### Yale University

# Yale Center for Environmental Law & Policy

HOME > COOL HEADS IN A WARMING WORLD: HOW TRADE POLICY CAN HELP FIGHT CLIMATE CHANGE

# Cool Heads in a Warming World: How Trade Policy Can Help Fight Climate Change

Edited by Daniel C. Esty and Susan Biniaz



World leaders came together in 2015 to reinvigorate the global commitment to advance

sustainability in general and to address the buildup of greenhouse gases in the atmosphere in particular. The 2015 Paris Agreement on climate change calls on all nations to limit average global temperature increases, improve resilience to climate change impacts, and deliver financial flows in support of a decarbonized future. The Paris Agreement cannot, however, succeed without the help of other parts of the global governance regime, including most notably the organizations that manage international trade and economic interdependence.

Cool Heads in a Warming World: How Trade Policy Can Help Fight Climate Change explores the many ways in which the international trading system intersects with the Paris Agreement—and how it might be engaged to help advance a low-carbon global economy. With insights applicable to the World Trade Organization (WTO) as well as trade law and policy more generally, Cool Heads features fresh perspectives and cutting-edge analysis from leading scholars, practitioners, and policymakers from around the world.

To read essays written by experts for this project, click the links on the right.

## **Project White Papers**

#### Project Homepage

<u>Introduction</u> Daniel C. Esty and Sue Biniaz

<u>Trade, Sustainable Development and Climate Change: A Proposal for Positive Convergence</u> James Cameron, Max Mendez-Parra, and Leah Worrall

<u>A Call for a WTO Climate Waiver</u>

James Bacchus

#### Trade in a World Where Goods Carry Carbon Passports

Ricardo Meléndez-Ortiz

Border Carbon Adjustments in a Post-Paris World: Same Old, Same Old, but Different Harro van Asselt and Michael Mehling

Trade and Carbon Standards: Why Greater Regulatory Cooperation is Needed Kateryna Holzer and Aik Hoe Lim Fossil Fuel Subsidy Reform: A View from the Trenches

Tim Groser

Can Preferential Trade Agreements Address Climate Change?

Jean-Frédéric Morin and Sikina Jinnah

<u>EU Trade and Climate Policy: Pursuing a "Cooperative Approach" to Promoting</u> <u>Implementation of the Paris Agreement</u> Jacob Werksman and Ilaria Buri

<u>Unsticking the Environmental Goods Agreement: Why It Matters, Why It Is Stalled, and</u> <u>How to Move Forward</u>

Jaime de Melo and Jean-Marc Solleder

Power to the People: From Top-Down to Bottom-Up Approaches Rafael Leal-Arcas

Some for All? Carbon Clubs in the Context of the Paris Agreement and the WTO Annie Petsonk and Nathaniel Keohane (with Alex Hanafi)

<u>Options for Reducing International Maritime Shipping Emissions: Opportunities and</u> <u>Constraints in an Era of Transformative Technologies</u>

Thomas L. Brewer

East Asian Approaches to Climate Change and Economic Integration Simon Tay

Integrating Non-Economic Concerns in International Economic Organizations: Learning from the International Financial Institutions' Approach to Sustainable Development Johanna Aleria Pedro Lorenzo

How the Topsy-Turvy Trade World Affects Climate Change Cooperation Steve Charnovitz

#### How the Topsy-Turvy Trade World Affects Climate Change Cooperation

Steve Charnovitz

George Washington University Law School (May 2019)

International trade rules can play a positive role in global efforts to prevent harmful climate change. In writing the new charter for the World Trade Organization (WTO) in 1994, governments noted their intent that trade relations allow "for the optimal use of the world's resources in accordance with the objective of sustainable development...."<sup>1</sup> Although the WTO does not prevent sustainable development, the WTO has not actively promoted sustainable development goals.

Climate change policymakers, likewise, have done little to reach across the divide to support trade goals. Such an initiative could have ensued from the mandate in the 1992 United Nations (UN) Framework Convention on Climate Change (UNFCCC) directing that

The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change.<sup>2</sup>

Consistent with the overall low level of coordination between the multilateral trade and climate regimes, the two regimes have largely stayed out of each other's way. The purpose of this essay is to consider whether there would be any serious impact on the climate regime from major alterations in the trading system. To wit, what if the multilateral trading order goes topsy-turvy and governments move to undo liberalization and repeal trade rules? How would such a trade dystopia affect the climate regime? Predicting the impact of an exogenous trade policy shock on climate change and climate change policy needs to start with an assessment of the design of the 2015 Paris Agreement on climate change. After reviewing the Paris Agreement, this essay provides an overview of recent developments in the trading system that could have consequences for the climate regime.

The essay proceeds in four parts: Part I explores the rationale for cooperation in international regimes and identifies the key design features. Part II provides an overview of the Paris Agreement and its implementation. Part III looks at the current conditions in the trading system and the attacks on it by the aggressive trade policies of the Trump Administration. Part IV discusses ways in which the unraveling of the trade world could impact the climate world.

#### The Strategy of International Domestic Cooperation

The constitutive function of an international regime is to collectively tackle problems that governments cannot solve unilaterally. The typical regime addresses a domestic challenge that becomes an international problem because actions in another country have consequences for another country's domestic goals. The border-crossing phenomenon can be physical (e.g., pollution, disease), economic (e.g., money, technology), or moral (e.g., altruism, humanitarianism). Treaties addressed to dual international and domestic problems can be called "intermestic."<sup>3</sup>

Although the very existence of an international treaty evidences a cross-border concern, the need for an international regime can be objectively examined in relation to the predicating problem. If the solution to a problem requires the cooperation of key countries or most countries,

then an international regime can potentially help to achieve that solution. If no country can be excluded from the benefits of achieving the goal of a treaty, then that goal becomes a public good that is rationally pursued by collective intergovernmental action.

Some regimes exist to solve domestic problems that could technically be solved internally. Yet for reasons of political failure, an international regime is created to induce countries to act in parallel or in cooperation with one another. Ideally, a government would undertake needed domestic regulation for its domestic benefits. But often, optimal policies do not automatically emerge due to fears about foreign economic competition or foreign government competition.

Historically, the usual approach to addressing problems that transcend borders has been for the concerned countries to adopt a uniform rule to solve the problem jointly. Early treaty provisions from several fields illustrate this cooperative logic: In the Paris Convention for the Protection of Industrial Property of 1883, the governments agreed that citizens of the first country should enjoy the same patent protection in a second country as that second country accords to its citizens.<sup>4</sup> In the Phosphorus Match Convention of 1906, governments agreed to prohibit the manufacture, importation, and sale of matches containing a chemical whose manufacturing was toxic to workers.<sup>5</sup> In the Fur Seals Convention of 1911, each government pledged to prohibit its citizens from engaging in seal hunting in the North Pacific Ocean and agreed not to allow any vessel engaged in pelagic sealing to use its ports or harbors.<sup>6</sup> In the International Plant Protection Convention of 1929, the governments agreed to "enact all necessary measures both to prevent and combat plant diseases and pests and to supervise the importation of plants and parts of plants from countries not as yet possessing any official organization for the protection of plants."<sup>7</sup> The common element in each of these provisions is

the prescription of a specific, substantive regulatory norm for cooperating governments to follow.

In any treaty negotiation, rational governments are going to be concerned about whether the treaty includes a critical mass of countries needed to solve the problem and whether the treaty contains structures to incentivize participation. Free-riding is addressed using rules to assure sufficient membership before a treaty becomes legally effective. For example, the Convention for the Regulation of Whaling of 1937 was to enter into force only after a majority of signatory governments had ratified it, and that majority had to include three identified major countries. The Final Act of the 1937 Whaling Conference recorded a recognition that the purpose of the Whaling Convention "may be defeated by the development of unregulated whaling by other countries..." and provided for a consideration of adjustments should that scenario occur.<sup>8</sup>

The hallmark of treaties is mutual commitment, but treaties vary in the symmetry of commitment. At the more rigid part of the continuum, treaties provide for equal commitments. For example, in the International Convention on Safety of Life at Sea of 1914 (after the RMS Titanic sank), the governments sought to achieve "by common agreement certain uniform rules," for example regarding lifeboat capacity, for which the signatory governments undertook "to propose to their respective legislatures, the measures necessary for the repression of infractions of the requirements imposed by this Convention."<sup>9</sup> At a more flexible end of the continuum, governments agree to undertake individual actions that are not the mirror image of actions taken by other countries, but are determined jointly to be commensurate or mutually sufficient. The leading example of this approach is how the General Agreement on Tariffs and Trade (GATT) of 1947 dealt with the goal of lowering and locking in tariffs. Multilateral negotiations "from time"

to time" were to be sponsored "on a reciprocal and mutually advantageous basis," and the results were to be accepted jointly, and then recorded within the treaty as a legal commitment.<sup>10</sup>

The international labor regime of 1919 was the first to establish a dispute settlement and enforcement system, but the trading system soon followed, giving enforcement a central role.<sup>11</sup> The Customs Formalities Convention of 1923 provided that any dispute between parties could be referred to the Permanent Court of International Justice.<sup>12</sup> The Charter of International Trade Organization (ITO) of 1948 provided a Chapter on "Settlement of Differences" that gave member governments the right to lodge a complaint to the intergovernmental Executive Board regarding an alleged breach of the treaty or other action nullifying or impairing benefits.<sup>13</sup> The Executive Board was authorized to investigate the matter and to request the government concerned "to conform to the provisions of the Charter." If remedial action was not likely to be effective, the Board was further authorized to release the affected government from the Charter's "obligations or the grant of concessions to any other Member." Appeals were possible to the ITO Conference and then to the International Court of Justice (ICJ). Although the ITO never went into force, the GATT developed an internal dispute settlement system that was significantly strengthened in 1994 when the GATT was upgraded to the WTO. The ITO Charter's aspiration for a two-level judicial review was finally attained in the establishment of the WTO Appellate Body.

In summary, even before 1950, best practices in the most successful multilateral treaties involved prescribing a set of substantive rules, addressing free riders, seeking a reciprocal balance of obligations between treaty parties, and providing a compliance and enforcement mechanism.

The above examination of the evolution of effective intermestic regimes included several environmental treaties, but the advent of the modern multilateral environmental agreement (MEA) beginning in the 1970s demonstrates the traditional best practices supplemented by new governance processes. The typical MEA entails some agreement on common regulatory rules. For example, the Protocol of 1988 to the Convention on Long-Range Transboundary Air Pollution of 1979 requires parties to reduce their annual emissions of nitrogen oxides to or below the levels of emissions existing in the 1987 base year.<sup>14</sup> The Montreal Protocol of 1987, as amended, sets numerical limits on production and/or consumption of controlled substances, and also contains trade enforcement provisions applying to non-parties.<sup>15</sup> In the Kyoto Protocol on climate change of 1996, the parties agreed to a set of nationally-proposed but internationallyagreed quantified emission limitation or reduction commitments, but these numerical pledges were only required for a discrete set of so-called Annex I countries. The Kyoto Protocol was criticized on fairness and effectiveness grounds because reduction commitments were not required from large (non-Annex I) economies such as China, India, Mexico, and South Korea.<sup>16</sup> The new environmental governance processes, sometimes called "autonomous institutional arrangements," explored new ways to carry out negotiations, oversight, and supervision outside of an international organization.<sup>17</sup>

Some MEAs contain only general regulatory norms and do not entail mutually agreed commitments by each party. For example, the 1971 (Ramsar) Convention on Wetlands of International Importance directs each party to designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance.<sup>18</sup> The World Heritage Convention of 1972 directs each party to submit an inventory of property situated in its territory forming part of cultural and natural heritage.<sup>19</sup> In addition, the World Heritage Convention obligates each party

not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage of other States Parties.<sup>20</sup> Both of these agreements are aimed at international (or intermestic) problems with a relatively low level of trans-border spillover.

#### **Assessing the Paris Agreement**

This brief overview of multilateral economic and environmental treaty practice provides context for assessing the architecture of the Paris Agreement. The Paris Agreement is built around each party's "nationally determined contributions" (NDCs) reflecting each party's self-assigned plan for greenhouse gas emissions reductions.<sup>21</sup> New NDCs must be submitted every five years and are intended to be "successive" as a "progression" from its prior-period NDC.<sup>22</sup> The only legal obligations, however, are procedural. The Paris Agreement does not oblige a country to actually achieve its NDC. Rather, the stated obligation is that each party have the "aim of achieving" the objectives of its NDC.<sup>23</sup> The Agreement contains transparency requirements regarding the reporting of NDCs and provides for the establishment of an expert-based committee to facilitate implementation and "promote compliance" in a manner that is "non-adversarial and nonpunitive."<sup>24</sup> In addition, the Agreement provides for a "global stocktake" beginning in 2023 to periodically assess "the collective progress towards achieving the purpose" of the Agreement.<sup>25</sup>

As compared to other environmental and non-environmental regimes, many of the usual treaty components are absent from the Paris Agreement. The biggest omission is the lack of substantive rules. A second key omission is a process for securing reciprocal or roughly balanced national commitments from the largest economies. A third omission is a reconciliation process to assure that each round of the pledged NDCs are cumulatively sufficient to achieve scientifically-set global temperature goals.

The absence of policy rules in the Paris Agreement is its biggest contrast with the WTO. The Paris Agreement lacks any commitment to refrain from taking actions, such as fossil fuel subsidies, that increase greenhouse gas emissions. Moreover, the Agreement lacks any commitment to undertake specific actions that would reduce greenhouse gas emissions, such as a jointly-imposed national carbon fee<sup>26</sup> designed to internalize the environmental costs of fossil fuels. Although the Paris Agreement calls for "integrated, holistic and balanced non-market approaches," the Agreement withholds any like endorsement for market-based solutions to emission reduction.<sup>27</sup>

Another gap in the Paris Agreement is its lack of rules for how to allocate state responsibility for emissions from products that are exported and imported. Despite the perennial popularity of proposals to unilaterally impose domestic climate change regulations and taxes on imports,<sup>28</sup> no international climate change rule has emerged to govern traded goods. For the climate regime to delegate this issue to the trading system is unwise because the trading system does not have the environmental competence to develop a climate change-savvy rule for assigning responsibility for the emissions from production of imports or exports.

This assessment of the Paris Agreement can be challenged with at least two counterarguments. The first is that climate change is different from past environmental challenges and so the absence of treaty-directed ("top down") mechanisms in the Paris Agreement should not be viewed as a flaw. Indeed, Charles Sabel and David Victor have suggested that decentralized governance and decomposed bargaining can work better for climate change than comprehensive bargaining.<sup>29</sup> The second argument is that the Paris Agreement was the best the planet could have achieved. In the words of one peer reviewer of this essay, "specific climate undertakings were not seen as politically feasible by nearly everyone involved

and that any conclusion that a much better agreement was possible is out of touch with the onthe-ground political reality." I was not on the ground in the negotiations leading up to the Paris Agreement, so I do not know how much ambition to save the planet existed in 2015. My impression at the time was that the Obama Administration sought a near-term agreement that would not require any changes in U.S. law.

The gamble in the Paris Agreement is that achieving universal membership and at least symbolic national commitment will make up for the lack of rules and reciprocity. Yet unlike other public policy problems such as human rights, the success of international climate change policy can be measured scientifically and in real time. Unfortunately, recent studies indicate that aggregate government action under the Paris Agreement continues to fall further behind the magnitude of change needed to save the planet from the dire effects of global warming.<sup>30</sup>

#### The Trump Administration's War on Trade

The Trump Administration's attacks on the Paris Agreement and the WTO Agreement are similar in that both agreements are criticized as being unfair to the United States.<sup>31</sup> Yet in contrast to the way that the Administration has often stayed aloof from the Paris Agreement, the Administration has engaged in constant attacks on the WTO and other international trade agreements.

Four motivations propel the Trump Administration's trade policy: The first is traditional protectionism granted to help favored U.S. industries withstand foreign competition.<sup>32</sup> The recourse to tariffs for protection is justified by the Administration as a response to an unlevel playing field and unfair foreign competition. The second motivation is revanchist, to recover the factories, investment, and jobs that are said to belong to the United States, but that have been lured away by other countries, such as China or Mexico. The third is to preserve American

sovereignty allegedly being eroded by international agreements. The same argument about international agreements intruding on sovereignty that President Trump uses on trade were also used in his June 2017 statement announcing the Administration's decision to submit a notice of intent to withdraw from the Paris Agreement.<sup>33</sup> The fourth is that U.S. trade law, unlike the laws of most other countries, gives the American President singlehanded authority to raise tariffs, to wage trade wars against other countries, and to pull out of international trade agreements. When such tariff-setting power has been delegated to a President who has long believed that the United States suffers poor trade policies, the availability of that executive power is itself a motivation to wield it. The importance of the Presidential discretionary authorities being invoked is especially noteworthy when one considers that in the last global trade war of the early 1930s, the U.S. tariff actions were dictated by Congressional action, with very little U.S. Presidential discretionary authority in play.

Trump's tweet of March 2, 2018 that "trade wars are good"<sup>34</sup> captures the weltanschauung of an Administration willing to fight trade wars on many fronts. The key trade wars being waged by U.S. officials are against the WTO, against free trade agreements (FTAs), against China, and against other major trading partners. The U.S. tariffs have been costly to U.S. consumers,<sup>35</sup> but those ill effects are diminished by the otherwise strong U.S. economic growth during the Trump Administration.

The war against the WTO is carried out through aggressive policies to destabilize the WTO. Trump's repeated threats to withdraw from the WTO<sup>36</sup> puts the organization on the defensive and calls its continued viability into question.<sup>37</sup> The disinterest by the U.S. government in the ongoing WTO negotiations was a key factor in the failure of the WTO's Buenos Aires Ministerial Conference of 2017 to achieve any result or even to issue the customary Ministerial

Declaration.<sup>38</sup> The U.S. government is also blocking appointments to the WTO's Appellate Body. That tribunal is now down to only three appellators. The diminished bench is delaying ongoing appeals and threatening to grind the Appellate Body to a halt.

The war against U.S. FTAs started in the first days of the Trump Presidency when he announced that the United States was withdrawing from the Trans-Pacific Partnership (TPP). Unlike the Paris Agreement, which had been ratified by the United States without seeking Congressional approval, the TPP had not been ratified and there was no obvious path forward for a President from either party to secure the requisite Congressional approval. Contrary to some expectations, the U.S. pullout did not prove fatal and a revised and renamed TPP went into force at the end of 2018.

The next U.S. target was the North American Free Trade Agreement (NAFTA). Through tough bargaining, the Trump Administration succeeded in late 2018 in getting Canada and Mexico to reach agreement on a revised and renamed trilateral NAFTA. The outcome of the NAFTA renegotiation is mixed. Some changes would usefully update the NAFTA and other changes would weaken the commitment to liberalization and rule of law. So far, none of the three NAFTA governments has approved the new agreement, and President Trump has threatened to pull the United States out of the existing NAFTA as leverage. Just as with the NAFTA, the Trump Administration put great pressure on South Korea to renegotiate its FTA with the United States.

The biggest U.S. trade war is against China, where President Trump is using Section 301<sup>39</sup> authority to impose tariffs on \$250 billion of goods from China in response to China's industrial and technology policies which are claimed to be unfair to the United States. The amount of trade involved is substantial and China has retaliated against U.S. exporters. The

Section 301 sanctions appear to have as one goal a U.S. decoupling from China's economy.<sup>40</sup> As of April 2019, the U.S. and Chinese governments have paused new tariff escalation in order to facilitate intensive, secretive bilateral negotiations.

Various countries are also being targeted by the Trump Administration's unilateral tariffs pursuant to statutory authority in Sections 201 and 232.<sup>41</sup> The Section 201 tariffs are being imposed on solar panels and washing machines. Section 232 tariffs are being imposed for alleged national security reasons on steel and aluminum in order to boost those domestic industries. Both the 201 and the 232 tariffs have led to foreign tariff retaliation against the United States and multiple disputes at the WTO.

Although this part of the essay has focused on the trade policies of the Trump Administration, one should note that many of the underlying motivations are shared by the opposition Democratic party, particularly the animosity towards China. And while President Trump's anti-trade actions are more aggressive than in previous U.S. administrations, some of President Trump's actions have precedents in the actions and attitudes of the Obama administration. For example, the Obama Administration also blocked a WTO Appellate Body appointment, demanded renegotiation of the South Korean FTA, and exhibited little interest in a successful conclusion of the ongoing WTO Doha Development Round. In 2015, the Congress and President Obama agreed to an extension of U.S. trade negotiating authority, but included an unprecedented U.S. negotiating objective "to ensure that trade agreements do not establish obligations for the United States regarding greenhouse gas emissions measures."<sup>42</sup> The 2015 law trade also features a sovereignty-saving provision that for the first time relegates international trade law to a lower legal status than state and local law.<sup>43</sup> Amid these anti-trade developments, an optimist could point to a handful of potentially pro-trade developments. First, alongside the WTO, leading governments, including the United States, have been talking about seeking new critical mass agreements designed to avoid the policy veto of the WTO's consensus rule. Among such agreements might be one for the liberalization of environmental goods. Second, the Trump Administration has taken steps to begin negotiating new trade agreements with Japan, the European Union, and the UK. Third, other countries are closely watching the ongoing United States-China negotiations with a hope that new pledges by China for liberalization may benefit other economies seeking to export more to China.

#### Impact of a Trade Meltdown on Climate Cooperation

Any hypothesis to predict how a trade meltdown would impact the Paris Agreement and global warming should be evidence-based. The collapse of the trading system during the Great Depression of the 1930s can be examined now as an experiment in regime spillover. The history of the period shows the surprising result that the trade wars of the early 1930s did not put the kibosh on international economic and environmental cooperation during the decade leading up to World War II. For example, the 1930s featured important multilateral agreements—pertaining, for example, to the Bank for International Settlements (1930), forced labor (1930), narcotics control (1931), telecommunications (1932), fauna and flora protection (1933), the rubber industry (1934), meshes of fishing nets and size limits (1937), whaling (1937), and nature protection and wildlife preservation (1940).<sup>44</sup> Thus, even in the face of the 20th century's biggest trade war, governments simultaneously continued and even strengthened cooperation on many global issues.

Regime theory can also aid in making predictions. International cooperation along functional lines is driven both by the rational behavior of governments and by pressure from interest groups that advocate in favor of shared norms and values. When specialized international cooperation ensues, it digs in roots that makes it difficult to topple over. International organizations are not dominos.

The impact of a trading system breakdown on the climate regime is not obvious. Trade wars do not generate greenhouse gas emissions. But trade wars could reshape the global ordering of the economy. By analyzing anticipated effects at the margin, this essay identifies and discusses three potential scenarios: first, no change; second, worsening climate outcomes; and third, improving climate outcomes. All three scenarios are predicated on a baseline of worsening global warming.<sup>45</sup>

The first scenario is that an earthquake in world trade will have little effect on the rate of continuation of climate change. Even so, a scenario of no impact masks the significance of continued climate regime stability. Critics of the weak structure of the Paris Agreement can miss the fact that its anomalous architecture gives it resilience.

Imagine if the Paris Agreement had been designed to be more like the WTO, if it was built upon a lattice of agreed rules and reciprocal commitments. A U.S. pullout from such a hypothetical climate change agreement would call into question the viability of commitments by other countries because the U.S. pullout would change the benefits and costs to other countries from their continued participation. But while the decentralized commitment structure in the Paris Agreement limits the expected outcomes due to free-riders, the Paris Agreement has less commitment interdependence. So, the Paris Agreement should be immune to a pullout by the United States. For the same reasons, the Paris Agreement should be immune to what happens in the WTO.

By contrast, the WTO — with its rules, reciprocity, and enforcement — is vulnerable to a seismic political shift. Should the United States leave the WTO, the survival of the WTO would be uncertain because the WTO's vaunted balance of obligations presumes the U.S. liberalization commitments and U.S. dispute settlement obligations. Furthermore, being a state-centric institution, the WTO's foundation of support is flimsy. In the WTO, all of the policy space is occupied by national governments and a departure of a state cannot be compensated for domestic actors within that state. By contrast in the climate regime, where subnational governments, the private sector, civic society, and consumers can contribute individually and aggregately to achieving emissions reduction, a pullout from the Paris Agreement by the U.S. government does not mean that the United States as a country ceases to be able to contribute to greenhouse gas reduction goals.

However, if the United States proceeds with the WTO, there would seem to be little spillover onto the U.S. role in the climate regime. In recent decades, the United States has quit some international organizations without much impact on the U.S. role in other organizations. Every specialized international organization has its own political dynamic and interest-group constituencies.

The second scenario is that the trade wars and disruption of the WTO lead to a weakening of the climate regime and a significant worsening of global warming. A contraction in trade could suppress the diffusion of decarbonization technology which could lead to higher emission intensity of production around the world. Already, the Trump Administration's 25% tariffs on

solar panels is reducing the adoption of solar panels in the United States.<sup>46</sup> Less trade in goods would dampen trade in environmental, energy, and data processing services.

Another effect of disruption at the WTO is to derail any opportunity for the WTO to deliver on its environmental agenda including the proposed agreements on fishery subsidies and the liberalization of environmental goods and services. During the first quarter-century of the WTO, many proposals have been offered for new WTO actions to support mitigation of and adaptation to greenhouse gas emissions.<sup>47</sup> Yet a WTO in disarray is unlikely to deliver on such proposals.

Deep cuts in trade could be especially difficult for China which predicates its industrial policy on growth through exports. A central component of China's industrial policy is the Made in China 2025 initiative that prioritizes 10 industries for investment, one of which is the self-driving and new energy vehicles. According to analysis done by the U.S. International Trade Commission, Chinese producers became successful exporters due to economies of scale derived from rapid growth and overcapacity driven by a mixture of government-driven industrial policy and ad hoc provincial and local subsidies.<sup>48</sup>

The Trump Administration's unilateral tariffs on China are threatening China's development model and could undermine China's commitment to clean energy technology. Indeed, one target for the Section 301 tariffs are products exported from the industries benefiting from China's 2025 industrial policy. U.S. trade hostilities could lead to retrenchments in China's industrial policy plans which could impact Chinese creation and utilization of new technology and the availability of high-tech Chinese exports. As a result of a trade war with China, global supply chains will be disrupted - including green supply chains. Another impact could be that

diminished trade in climate change-related goods and services could dampen the interest of global business groups in climate change advocacy.

A large wave of disruption to the WTO's legal system could undermine the commitments of governments to the international of rule of law. For example, in China's NDC submission, China explained that its action to mitigate carbon emissions was not only driven by China's domestic needs, but also by "its sense of responsibility to fully engage in global governance...."<sup>49</sup> But that could change. Actions by the United States or the WTO to betray commitments to China or to deny China its legal rights could shake the foundations of China's loyalty to the leading institutions of global governance.

The third scenario is that reduced trade and supervision by the trading system can improve climate change outcomes. If the leftist opponents of international trade are right that trade is the transmission belt of competition that promotes a race to the bottom in national regulation, perforce an absence of trade should remove those disincentives for choosing optimal regulation. Reduced WTO supervision could give governments greater latitude to subsidize domestic climate change technology and to achieve localization of green job creation. Of course, trade law impunity does not necessarily lead to more stringent environmental regulation and to more generous environmental subsidies. As the experience of the Trump Administration has shown, rightist politicians can join the left in taking down international trade rules without sharing the left's support for a socialist green agenda.

In summary, three plausible scenarios for the climate change impact of a trade meltdown are put forward. In my view, the first scenario of no effect is the most likely. Note that the dynamic postulated in the second and third scenarios could coexist and result in an outcome

approximating the first scenario. So, the overall conclusion of this essay is that the current instability in the trade world will not cause much impact on the climate world.

The ongoing trade wars will eventually cease due to the inherent disconnect between economic nationalism and a global economy. Over the past century, we have seen a post-war rebound effect that led to waves of internationalism after World War I, World War II, and the Cold War. With some luck, the current world trade crisis, when it ends, will lead to a frisson of global hope that could induce constructive reforms in both the WTO and the Paris Agreement. Cool heads should be prepared to seize those opportunities.

#### Notes

<sup>1</sup> Preamble, "Agreement Establishing the World Trade Organization," signed April 15, 1994.

- <sup>2</sup> "United Nations Framework Convention on Climate Change," signed May 9, 1992, Art.
- 3.5.

<sup>3</sup> Bayless Manning, "Congress, the Executive and Intermestic Affairs," *Foreign Affairs* 55, no. 2 (January 1977): 306324 at 309 (coining the word).

<sup>4</sup> "Convention for the Protection of Industrial Property," signed March 20, 1883, Art. II.

<sup>5</sup> "International Convention Prohibiting the Use of White (Yellow) Phosphorus in the

Manufacture of Matches," signed Sept. 26, 1906, Art. 1.

<sup>6</sup> "Convention Providing for the Preservation and Protection of Fur Seals," signed July 7, 1911.

<sup>7</sup> "International Convention for the Protection of Plants," signed April 16, 1929, Art. 4.

<sup>8</sup> "Agreement for the Regulation of Whaling, Final Act," signed June 8, 1937, para. 10.

<sup>9</sup> "International Convention on Safety of Life at Sea," signed January 10, 1914, Preamble, Arts. 1, 65.

<sup>10</sup> "General Agreement on Tariffs and Trade (GATT)," as amended March 10, 1955, Art. XXVIII *bis*.

<sup>11</sup> Steve Charnovitz, "What the World Trade Organization learned from the International Labour Organization," in *Research Handbook on Transnational Labour Law*, eds. Adelle Blackett and Anne Trebilcock, 411-424 (Cheltenham, UK: Edward Elgar Publishing, 2015).

<sup>12</sup> "International Convention Relating to the Simplification of Customs Formalities," signed Nov. 3, 1923, Art. 22.

<sup>13</sup> "Havana Charter for an International Trade Organization," signed March 24, 1948, Art. 94.

<sup>14</sup> "Convention on Long-Range Transboundary Air Pollution, Protocol Concerning the Control of Emissions and Nitrogen Oxides or the Transboundary Fluxes," signed October 31, 1988, Art. 2.

<sup>15</sup> "Montreal Protocol on Substances that Deplete the Ozone Layer," Aug. 26, 1987, as amended.

<sup>16</sup> "Kyoto Protocol to the United Nations Framework Convention on Climate Change," signed Dec. 11. 1997, Art. 3.1.

<sup>17</sup> Robin R. Churchill and Geir Ulfstein, "Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law," *American Journal of International Law* 94, no. 4 (October 2000): 623–659.

<sup>18</sup> "Convention on Wetlands of International Importance especially as Waterfowl Habitat," signed Feb. 2, 1971, as amended, Art. 2.1.

<sup>19</sup> "Convention Concerning the Protection of the World Cultural and Natural Heritage," signed Nov. 16, 1972, Arts. 3, 4, 11.1.

<sup>20</sup> "Convention Concerning the Protection of the World Cultural and Natural Heritage," Art.

6.1.

<sup>21</sup> "Paris Agreement." Conclusion date: December 12, 2015. United Nations Treaty Series Online, registration no. I-5411, Art. 4.2, https://unfccc.int/sites/default/files/english\_paris\_agreement.pdf

<sup>22</sup> "Paris Agreement," Arts. 4.2, 4.3.

<sup>23</sup> "Paris Agreement," Art. 4.2.

<sup>24</sup> CMA 1-3, "Modalities and Procedures for the effective operation of the committee to facilitate implementation and promote compliance," Dec. 2018.

<sup>25</sup> "Paris Agreement," Arts. 4.9, 14.1.

<sup>26</sup> See Daniel C. Esty and Steve Charnovitz, "Green Rules to Drive Innovation," *Harvard Business Review* 90, no. 3 (March 2012): 122–123 (proposing a carbon fee to be accepted by a critical mass of large economies).

<sup>27</sup> Paris Agreement, Arts. 6.8. (The Paris Agreement does support the trading of emission reductions.)

<sup>28</sup> For proposals in 2019, see "Economists' Statement on Carbon Dividends," *Wall Street Journal*, Jan. 6, 2019 (calling for a U.S. border carbon adjustment to enhance American competitiveness and to incentivize other countries to adopt similar carbon pricing); Jason Bordoff, "Getting Real About the Green New Deal," *Democracy* 52 (Spring 2019), https://democracyjournal.org/magazine/52/trade-parade-of-broken-promises/ (calling for a U.S. border adjustment based on the carbon content of imported goods "unless other nations adopt climate policy of similar stringency to our own").

<sup>29</sup> Charles F. Sabel and David G. Victor, "An Evolutionary Approach to Governing Global Problems: Climate Policy After Paris, Stanley Foundation Policy Analysis Brief," *The Stanley Foundation*, August 2016, https://www.stanleyfoundation.org/policyanalysis.cfm?id=1605.

<sup>30</sup> France 24, "Global Efforts to thwart climate change far off course, UN says; Humanity is falling further behind in the race against climate change," Nov. 27, 2018; Brad Plumer and Nadja Popovich, "The World Still Isn't Meeting Its Climate Goals," *New York Times*, Dec. 7, 2018.

<sup>31</sup> Steve Charnovitz, "How American Rejectionism Undermines International Economic Law," *Trade, Law and Development* 10 (2018): pp. 250–251.

<sup>32</sup> Jagdish Bhagwati and Pravin Krishna, "America's Protectionist Fallacies," December 2017 (on file with the author).

<sup>33</sup> The White House, "Statement by President Trump on the Paris Climate Accord," remarks, June 1, 2017, https://www.whitehouse.gov/briefings-statements/statement-president-trump-parisclimate-accord/. (No notice of withdrawal has yet been submitted as it is premature to do so under the Agreement.)

<sup>34</sup> Thomas Franck, "Trump Doubles Down: 'Trade Wars are good, and easy to win'," *CNBC*, March 2, 2018, https://www.cnbc.com/2018/03/02/trump-trade-wars-are-good-and-easy-towin.html.

<sup>35</sup> Thomas Franck, "Trump tariffs costing US consumers \$1.4 billion per month, study shows," *CNBC*, March 26, 2019, <u>https://www.cnbc.com/2019/03/26/ny-fed-trump-tariffs-costing-us-</u> consumers-1point4-billion-per-month.html.

<sup>36</sup> Christine Wang, "Trump threatens to withdraw from World Trade Organization," *CNBC*, August 30, 2018, https://www.cnbc.com/2018/08/30/trump-threatens-to-withdraw-from-world-trade-organization.html.

<sup>37</sup> Brett Fortnam, "Ambassadors warn that WTO is at a break point, but chasm remains," *World Trade Online*, July 27, 2018. Even before the threats from Trump, the WTO was also facing a crisis of confidence. See, e.g., Dani Rodrik, "The WTO has become dysfunctional," *Financial Times*, August 5, 2018, <u>https://www.ft.com/content/c2beedfe-964d-11e8-95f8-8640db9060a7</u>.

<sup>38</sup> Brett Fortnam, "MC11 expected to end without ministerial declaration, as U.S., India clash over language on development," *World Trade Online*, December 13, 2017, <u>https://insidetrade.com/daily-news/mc11-expected-end-without-ministerial-declaration-us-india-clash-over-</u>

language.

<sup>39</sup> U.S. Congress, House, *Trade Act of 1974*, 19USC §2411 et seq. (Section 301 of the Trade Act of 1974), enacted March 23, 2018.

<sup>40</sup> Elizabeth Economy, "Trade: Parade of Broken Promises," *Democracy. A Journal of Ideas* 

52 (Spring 2019), https://democracyjournal.org/magazine/52/trade-parade-of-broken-promises/.

<sup>41</sup>19 USC §2251 et seq. (Section 201 of the Trade Act of 1974); 19 USC §1862 et seq.

(Section 232 of the Trade Expansion Act of 1962);

<sup>42</sup>19 USC §4201(a)(15).

<sup>43</sup>19 USC §4207(b).

<sup>44</sup> Vaclav Mostecky (ed.), *Index to Multilateral Treaties* (Cambridge: Harvard Law School Library, 1965): 76–102.

<sup>45</sup> See "Hottest Four Years Ever? 2015. 2016. 2017. 2018?," Common Dreams, July 28,

2018, https://www.commondreams.org/news/2018/07/28/hottest-four-years-ever-2015-2016-2017-2018/.

<sup>46</sup> Nicola Groom, "Billions of solar projects shelved after Trump panel tariff," *Reuters Business News*, June 7, 2018, <u>https://www.reuters.com/article/us-trump-effect-solar-insight/billions-in-u-s-</u> solar-projects-shelved-after-trump-panel-tariff-idUSKCN1J30CT. <sup>47</sup> For example, see Ryerson Neal, "Trade and Climate Change. Synergies and Conflicts," *CIGI Conference Report*, January 2018, https://www.cigionline.org/publications/trade-andclimate-change-synergies-and-conflicts; James Bacchus, *The Willing World. Shaping and Sharing a Sustainable Global Prosperity* (Cambridge, UK: Cambridge University Press, 2018).

<sup>48</sup> USITC, Investigation No. TA-201-75, Publication 4739, Nov. 2017, Views of Commissioner Meredith M. Broadbent on Remedy, pp. 105-07.

<sup>49</sup> "Welcome to the Interim NDC Registry," UNFCCC, accessed May 7, 2019, http://www4.unfccc.int/ndcregistry/Pages/All.aspx.