (d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks and copyrights, and the prevention of deceptive practices;

[...] (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

The WTO exceptions operate through a two-step test. First, the measure must fit within one of the specific exceptions, two of which ((b) and (d)) directly deal with the environment. Second, the GATT Article XX “chapeau” must be met—a measure must not arbitrarily or unjustifiably discriminate between countries where the same conditions prevail, and the measure must not be a disguised restriction on trade. Relying on exceptions to generate policy space is less ideal than clearly laying out obligations. Testing the validity of a measure justified by an exception requires litigation that is generally carried out through a lens of seeking the least trade restrictive outcome—not necessarily the most environmentally friendly outcome. Although there have been some WTO cases with the GATT XX(b), (d), and (g) exceptions at their core, the exceptions still lack legal clarity, particularly when compared to detailed, specific obligations.

## The Relationship between the WTO and Multilateral Environmental Agreements

The Doha mandate stresses the importance of clarifying the relationship between WTO rules and multilateral environmental agreement (MEA) trade-measures. The WTO Secretariat does not define what constitutes an MEA, although it has noted that roughly 20 of the 250 MEAs in force include trade measures or provisions that can affect trade.<sup>33</sup> While no dispute has been raised over the relationship between MEAs and WTO rules, WTO members have long examined the relationship between them. As a result, it is important to understand the trade-related aspects of each relevant MEA.

Multilateral Environmental Agreements (MEA)	Description of Agreement & Trade-Related Aspects
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	An international treaty that regulates trade in wildlife over species that are at risk of extinction. Provides a legal framework to ensure that trade is not detrimental to a species' survival.
Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)	A convention that aims to conserve Antarctica's marine ecosystem. Trade-related measures have been adopted to protect this environment including licensing and inspection obligations.
International Convention for the Conservation of Atlantic Tunas (ICCAT)	A convention that mandates "the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas." Trade-related measures have been adopted, including limits on fishing activity, fish farming, and non-discriminatory trade restrictions.
United Nations Fish Stocks Agreement (UNFSA)	A convention that seeks long-term sustainability of straddling and highly migratory fish stocks. It requires states to cooperate on fishery management organizations and arrangements to limit illegal fishing activity.
Agreement on Port State Measures (PSMA)	An agreement to "prevent, deter, and eliminate illegal, unreported, and unregulated fishing through the implementation of effective Port State measures." It regulates the designation of ports, port entrances, the use of ports, and inspection conduct.
International Tropical Timber Agreement (ITTA)	An agreement to promote sustainable trade, management, and development of tropical forest industries. Aims to promote the "expansion and diversification of international tropical timber from sustainably managed and legally harvested forests."
International Plant Protection Convention (IPPC)	An international treaty on cooperation to protect plants from the spread of pests and harmful plant products. Its strategic objective is to "facilitate economic and trade development through the promotion of harmonized scientifically based phytosanitary measures."
Convention on Biological Diversity (CBD)	A convention on the conservation, sustainable use, and fair use of the benefits of genetic resources. It contains provisions that regulate accessing, transferring, and funding these resources and relevant technologies.



Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity	A protocol to provide fair and equitable sharing of the benefits from genetic resources. Contains provisions that regulate accessing, transferring, and funding these resources and relevant technologies.
Cartagena Protocol on Biosafety to the Convention on Biological Diversity	A protocol to ensure adequate protection in transferring, handling, and using living modified organisms may affect conservation and biological diversity.
Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety	A supplementary protocol to “contribute to the conservation and sustainable use of biological diversity.” Establishes liability rules and redress for addressing the risk to human health when working with living modified organisms.
Montreal Protocol and the Vienna Convention on Substances that Deplete the Ozone Layer	A protocol and convention to protect human health and the environment against harmful activities that modify the ozone layer. The Montreal Protocol specifically “develops a regime that limits the release of ozone-depleting substances into the atmosphere.” It contains provisions on controlled substances, trade with non-parties, and licensing.
United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement	Agreements to stabilize greenhouse gas concentrations at a level that prevents dangerous interference in the climate system. The Kyoto Protocol strengthens UNFCCC, and the Paris Agreement enhances UNFCCC’s implementation. The domestic actions of countries implementing these agreement’s provisions could have trade implications.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	A convention to protect human health and the environment from the generation and management of harmful waste. It establishes protocols to control transboundary movements of waste, monitor and prevent illegal traffic, and develop technical guidelines for managing waste. Further, it provides a liability regime and damage compensation for transboundary movement and disposal of wastes.
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	A convention to promote responsibility and cooperation in the international trade of certain harmful chemicals. It facilitates information exchange and establishes procedures for handling their export and import.

Stockholm Convention on Persistent Organic Pollutants	A convention to “protect human health and the environment from persistent organic pollutants” by reducing or eliminating their release into the environment. It contains provisions to reduce or eliminate releases of specific chemicals from intentional production and use.
Minamata Convention on Mercury	A convention to “protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.” Contains provisions to regulate mercury supply sources and trade, mercury-added products, and mercury waste.

While many of those 20 MEAs address climate change-related impacts, only one directly addresses climate change: the UNFCCC, and by extension the Paris Agreement. Unlike many of the other MEAs that have trade implications, the Paris Agreement does not require governments to adopt and maintain certain regulations that could brush up against trade rules or allow for trade penalties for non-compliance. Instead, members of the Paris Agreement are required to meet individual GHG reduction commitments and are free to do so in whatever way they see fit. The UNFCCC does mirror the GATT in stating that “measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.” Because the Paris Agreement does not prescribe action, it does not by itself advance the trade-climate-MEA nexus. However, the Paris Agreement does provide a justification for countries to leverage trade tools previously described—potentially in breach of WTO obligations—to achieve their own climate objectives.

WTO members have discussed and held negotiations over the relationship between MEA secretariats and WTO committees. Cooperation is necessary for international trade and international environmental policy to mature with as little friction as possible. Global leaders backed this approach at the 2002 World Summit on Sustainable Development but negotiators at the WTO have yet to change or add rules to reduce friction between MEAs and WTO rules. The WTO Secretariat has relationships with its MEA counterparts to exchange information, documents, and provide technical assistance to developing countries. WTO members have tabled a range of proposals covering changes to GATT Article XX, the role of MEAs in dispute settlement, whether the WTO is the correct forum for a dispute involving parties to an MEA, waivers for trade measures in MEAs that fit certain conditions such as necessity and least-trade restrictiveness, and more fundamental questions such as how to define MEAs.<sup>34</sup>

Most recently, the Committee on Trade and Environment (CTE) has discussed issues including the circular economy, trade and plastics pollution, and fossil fuel subsidy reform.

Uncertainty can have a chilling effect on government’s willingness to undertake policies to address climate change that involve trade measures because it is not clear whether they breach WTO obligations or not. However, in many cases, compliance with WTO rules is not the primary barrier for governments to adopt more aggressive climate action. As the climate crisis accelerates and governments take bolder action to address it, they will likely to try to insulate themselves from corresponding trade disadvantages. That dynamic could result in underappreciated and unexplored

tensions between climate policy and trade rules exploding to the forefront, particularly for countries that pursue more aggressive climate policy and those that export relatively energy-intensive goods. Trade policy will not be the primary tool in combatting climate change and environmental degradation, but failure to better integrate trade and environmental policy will result in conflicts that will make achieving environmental goals more difficult.



# The International Foundations

The trading system is not blind to its relationship with the environment, although thinking on the issue has evolved. The 1948 GATT included the same exceptions regarding plant, animal, and human life as well as the conservation of natural resources, although the drafters likely interpreted those terms differently than they are interpreted today. In 1971, a GATT study warned that environmental policies may result in a new form of “green protectionism.” That same year, the GATT parties established the Group on Environmental Measures and International Trade (EMIT), although the group lay dormant for two decades. In 1991, the members of the European Free Trade Association requested the group be reconvened ahead of the 1992 United Nations Conference on Environment and Development, often referred to as the Rio Earth Summit.

EMIT focused on three issues still relevant today: the impact of environmental measures on trade, the relationship between international trade rules and MEAs, and transparency of national environmental regulations that may impact trade. Meanwhile, negotiators during the Tokyo Round—which stretched from 1973 to 1979—discussed the relationship between environmental standards and regulations and trade. During the Uruguay Round, from 1986 to 1994, negotiators explicitly addressed the relationship in the Agreement on Technical Barriers to Trade, the General Agreement on Trade in Services, the Agricultural Agreement, the Agreement on Sanitary and Phytosanitary Measures, the Subsidies and Countervailing Measures Agreement, the Agreement on Trade Related Aspects of Intellectual Property, and through an affirmation of the GATT Article XX exceptions. The preamble of the Marrakesh Agreement to establish the WTO in 1994 explicitly states that trade and economic relations should be conducted to allow for sustainable development and environmental preservation. In 1995, the WTO General Council then established the Committee on Trade and the Environment (CTE) to succeed the

EMIT. The CTE is open to all WTO members and some international observers, to better understand the relationship between trade and the environment.

Focus on trade and the environment was renewed with the adoption of the Doha Development Agenda in November 2001. The agenda “strongly reaffirms [the WTO’s] commitment to the object of sustainable development” and notes that the multilateral trading system and protection of the environment must be mutually supportive.<sup>35</sup> It ordered the CTE to negotiate relationships between WTO rules and obligations in multilateral environmental agreements (MEAs), procedures for information exchanges between MEA Secretariats and the WTO, and reductions in tariff and non-tariff barriers to environmental goods and services.

While the Doha Round has not been concluded, plurilateral negotiations on an Environmental Goods Agreement (EGA) began in July 2014. Through the EGA, 46 WTO members aim to eliminate tariffs on environmental-related products such as wind turbines and solar panels. The participants of the EGA negotiations represent nearly 90 percent of global exports in environmental goods, potentially indicating significant reductions in tariff rates for all WTO members if the agreement is open to most-favored nation treatment. In December 2016, however, these negotiations stalled despite narrowing the number of products covered to less than half of the original.<sup>36</sup>

A number of issues led to the breakdown. Consensus on what constitutes an “environmental good” vexed negotiators throughout the talks. Developed countries sought tariff reductions in high technology sectors while China balked and supported its own export interests.<sup>37</sup> The European Union and others blamed China for submitting a new proposal when it appeared a deal was in reach. China proposed that it be allowed longer tariff phaseouts than other members and proposed that goods sensitive to other governments be covered by the EGA. Of particular concern for the European Union was China’s proposed inclusion of bicycles. There is overcapacity in China, and Brussels and various member states worried it would flood the European market and put European bikemakers out of business.<sup>38</sup> The bicycle fight makes clear that despite its environmental objective, the EGA negotiations were still driven by parochial interests. Members sought to include goods they had an interest in exporting and exclude goods they had an interest in protecting from competition.

Further muddying the negotiations is the fact that tariff rates for environmental goods have decreased significantly over the years and remain low relative to other goods, resulting in less stake in the negotiations. The average applied tariff on environmental goods in high-income countries—which all but two EGA participants are—is about 0.5 percent.<sup>39</sup> These issues have not been resolved, and talks have not yet resumed on EGA.

Since 2018, the WTO’s attention on environmental issues has been focused on reaching an agreement to discipline subsidies that contribute to illegal, unregulated, and unreported fishing. Reining in such harmful subsidies has been on the WTO agenda since the Doha Round; however, the spotlight was recast on the issue in 2015 when the UN Sustainable Development Goals were adopted, and focus on reaching a deal was redoubled in 2017 when trade ministers agreed to conclude negotiations on a fisheries subsidies deal by the end of 2020. While progress has been made, WTO members missed the 2020 deadline for reaching a deal. An agreement may be possible by the 12th WTO Ministerial Conference expected to take place in 2021.

# WTO Jurisprudence

Despite attempts, no new understandings regarding trade and the environment have been negotiated at the WTO. Countries have made progress incorporating the two issues into free trade agreements, but multilateral action has remained out of reach. The lack of negotiated outcomes at the WTO in general has led to increased reliance on dispute settlement, as members seek to achieve through dispute settlement decisions what they cannot achieve through negotiation. This has resulted in expanded WTO jurisprudence imbuing further meaning in WTO rules, albeit not negotiated by the WTO membership.

There have not been many cases that involve environmental issues, either as a justification for policies that breach trade rules or measures that are in the gray zone of WTO legality and are aimed at addressing climate change. Given the lack of both jurisprudence and specific language on trade and climate change, the relationship between trade rules and measures to protect the environment remains relatively opaque.

## **The GATT XX Chapeau: Environmental Measures, Non-discrimination, and the Equilibrium**

Members must ensure that measures taken under the environment exception are done on a non-discriminatory basis, sustaining the fundamental WTO principle of national treatment. This requirement is based on the so-called GATT XX “chapeau,” which states that measures justified by a specific exception may not “constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade[.]” The WTO has confirmed this reading in multiple cases where respondents cited either GATT XX(b)

or GATT XX(g) to justify a trade restriction. Those cases are: DS2 and DS4 United States – Standards for Reformulated and Conventional Gasoline; DS58 and DS61 United States – Import Prohibition of Certain Shrimp and Shrimp Products; and DS332 Brazil Retreaded Tires.

United States – Gas forms the foundation of WTO jurisprudence on the relationship between GATT Article XX and the environmental exceptions. The cases, first brought by Venezuela and then Brazil in 1995 and 1996 respectively, challenged an EPA regulation to implement the Clean Air Act to control pollution caused by combustion of gasoline manufactured in the United States or imported. To implement the regulation, the EPA established different baseline measurements for domestically manufactured gas and imported gas. The WTO Appellate Body, the organization’s highest “court,” found the distinction to be inconsistent with the WTO’s national treatment principle—that foreign products be treated the same as domestic like products. The Appellate Body determined that the measure was justifiable under Article XX(g)—the exception which allows for measures relating to the conservation of natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. U.S. regulation resulted in foreign gas being put at a disadvantage despite it being no different than domestic gas. As a result, the measure was not justifiable under GATT XX and therefore put the United States in breach of its WTO obligations.

The Appellate Body relied on its decision in United States – Gas later that decade when it was presented with DS58 and DS61 United States – Import Prohibition of Certain Shrimp and Shrimp Products. The dispute, referred to as the “shrimp-turtle” case, was brought by India, Malaysia, Pakistan, and Thailand. The case revolved around a U.S. ban on shrimp imports harvested with technology that may harm sea turtles unless the country of origin had a certified regulatory program and an incidental take-rate (accidental catch) similar to that of the United States, or if fishing territory in the exporting country did not contain sea turtles. The United States had negotiated a regional agreement on the protection of sea turtles, which included regulations about turtle excluder devices (TEDs) with reference to WTO agreements and technical assistance on the use of TEDs. Countries party to that agreement could export shrimp to the United States. The complainants in the shrimp-turtle case argued that they were not afforded the same treatment and therefore the U.S. ban was discriminatory.

While the Appellate Body determined that the prohibition was justifiable under Article XX(g), it sided with the complainants in the case and, just as it did in United States – Gas, found that the prohibition was imposed in a discriminatory fashion. However, in this case, the discrimination was between two sets of foreign countries: the group party to the agreement with the United States that allowed for shrimp exports to the United States, and the group that was not party to the agreement and was therefore required to meet a regulatory bar to export shrimp to the United States—a violation of the most favored nation obligation. The Appellate Body concluded that because the United States negotiated an agreement that allowed for shrimp exports from some countries, an “equilibrium” and “alternative course of action” which would’ve achieved the U.S. objectives short of an import ban was possible.<sup>40</sup> In short, the Appellate Body held that it is not acceptable for one country to use “an economic embargo” to require that other members adopt the same regulatory scheme without taking into consideration the different conditions that other members may be dealing with.<sup>41</sup> The Appellate Body also faulted the United States for not allowing shrimp imports from uncertified countries that had different regulatory programs but used similar TEDs.



Finally, the Appellate Body faulted the United States for not engaging with other countries on international agreements for the conservation of sea turtles. It cited a series of international agreements and declarations in arguing that the U.S. objective demands international efforts: the Decision on Trade and Environment which refers to the Rio Declaration on Environment and Development and Agenda, principle 12 of Rio and paragraph 2.22(i) of agenda 21, Article 5 of the Convention on Biological Diversity, Annex one of The Convention on the Conservation of Migratory Species of Wild Animals, and the Report of the CTE, forming part of the Report of the General Council to Ministers at the Singapore Ministerial Conference.

That the United States only chose to negotiate with some countries and not all was in the Appellate Body's view unjustifiably discriminatory, as was the resulting unilateral nature of the United States determining compliance. Notably, the underlying prohibition on certain shrimp imports that could harm sea turtles was found to be legitimate by the WTO. The case hinged on its application—not the United States' environmental objective.

A third case, DS332 Brazil – Retreaded Tires, confirms the Appellate Body's application of the GATT XX chapeau and adds additional nuance. The then-European Communities (EC) raised the complaint in 2005 and alleged that an exemption for Mercosur countries from Brazil's import ban on retreaded tires, fines associated with importing retreaded tires, and restrictions on marketing them violated the national treatment obligation. As in United States – Gas and the shrimp-turtle case, the Appellate Body found the ban and associated measures could be legitimate under a specific exception, GATT XX(b), which allows measures necessary to protect human, animal, and plant life.

Brazil successfully argued that imports of retreaded tires would generate additional waste in Brazil, and that waste was an environmental hazard. In taking up the GATT XX chapeau, the panel determined that the Mercosur exception would result in unjustifiable discrimination and a disguised restriction on trade only if imports from Mercosur undermined the objectives of the import ban. However, the Appellate Body reversed this call for an “effects test” and found that the exception violated the chapeau because it did not relate to the pursuit of Brazil's objective and may have run counter to it.

These three cases not only underline the fundamental importance of non-discrimination when crafting import bans as part of environmental policy, but they also reveal that the WTO dispute settlement process is not tilted in favor of more trade no matter the circumstances. First, in each case, the WTO determined that members may take measures they deem necessary to achieve environmental objectives. Second, the failure of the United States and Brazil to prevail in their cases was not because they used trade restrictions to accomplish an environmental objective. To the contrary, one could argue that they failed because they were not trade restrictive enough. If the United States had applied the shrimp ban on all countries and not offered any technical assistance for TEDs, or if it had extended assistance and reached agreements with all other shrimp exporters that fished in waters containing turtles, there would likely have been no WTO issue with its policy. The former of those options is more trade restrictive than the other but is arguably in line with WTO obligations and U.S. environmental objectives. The latter is less trade restrictive and more environmentally friendly—a course of action that the Appellate Body said would be satisfactory. Brazil's case is clear cut: not introducing the Mercosur exception to begin with would have been a more trade restrictive route and arguably a more environmentally advantageous route.

These three cases confirm that WTO members have the right to determine what measures are necessary to protect human, animal, or plant life. Risks to that life can be defined either quantitatively or qualitatively, and members do not need to show that action taken to protect life will do so. However, the more severe the trade restriction, the greater the onus is on the member imposing the measure to prove that it will achieve its primary objective. For example, a member banning imports of a certain product—an extreme trade action—would need to show that alternative, less trade restrictive actions would be insufficient in resolving the risk the ban aims to mitigate. This balancing act is referred to by the Appellate Body as “marking out the line of equilibrium.”

In *United States – Shrimp*, the Appellate Body held that in order to determine whether a measure is justifiable under Article XX, one would need to determine whether the objective of the measure taken was commensurate with the level of trade distortion the measure would cause. As the Appellate Body wrote in that case, “the location of the line of equilibrium, as expressed in the chapeau, is not fixed and unchanging; the line moves as the kind and the shape of the measures at stake vary and as the facts making up specific cases differ.”

This theoretical approach does not offer much concrete guidance to members that seek to craft policies to hit the sweet spot on the so-called line of equilibrium. For example, in the shrimp-turtle dispute, the Appellate Body took the U.S. agreement with regional partners on sea turtle conservation—which included provisions on TEDs and WTO obligations—as proof that the United States could have negotiated with other countries as an alternative to prohibiting certain shrimp imports. Since the United States had been involved in a number of other international environmental agreements and had negotiated one regional agreement on the shrimp-turtle issue—including on WTO issues—the Appellate Body determined that an alternate course of action which fell along the equilibrium was available to the United States and therefore, its decision to prohibit shrimp imports from certain countries was unjustifiable discrimination.

The Appellate Body’s reasoning in this case, however, raises a number of questions that have grown in relevance as calls for international action on climate change and other environmental issues have grown and as uncertainty persists in the relationship between WTO rules and MEAs. In this specific case, the existence of a regional agreement does not necessarily mean a broader international agreement was viable or achievable in a timeframe that would have prevented harm to sea turtles. Regional environmental agreements have proliferated over the past decades. These agreements provide a foundation for deepening cooperation, including on environmental issues that intersect with trade issues. If a country can quickly strike a deal with a certain group of countries and opt to take action to protect the environment while assessing prospects for negotiations with a broader group of countries—some of whom may have no interest in negotiating—would that create grounds for a WTO case? While that question may not be the largest factor in determining whether or not a government joins an agreement and takes action against those outside of it, it may influence how agreements and related measures are designed.

## **Process and Production Method: A Fiber-Thin Difference**

The WTO obligates members to treat “like” products the same whether they are imports or produced domestically and regardless of which country they are imported from. But what makes a product “like” another one? At its core, likeness depends on whether products compete in the market. As businesses,

consumers, and governments grow more conscious about how products are made, and pressure grows on companies to produce goods in a sustainable manner and cut emissions, is there a case for products that have a heavy carbon production footprint to be treated as distinct from a product that is the same in final form but embodies less carbon? That is, that the two are not “like” products.

A similar question was at the core of DS135 European Communities – Measures Affecting Asbestos and Asbestos-Containing Products. Canada initiated the complaint in 1998, which centered on France’s import ban on asbestos and products containing asbestos. The panel determined that cement containing asbestos fibers, of which Canada was a major exporter, and cement substitutes which did not contain asbestos were “like products” and therefore France’s ban treated imports less favorably than domestically produced like products.

The Appellate Body reversed this claim and established a four-part “likeness” test, where the failure to meet any one part would make the products in question not like products:

- I. The physical properties of the products;
- II. The extent to which the products are capable of serving the same or similar end-uses;
- III. The extent to which consumers perceive and treat the products as alternative means of performing particular functions in order to satisfy a particular want or demand;
- IV. The international classification of the products for tariff purposes.

Applying that framework to the case at hand, the Appellate Body determined that toxicity was a physical difference to be considered in judging likeness and that it was linked to the competitive relationship between the two products being compared for likeness. The Appellate Body and panel determined that health risks can influence consumer tastes and habits, and therefore are relevant in determining likeness. And, the Appellate Body emphasized that the framework is not treaty language or a “closed list” of means to determine likeness. Examination of likeness is required on a case-by-case basis. The Appellate Body’s approach in this case was a more accommodating departure from the shrimp-turtle case, as well as a number of similar cases regarding U.S. regulations on tuna imports that may endanger dolphins. In those cases, “non-product related process and production methods”—the way shrimp or tuna is caught—did not set catch from certain countries apart from others.

The finding and corresponding likeness test in EC – Asbestos arguably sets a precedent for treating products that are physically the same differently based on “process and production methods” that set them apart competitively in the market. The consumer perception criteria support distinguishing products based on production processes—more and more consumers are opting for sustainably produced products.<sup>42</sup> However, it is not clear what level of consumer interest in sustainably produced products would constitute those products competing against physically indistinct products. The issue of whether “non-product related process or production methods” makes products unlike is not settled, and therefore the legitimacy under WTO rules of a distinction based on a product’s carbon footprint is not settled.<sup>43</sup>

## Carbon Border Tax Adjustment

Carbon taxes are often discussed as a necessary component of an ambitious climate agenda. The European Union has considered this approach in the form of either a carbon tax on imports or requiring importers to buy carbon allowances from the EU Emissions Trading System.<sup>44</sup> The European Union sees this approach as a way to address carbon leakage, which occurs when more stringent climate regulations in one jurisdiction lead companies there to move production to a jurisdiction where climate regulations are weaker.

There is a growing consensus that a carbon border tax adjustment (BTA) can be constructed in a way that is consistent with WTO rules. Jennifer Hillman, former Appellate Body member and general counsel at the Office of the U.S. Trade Representative, has written the instructional paper on this issue.<sup>45</sup> Hillman explains that a BTA would fall under the requirements of Article II of the GATT if the BTA is characterized as a customs duty or charge imposed on or in connection to an import. GATT Article II obligates countries not to impose duties on imports that exceed commitments in their tariff schedule; however, it allows additional charges to be imposed that go beyond those commitments if they are equivalent to an internal tax, such as a domestic carbon tax.

Alternatively, a country could classify a carbon BTA as an internal tax or charge if the tax were paid on resale of the product in the United States. In that case, it would be required to follow the GATT Article III national treatment principle and treat imports no less favorably than domestically produced products. Both types of charges allowed under GATT Article II and Article III require that they are equivalently charged on domestically produced like products. Both of those articles also allow only for indirect taxes—taxes that are applied to a product, not the producer, manufacturer, or their income.

The WTO compliance picture becomes muddier if policymakers opt to impose taxes based on a product's carbon footprint. Challenges in measuring the carbon footprint of a foreign product expand as the scope of the carbon BTA expands. For example, would the BTA only cover emissions at the manufacturing site of the final product or at the manufacturing sites of all the inputs into the product? Would indirect emissions be counted, like emissions from transportation? What about emissions from the complex where the product was designed? These questions may vex regulators. In United States – Gas the United States was faulted for using separate methodologies for domestic and foreign gas producers—a ruling that policymakers considering a far-reaching carbon BTA should keep in mind. The WTO may still determine that a carbon BTA—which is applied equally to all imports as well as to domestically produced products—violates WTO rules by rejecting the argument that a product's carbon footprint makes it distinct from physically like counterparts. In that case, countries would need to resort to GATT XX (b) and (g)—the two environmental exceptions. On the other hand, carbon BTA schemes that provided different treatment products from countries with carbon taxes of their own could raise most favored nation issues like those raised in the shrimp-turtle case. Likewise, exemptions for LDCs, which the European Union is reportedly considering, may raise complaints over discrimination as well.<sup>46</sup>



## **GATT Article XX(b) and (g): Broadening the Scope for Action**

Recall that the two most relevant WTO exemptions related to the environment are GATT Article XX(b) and (g). The former allows WTO members to breach WTO obligations if doing so is “necessary to protect human, animal, or plant life or health.” The latter allows WTO members to breach WTO obligations to take action “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.” The WTO has taken relatively deferential and broad views of both exceptions.

GATT Article XX(b) is relatively straightforward. The largest source of debate is the meaning of “necessary.” The EC – Asbestos case is instructive. The Appellate Body determined that “it is undisputed that WTO Members have the right to determine the level of protection of health that they consider appropriate in a given situation.”<sup>47</sup> The Appellate Body also rejected Canada’s claim that controlled use would have been a “reasonably available” alternative by pointing to the scientific evidence that controlled use would still create significant risks to public health. The Appellate Body buttressed this argument by pointing to three GATT cases: Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes; Korea – Beef; and United States – Section 337 of the Tariff Act of 1930. Importantly, the Appellate Body found that those cases developed a reading of “necessary” that is essentially a positive relationship between how severely members may breach their WTO obligations and how “vital or important” the objective is that is being pursued—similar to the “line of equilibrium” approach discussed previously.

The Appellate Body added that risks to human, animal, or plant life or health do not need to be quantified for a member to take action to protect that life.

This approach was confirmed in Brazil – Retreaded Tires. In answering the question of whether Brazil’s ban was “necessary” under GATT XX(b), the panel looked at two questions: whether the ban would contribute to the reduction in number of waste tires in Brazil and whether that reduction reduced risks to human, animal, and plant life and health arising from waste tires. The panel concluded affirmatively on both. The EC argued that the panel only determined what contribution to risk reduction the measures might have, but it should have determined “the actual contribution of the measures to its stated goals.” In doing so, it should have quantified the reduction of waste tires from the import ban. Brazil recalled EC – Asbestos to argue that risk can be evaluated in quantitative or qualitative terms, and that the panel did not have to make a quantitative finding. The Appellate Body accepted this line of reasoning and upheld the panel’s decision to perform a qualitative analysis of the ban.<sup>48</sup>

While finding that a quantitative projection of the ban was not needed, the Appellate Body did follow the outcome from EC – Asbestos and other GATT XX cases in writing that “when a measure produces restrictive effects on international trade as severe as those resulting from an import ban, it appears to us that it would be difficult for a panel to find that measure necessary unless it is satisfied that the measure is apt to make a material contribution to the achievement of its objective.”<sup>49</sup> The Appellate Body added that for an import ban to be justified under Article XX(b), it must be apparent that it “brings about a material contribution to the achievement of its objective.”<sup>50</sup> The Appellate Body went on to note that a measure can be analyzed qualitatively or quantitatively, and that some measures, such as those “adopted in order to attenuate global warming and climate change” or prevent disease spread, “can only be evaluated with the benefit

of time.”<sup>51</sup> The Appellate Body also found it relevant that the import ban was part of a broader strategy that would result in fewer waste tires.<sup>52</sup>

The Appellate Body’s interpretation of GATT Article XX(b) provides policymakers ample space to take environmental action. The combination of WTO members being the ones to determine what is “necessary” to protect human, animal, or plant life, along with the determination that risks to that life do not need to be quantified for action to be taken, provides significant latitude for environmental measures that may breach WTO obligations, of course only if they are applied in a non-discriminatory manner as required by the GATT Article XX chapeau. That said, the Appellate Body’s opinion in *Brazil – Retreaded Tires* makes clear that the exception does not give governments free rein to test out policies aimed at achieving environmental objectives but is filled with loopholes that mitigate its impact or create uncertainties about its effect.

Further opening up space for environmentally conscious policymakers, the WTO has taken a broad definition of “exhaustible resources” under GATT Article XX(g). In various cases, it has considered clean air and endangered species as “exhaustible resources,” considered the term to include both finite and renewable resources, and concluded that it does not have a static definition. In the *shrimp-turtle* case, the Appellate Body determined that XX(g) is not limited to mineral or non-living resources, and that exhaustible natural resources are not mutually exclusive with renewable natural resources. The Appellate Body wrote in that case, “one lesson that modern biological sciences teach us is that living species, though in principle, capable of reproduction and, in that sense, ‘renewable’, are in certain circumstances indeed susceptible of depletion, exhaustion and extinction, frequently because of human activities. Living resources are just as ‘finite’ as petroleum, iron ore and other non-living resources.”<sup>53</sup> The Appellate Body also determined that “natural resources” should be read in conjunction with the preamble of the WTO agreement and that, more importantly, the term is not static but “by definition, evolutionary,” and should be read in light of other modern international agreements and declarations on the environment.

Prior to the *shrimp-turtle* case, in *United States – Gas*, the Appellate Body found that clean air is an exhaustible natural resource under GATT Article XX(g); however, the EPA’s regulatory scheme failed to meet the requirements of the article because the measure was not made in connection with effective restrictions on imported and domestic products in the name of conservation on the production or consumption of exhaustible natural resources.<sup>54</sup>

A series of cases involving Chinese export restrictions on raw materials (DS394, 395, and 398) resulted in the Appellate Body setting some clearer parameters on the second clause in GATT Article XX(g): that such measures are made effective in conjunction with restrictions on domestic production or consumption—and confirmed that GATT-inconsistent measures with the goal or effect of insulating domestic producers from foreign competition cannot be justified by the exception.<sup>55</sup>

The GATT prohibits export restrictions. To judge whether China’s export restrictions—which it claimed were aimed at resource conservation—accomplished that objective, the panel determined that the “pace of extraction” is the relevant metric for conservation, “not whether the resource is consumed domestically or abroad.”<sup>56</sup> In addition, the panel noted that following the export restriction, domestic extraction and consumption of fluorspar and refractory-grade bauxite had increased in China while exports had not grown at the same rate. This did not support China’s claim that the country had put in place adequate restrictions on domestic production or consumption as required by GATT Article

XX(g). The panel also raised concerns that export restrictions may have long-term negative effects on conservation by increasing demand from the domestic downstream sector due to reduced domestic prices for the materials. That could offset the reduction in extraction due to less foreign demand as a result of the export restriction.<sup>57</sup>

In regard to operating in conjunction with domestic restrictions on consumption or production, the panel noted that relevant restrictions must exist and operate concurrently with the trade action under question. The panel then determined that China had not shown that its export restrictions were made effective with restrictions on domestic production or consumption because those restrictions were not intended to enforce a reduction on domestic production or consumption, despite that being possible in the future. China did not appeal that claim; however, the Appellate Body noted that Article XX(g) requires the given trade restriction to “work together” with restrictions on domestic production and consumption.

The panel also recalled that in *United States – Gas* it determined that export restrictions cannot be determined to be even-handed if there is no restriction on domestic production or consumption. The panel determined that China did not meet the even-handedness standard because its measures to restrict domestic consumption were a production cap that only kicked in when domestic demand was greater than the quantity available to the domestic economy through production and export caps—a scenario which was not guaranteed.<sup>58</sup>

Further, the panel found that while there is no textual basis under Article XX(g) for “identical treatment” between domestic and foreign users of the relevant resources, “it is difficult to see” how China’s measures would meet the even-handedness requirement if limitations are only imposed on foreign consumers and not domestic users or consumption. To meet the standard, China would have to show that the impact of the export restrictions on foreign users is balanced with restrictions on domestic users or consumers.<sup>59</sup> In a separate string of later cases, China again failed to defend export restrictions on rare earth elements because those restrictions were not paired with restrictions on domestic consumption and production and they did not meet the “even-handedness” requirement.<sup>60</sup>

## **Government Support: Unsettled Subsidies**

In addition to certain types of subsidies that could contribute to the fight against climate change’s ambiguity in the WTO rulebook, a recent WTO case involving feed in tariffs has added another layer of mystery in how governments can support clean energy while staying within the bounds of WTO rules. In 2012, Japan and the European Union challenged an Ontario feed in tariff (FIT) program that contained domestic content requirements. To qualify for a long-term contract with the Ontario government, wind and solar power generators were required to source power generation equipment from Ontario. The European Union and Japan challenged the measure as a national treatment violation because foreign electricity generation products were treated less favorably than domestic products, and the two WTO members claimed the measure was a prohibited subsidy because the participation in the FIT scheme was conditioned on the use of domestic over imported goods.

The Appellate Body found that the FIT did not breach subsidy rules because, despite it being a financial contribution, it did not benefit the recipient. It did, however, find that the local content requirement

violated national treatment obligations in the GATT and Agreement on Trade and Investment Related Measures (TRIMS).

The Appellate Body arrived at its conclusion that the FIT did not breach the ASCM by examining the entire electricity market and not just that for wind and photovoltaic (PV) electricity, which have different characteristics than other forms of electricity generation. The Appellate Body determined that wind and PV electricity producers cannot compete with other electricity producers because of cost structure, operating cost, and other characteristic differences. For example, wind and PV electricity producers cannot put price constraints on competitors, while their competitors—who can operate base and peak load—can put price constraints on wind and PV.<sup>61</sup>

In turn, the Appellate Body claimed that there is a distinction between government intervention which distorts markets and that which creates markets that would not otherwise exist—the latter by itself not necessarily equating to a subsidy as per the ASCM.<sup>62</sup> The Appellate Body also found that a government defining a certain supply-mix cannot by itself be considered as conferring a benefit within the meaning of Article 1.1(b) of the SCM.<sup>63</sup> As long as electricity is blended and cost gaps between conventional and renewable energy are significant, “markets for wind and solar PV-generated electricity can only come into existence as a matter of government regulation . . . It is often the government’s choice of supply-mix of electricity generation technologies that creates markets for wind- and solar PV-generated electricity.”<sup>64</sup>

Further, the Appellate Body found that comparing renewable energy generators with conventional energy generators requires consideration of prices and other externalities, including positive externalities associated with renewables—such as long-term supply—and addressing environmental concerns and negative externalities associated with fossil fuels—such as adverse impact on human health and environment.<sup>65</sup>

Notably, however, there was dissent in the original panel decision, and the dissent, panel majority, and Appellate Body took different approaches to the relationship between the ASCM and environmental objectives. The panel majority took environmental policy into account when it considered Ontario’s environmental objectives in constructing the benchmark electricity market prices to determine if the challenged measures conferred a benefit. However, the panel dissent threw out that reasoning when it determined that without the FIT there would be no renewable energy market and thus a benefit must have been conferred regardless of environmental objectives. The Appellate Body made a mixed determination which took Ontario’s environmental objectives into account while simultaneously pointing out that the ASCM does not reference policy objectives in its text.<sup>66</sup> This lack of clarity and consistency does not bode well for future subsidies in the environmental space. Nor does it inspire confidence in understanding the purpose of the ASCM—whether it is designed to police trade distorting subsidies of all stripes or whether it is designed to accommodate what scholars have termed as “socially constructive” subsidies and allow for action against “protectionist subsidies.”<sup>67</sup>

## Takeaways and Next Steps

The relationship between WTO rules and environmental measures that may breach them is still relatively untested. However, some bedrock principles have been established that form a useful guide to policymakers trying to craft environment policies that will not be at odds with WTO rules.



1. **Non-discrimination is paramount.** A brief review of WTO disputes involving environmental objectives reveals that WTO members are often faulted for policies that treat products from some foreign countries different than others or treat domestic products more favorably than foreign products. Regardless of whether a measure that otherwise violates WTO rules fits into any of the specific GATT XX exemptions, if it is unjustifiably discriminatory or amounts to a disguised restriction on trade, it will fail to meet the GATT XX chapeau and breach WTO rules.
2. **Governments have latitude to protect the environment, but not a blank check.** The WTO has repeatedly confirmed that it is up to governments to decide what is necessary to protect human, plant, and animal life and health. The WTO has taken a broad view of Article XX's application to the environment. In the shrimp-turtle dispute the Appellate Body wrote that GATT Article XX should be considered through "contemporary concerns of the community of nations about the protection and conservation of the environment." The Appellate Body also referenced the inclusion of "sustainable development" in the preamble of the Marrakesh Agreement as an objective of the WTO. But members do not have a blank check. The more extreme the trade measure, the larger the responsibility the implementing member has to show that a less trade restrictive alternative is not viable. And, even as the WTO has taken an expansive definition of "exhaustible resources" to include clean air and animal life—both of which are arguably renewable—it has repeatedly faulted WTO members that failed to tie effective measures to rein in domestic production and consumption when breaching WTO rules to allegedly conserve exhaustible resources.
3. **Subsidies are murky.** A lack of clarity persists over whether the ASCM covers certain types of assistance and which policy measures confer a benefit as defined by the ASCM. The Canada – FIT dispute did little to clarify the picture and in fact presented three different approaches to considering—or not—environmental objectives when providing government support. The most fundamental question raised in that case is whether government measures to create a market which would not otherwise exist should be considered a subsidy. The Appellate Body's decision that creating a market which otherwise would not exist does not constitute a subsidy potentially eliminates any concern about heavy-handed government support for a cleaner electricity mix violating WTO rules.
4. **The relationship between WTO and MEA obligations is untested.** The question of how trade actions provided by MEAs fits into the WTO rulebook remains unanswered. As a result, some MEA negotiations have avoided addressing trade obligations altogether for fear of creating friction with WTO obligations.<sup>68</sup> Older MEAs, such as CITES, the Montreal Protocol, and the Basel Convention provide for trade action and do not make explicit references to the GATT (these agreements were negotiated prior to the establishment of the WTO), although there have been attempts by the Secretariats of those MEAs to mitigate friction with WTO rules. Still, without more specificity regarding the interaction between MEAs and WTO rules, governments may balk at including trade obligations in MEAs or taking trade action allowed by MEAs. Sorting out the relationship through negotiation at the WTO would be the best option, but after a quarter century of talks to do so with little progress, it seems as though settlement through a dispute—if one ever arises—is more likely. A showdown between MEA and WTO obligations would put both at risk, an outcome that governments should seek to avoid.

The WTO—both its members and the dispute settlement system—are aware of the growing importance of environmental policy and its relationship to international trade rules. However, as negotiations over the past 25 years have shown, it will be difficult for WTO members to reach the consensus required to

modify WTO rules to clarify their relationship with environmental policy. That said, the United States still has options within and outside of the WTO to adopt a more climate-driven trade agenda.

# Opportunities for a Climate-Driven Trade Agenda

While wholesale WTO reform, negotiation of new WTO rules, and bold carbon tax and border adjustment policies are important components of a climate-driven trade agenda, their realization is years away. In the meantime, policymakers can build a foundation for fundamental reform while advancing a climate-driven trade policy that improves prospects for combatting climate change in the long-term as well as conditions on the ground in the short-term. Most existing trade rules are not definitive; there is ample gray area for policymakers to define them in a climate-positive manner—a task the United States and its allies should take on together. The current system also provides plenty of space to advance green initiatives without bending or breaking rules. While initiatives like renegotiation of WTO rules and carbon border adjustment mechanisms are headline grabbing and can have a large impact, they should not be the only dimensions of a climate-driven trade agenda.

## Review TPA and Domestic Trade Law

Free trade agreements provide the United States an opportunity to make multilateral environmental agreements enforceable, which in turn helps establish international environmental law and demystify the relationship between MEAs and trade rules. Trade promotion authority (TPA), the basic authority for the president to conduct trade negotiations, is granted by Congress as a trade-off: Congress sets out objectives that the administration must pursue when negotiating free trade agreements. In exchange, Congress gives up its ability to amend agreements subject to TPA when they are presented by the Executive Branch for a vote on implementing them. Since the so-called May 10 Agreement was struck between Congressional leaders and the Bush administration in 2007, Congress has required that free trade agreements require parties to comply with seven multilateral environmental agreements: the

Convention on International Trade in Endangered Species; the Montreal Protocol on Ozone Depleting Substances; the Convention on Marine Pollution; the Inter-American Tropical Tuna Convention; the Ramsar Convention on the Wetlands; the International Convention for the Regulation of Whaling; and the Convention on Conservation of Antarctic Marine Living Resources. The 2015 TPA law obligates the United States to negotiate provisions subject to dispute settlement which require FTA partners to fully implement those MEAs, enforce their own environmental standards, and which prohibit parties from derogating from environmental obligations. TPA, and by extension free trade agreements, can be a lever to align international trade and international environmental policy and give multilateral environmental agreements some teeth.

The incoming Congress together with the Biden administration will have the opportunity to write and make law a new TPA bill since the current one expires on July 1, 2021. Congress, in cooperation with the Executive Branch, should seize the opportunity to produce a more climate ambitious TPA law. **In the next TPA bill, Congress should include the following negotiating objectives:**

- **Add to the existing list of MEAs enforceable under FTAs:**
  - In addition to the MEAs covered in existing legislation, agreements, and obligations negotiated under the United Nations Framework Convention on Climate Change, PSMA, ITTA, IPPC, and Minamata Convention on Mercury should be made enforceable through FTAs, and existing free trade agreements should be upgraded to include those obligations.
- **Expand market access for green goods and services:**
  - Eliminate tariffs on “green goods,” with goods covered by the APEC environmental goods initiative as a minimum starting point.<sup>69</sup>
  - Expand services market access for “green services,” including design, engineering, and construction services related to clean energy generation and environmentally friendly buildings, supply of installation, servicing, and repair for environmentally friendly technology and products.
  - Align regulations and standards for green goods and services to balance innovation, environmental, market access, and technology diffusion objectives.
- **Establish a working group with FTA partners to coordinate emission pricing schemes:**
  - The objective of each FTA working group should be to establish a common carbon pricing floor to prevent carbon leakage.
- **Make “illegal take” obligations prescriptive and broader:**
  - USMCA includes a novel provision, similar to the Lacey Act, to “affirm the importance of combatting the illegal take of, and illegal trade in, wild fauna and flora.” The United States should upgrade this language from hortatory to prescriptive and ensure that it covers illegal harvesting of products that contribute to climate change and cause environmental harm, such as illegal logging and deforestation. The United States fought for similar language to be included in TPP, however it was suspended after the United States left the agreement and the 11 remaining parties moved forward with the CPTPP. If the United States were to rejoin the agreement, it should do so only if that provision is restored and improved.

Beyond negotiating objectives, **Congress should mandate that relevant government agencies complement *ex ante* environmental reviews of concluded trade agreements with regular *ex post* reviews of agreements once in force.**

## **Establish a Climate-Driven Trade Agenda with the European Union**

In December, the European Commission proposed an agenda for transatlantic cooperation with the incoming Biden administration. Cooperation on climate change and the environment is a centerpiece of the Commission's proposal. **The United States should take the European Union up on its offer to establish a global template for carbon border adjustment mechanisms, form a transatlantic green trade agenda, and develop a trade and climate agenda for the WTO.** The Biden administration will bring new momentum and urgency for U.S. action on climate change and for reengagement with traditional allies that could help the United States and European Union overcome longstanding trade disagreements that have plagued previous negotiations.

The United States must seize this opportunity. The European Union plans to put forward legislation for a carbon border adjustment mechanism in the first half of 2021.<sup>70</sup> Adoption of a carbon border adjustment mechanism would provide the European Union a first mover advantage and influence the design of carbon border adjustment mechanisms adopted by other governments—similar to the global effect EU regulation in the digital space has had. Time is running out for the United States to influence and cooperate with the European Union on an initiative that will shape a policy that will influence the \$1.1 trillion U.S.-EU trade relationship as well as U.S. trade relationships with countries around the world. Instead of remaining a bystander, the United States should work with the European Union to establish a global template for carbon border adjustment mechanisms to mitigate disruptions to U.S. commercial interests. Areas for agreement include how to measure carbon embodied in a product, which industries should first be subject to a border adjustment, how to design a border adjustment within WTO rules, and how to apply the mechanism to countries that have carbon border adjustment mechanisms with different designs.

U.S.-EU cooperation on a bilateral green trade agenda as well as a WTO trade and climate agenda would provide momentum for quick, meaningful trade policy contributions to the battle against climate change and build a foundation for more fundamental action over the long-term. Bilaterally, an agreement to open up market access for green goods and services could set the stage for negotiations and agreement at the WTO on a revived and expanded EGA. This objective is important given that tariffs and non-tariff barriers are lower on “dirtier” industries that embody more carbon dioxide emissions than clean energy.<sup>71</sup> At the WTO, the United States and European Union could forward joint interpretations of WTO rules that could promote a climate-driven trade agenda. Even if such interpretations are never adopted by the WTO membership, a proactive approach to demystifying the relationship between WTO rules and climate policy is superior to a reactive approach.

## **“Green” APEC Trade Discussions in 2021**

Parallel to the WTO and actions that could come out of MC12, **the United States should pick up on the APEC green goods initiative (a separate agreement from the previously discussed EGA) and use**



**APEC as an incubator and launchpad for components of a climate-friendly trade policy agenda.** New Zealand's hosting of the APEC Summit in 2021 gives the country an opportunity to build on its WTO initiative to rein in fossil fuel subsidies by focusing outreach on familiar APEC members. 2021 should also be the year that the APEC green goods initiative formally expands, both in terms of goods covered and into green services. New Zealand is the APEC "champion economy" for environmental services. The APEC Environmental Services Action Plan—which studies environmental services trade and is meant to establish a path forward—will undergo its final review in 2020, teeing up 2021 as a year for fresh initiatives.<sup>72</sup> There is precedent for APEC to focus on liberalizing environmental services—doing so was a topic in 2015 discussions on lowering services barriers for small businesses.<sup>73</sup> As previously stated, tariffs and non-tariff barriers are lower on "dirtier" industries that embody more carbon dioxide emissions than clean energy, which provides ample reason to pursue tariff cuts and services market liberalization for green goods.<sup>74</sup>

## MC12 and Beyond

Trade chiefs are expected to descend upon Nur-Sultan, Kazakhstan, in the summer of 2021 for the 12th WTO Ministerial Conference. It is unlikely that WTO members will be able to resolve the thornier questions about the relationship between trade and the environment raised in Appellate Body and panel reports. Doing so would require a negotiation over the text of the WTO Agreements—either to change the text outright or clarify its meaning. However, if the right leadership is brought to MC12, trade ministers could push for an environmentally friendly agenda for a WTO that currently lacks direction and is facing a credibility crisis. That agenda could be jumpstarted by an agreement on fisheries subsidies.

## REVIVE AND EXPAND EGA NEGOTIATIONS

If a fisheries deal is reached, momentum could be carried into **restarting negotiations for a tariff-cutting Environmental Goods Agreement**. WTO members should not repeat previous mistakes made in the run up to negotiations collapsing in December 2016. Before offers are exchanged, negotiators should agree on criteria for goods to be covered, for example, goods that reduce greenhouse gas emissions, goods that offer improved energy efficiency, and goods produced with a clean production process. WTO members should also clarify up front that covered goods are still fair game for trade remedies. This would send a clear message to China and other countries interested in potentially trade distorting industrial policy that the EGA is not a get-out-of-jail free card for overcapacity, dumping, and trade distorting subsidization of environmentally friendly technology if those measures do not meet the requirements of the climate waiver described below. Finally, negotiators should include environmental services. Doing so would further unlock trade in environmental goods and create a more dynamic negotiation that would increase the chances of success.<sup>75</sup> WTO members have recently discussed market access for environmental services, with Australia, Canada, Mexico, New Zealand, and Switzerland jumpstarting the conversation.<sup>76</sup>

## NEGOTIATE A CLIMATE WAIVER

On the other side of trade liberalizing agreements, WTO members must begin discussions over the compatibility of measures taken to meet Paris Agreement commitments and WTO rules. Here, members would be wise to avoid the theoretical and stick to specifics. **One option, proposed by former Appellate Body chief and U.S. Congressman James Bacchus among others, is a climate**

**waiver.**<sup>77</sup> The waiver would allow WTO members to take action to meet their Paris commitments so long as the measures were consistent with the Paris Agreement and did not unjustifiably or arbitrarily discriminate in a manner which distorts trade or amount to a disguised restriction on trade. At a high level, this approach is similar to reiterating the GATT XX chapeau and creating an exception specifically for measures aimed at meeting Paris Agreement obligations. Even without adding further detail, it would generate clarity and certainty regarding the WTO's relationship with the Paris Agreement, provide some clarity surrounding green subsidies and WTO rules, and set a precedent for future waivers as international environmental policy matures.

To move beyond a broad waiver, WTO members could adopt a two-step process. The first step would be the adoption of the broad waiver, which will require some diplomatic finesse but is not impossible given the universal overlap of Paris membership with that of the WTO (except for the United States currently). The second step would be to add additional detail to the waiver, including, per Bacchus, detailing how greenhouse gas emissions could be measured, defining a climate response measure, establishing disciplines on fossil fuel subsidies, and better defining which subsidies are acceptable to further environmental objectives. "Climate response measure" remains ill-defined, and work by the UNFCCC on doing so continues. WTO members should track that work and incorporate where possible sharper language to define what specific climate response measures would be covered by the waiver. The WTO can also draw on work being done by the Ad Hoc Working Group on the Paris Agreement to standardize methodologies and metrics to determine whether Paris commitments are being met, in line with methodologies and metrics employed by the Intergovernmental Panel on Climate Change and adopted by the Conference of the Parties.

However, even if WTO members were only able to conclude the first step (the adoption of a broad waiver) policymakers would still have more definition in the policy space provided to navigate climate and trade obligations. If a dispute were to arise with a measure taken to address climate change at its core, panelists and Appellate Body members would have at least some climate change-related language to reference.<sup>78</sup>

## Secure Critical Mineral Supply Chains

Critical minerals are a necessary input into many clean energy technologies. As demand for clean energy generation grows, so will demand for critical minerals. Unfortunately, the production of critical minerals is concentrated among a few countries, depending on the mineral, not all of which can be considered close U.S. allies or trustworthy partners. The United States is 100 percent reliant on foreign sources for 14 critical minerals and 50 percent import-reliant for 17 critical minerals, as defined by the Department of Energy.<sup>79</sup> China's dominance of the rare earth elements market in particular has proven difficult to break, largely for economic reasons. Recent attempts to establish midstream separation and processing facilities in the United States failed because of Chinese price competition. Lack of transparency into critical mineral supply chains and price volatility are also challenges that may slow uptake of clean energy technology in the United States and West more broadly.

In light of these challenges, President Trump in December 2017 issued an Executive Order on "A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals."<sup>80</sup> Among other things, the order directs the secretary of commerce in partnership with other executive agencies to present options for accessing and developing critical minerals through investment and trade with allies and

partners. There is precedent for cooperation with allies on access to critical minerals. The United States, Japan, and the European Union filed and successfully prosecuted a joint WTO complaint against Chinese export restrictions on rare earth elements in 2012.

Cooperation should extend beyond litigation at the WTO and other efforts to keep supplies from China open. **The United States should work with allies—principally NATO members and those with which it has defense commitments—to diversify critical mineral supply chains through trusted partners** and improve critical mineral extraction, separation, processing, and other downstream capabilities.<sup>81</sup> It should engage with the European Union on its announcement to build a critical raw materials alliance. Memorandums of understanding with Canada and Australia stemming from the State Department’s Energy Resources Governance Initiative are positive first steps, but a wider network of trusted partners and additional investment both in U.S. and allied capacity is needed.

Table 1: Government Climate Policy, WTO Rules, and Potential WTO Reform

What climate actions might be challenged under trade rules?	What do rules say about the legality of those actions?	What reforms should be made to accelerate action on climate?
Tax/tariff or import restrictions on products with carbon-heavy production processes	<ul style="list-style-type: none"> <li>• GATT Art. I and III prohibits discrimination against “like products.”</li> <li>• GATT Art. II prevents imposing tariffs on products above scheduled commitments.</li> <li>• GATT Art. II and III allows for additional indirect taxes (a tax on the product, not manufacturer, producer, or their income) to be imposed on imports if an equivalent tax is imposed on domestic products.</li> <li>• Agreement on Technical Barriers to Trade Art. 2.2 requires that “technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create.”</li> <li>• GATT Art. XX(b) and (g) allows WTO members to breach rules to protect plant, animal, and human health, and to conserve exhaustible natural resources. The measure cannot be “a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail” and cannot be “a disguised restriction on international trade.”</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify the relationship between process or production methods and “likeness.”</li> <li>• Negotiate a climate waiver to establish clarity regarding the GATT Art. XX exceptions application to climate change and how carbon border adjustments can align with WTO rules.</li> </ul>
Subsidies conditioned on local content or export performance	<ul style="list-style-type: none"> <li>• The Agreement on Subsidies and Countervailing Measures prohibits export subsidies and those conditioned on local content.</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
Sector-specific subsidies (clean energy tax breaks or grants, price supports, FIT, etc.)	<ul style="list-style-type: none"> <li>• The Agreement on Subsidies and Countervailing measures allows WTO members to impose countervailing duties on subsidized imports that cause adverse effects on the interests of other members.</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify the relationship between “green actionable subsidies” and the ASCM. Options include listing non-actionable green subsidies or reinstating ASCM Art. 8.</li> </ul>
Government procurement with environmental objectives and local content requirements	<ul style="list-style-type: none"> <li>• GATT Article III:8(a) exempts government procurement from GATT national treatment obligations, i.e., it allows governments to preference domestic products. However, members of the Government Procurement Agreement have foregone that exception.</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>

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