

# Regional Trade Agreements as Laboratories for New Trade Disciplines to Tackle Climate Change: Why and How?

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*The interaction between GATT/WTO and legal regimes to combat climate change has experienced four important stages. First, both were created independently as two self-contained legal regimes. Second, these regimes may potentially conflict with each other because climate change measures may violate the GATT/WTO rules. Third, if policies and measures are tailored well, the GATT/WTO and climate change legal regimes could be implemented simultaneously. Last, a shift to low carbon economy presses for close cooperation and mutual supportiveness between these two legal regimes. However, the multinational nature of these two legal regimes often delay or hamper global consensus on agenda for cooperation. This article argues that trade agreements as a regional approach have merits and advantages of pursuing harmonization and cooperation under the GATT/WTO framework. Regional trade agreements can provide opportunities for a group of countries with concrete commitments and rules to cope with climate change beyond the possibility of the multilateral arena.*

**Keywords:** GATT, WTO, Regional Trade Agreement, UNFCCC, Climate Change

*Do we then nullify the Law through faith?  
May it never be! On the contrary, we establish the Law.*  
Romans 3:31

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## 1. Introduction

The General Agreement on Tariffs and Trade of 1947 (“GATT”) aimed only at promoting free trade. Together with the Rio Declaration on Environment and Development whose main goal is sustainable development,<sup>1</sup> the World Trade Organization (“WTO”) has been trying to ensure environmental and social considerations for international trade with human face.<sup>2</sup>

In this course, the interplay between the trade and climate change rules is shifting to a new era of focus on low carbon economy. At first, both were originally created independently as two self-contained legal regimes. Between the 1990s and early 2000s, climate change rules and policies were thought to contradict the GATT/WTO. From the mid-2000s, the GATT/WTO rules finally began harmonizing with climate change treaties based on good faith. Now, it is evident that both regimes should cooperate and support each other in order to produce synergistic effects.

Nonetheless, to adopt global consensus on an agenda rooted in cooperation is likely to be delayed due to the multinational structure of both regimes. This research tries to answer a practical issue which may arise here: How to we make mutual supportiveness work efficiently? This paper is composed of five parts including a short Introduction and Conclusion. Part two will explore the interaction between the GATT/WTO and climate change rules. Part three will explain regional trade agreements under the GATT/WTO that have been carried out with different characteristics from historical, normative and demand-based perspectives. This part will also show that regional trade agreements are well prepared disciplines to combat climate change. Part four will lay out how new regional trade agreements can be used to abate climate change under the Trans-Pacific Partnership (“TPP”).

## 2. The Linkages between the GATT/WTO and Climate Change Rules

### *A. Free Trade, the Environment and Climate Change*

Since the 1999 WTO Ministerial Conferences, environmental activists have

rallied to stop free trade to save our ecosystem.<sup>3</sup> Environmental activists have claimed that free trade and global industries have been responsible for discharging hazardous waste, destroying and endangering various species, and for unbridled emissions of air pollutants.<sup>4</sup> Also, they have asserted that producers should consider all involved costs when making production decisions.<sup>5</sup>

In 1999, the WTO Secretariat published a study on trade and the environment,<sup>6</sup> which claimed that the root cause of environmental problems is not free trade, but government subsidies, over-consumption and wanton disposal of waste products.<sup>7</sup> The study argued that international cooperation is the best way to protect the environment.<sup>8</sup>

A few years later, the controversial scenario has turned into an impending catastrophe in the form of global warming.<sup>9</sup> Industries everywhere want large-scale production and avoid internalizing costs of greenhouse gas emissions to reduce their production costs, while climate change conventions ask their contracting parties to mitigate harmful effects of climate change and to reduce emissions.<sup>10</sup> As a result, the relationship between free trade and climate change are getting complicated and has been recognized as a global challenge.<sup>11</sup>

### ***B. GATT/WTO and Climate Change Legal Regimes***

The GATT was promulgated in 1947 as an interim agreement for reducing tariffs,<sup>12</sup> which was replaced by the WTO in 1995.<sup>13</sup> Meanwhile, global warming became quite recently a major concern for the international community with the 1992 United Nations Framework Convention on Climate Change (“UNFCCC”), finally adopted on May 9, 1992. In 1997, the Kyoto Protocol to the UNFCCC committed Annex I contracting parties to legally binding targets in combating greenhouse gas emissions. This emissions control system was renewed with the Paris Agreement of 2015, which requires all contracting parties to take mitigation and adaptation measures in response to climate change and to limit increasing global average temperature to well below 2 degrees Celsius.<sup>14</sup>

In spite of their connection, the GATT/WTO and climate change legal regimes have developed according to their own ‘styles.’<sup>15</sup> The GATT/WTO, which promotes free trade, has made great progress over seventy years. Meanwhile, the climate change regime, which deals with global warming, has moved forward over two decades. However, both have not discussed cross-cutting issues seriously,

which has been well proven by the UN International Law Commission's research program, "Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law."<sup>16</sup>

### *C. Attitude Shift: Towards Low-Carbon Economy*

For the past few decades, whether climate change could go together with free trade and economic growth was a point of contention. It has been commonly recognized that greenhouse gas emissions reduction would depress economies led by energy-intensive industries. Some even deny the damage caused by anthropogenic climate change on human being; they maintain it is untrue or exaggerated.<sup>17</sup>

Recently, however, the paradigm has been shifting gradually.<sup>18</sup> The cost of climate change actions is outweighed by the loss of global Gross Domestic Product ("GDP"). N. Stern maintains:

If we don't act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more. In contrast, the costs of action - reducing greenhouse gas emissions to avoid the worst impacts of climate change - can be limited to around 1% of global GDP each year.<sup>19</sup>

Also, others argue that the threat of climate change is an 'opportunity,' to turn the classical growth model into a sustainable development model.<sup>20</sup> The notion of "low-carbon economy" or 'green economy' has been proposed and supported to achieve this purpose. To reduce the risks of climate change catastrophe, a portfolio of green technologies has to be developed and incorporated into human life. These green technologies used in different sectors and industries encourage innovation, create new jobs, require new and a large number of investments, and need friendly policies and regulations.<sup>21</sup> Then, the decarbonizing economy will reach the climate capitalism: "A model which squares capitalism's need for continual economic growth with substantial shifts away from carbon-based industrial development."<sup>22</sup>

In this regard, a low-carbon economy is a paradigm shift. In the 1990s and early 2000s, contracting parties of climate change conventions implemented different measures and policies to abate global warming which are not consistent with the GATT/WTO legal regime.<sup>23</sup> Later, these two regimes were required

to be fulfilled on the basis of *pacta sunt servanda* doctrine<sup>24</sup> and sustainable development principle.<sup>25</sup> In 2009, the WTO and the United Nations Environment Programme (“UNEP”) delivered a report on “Trade and Climate Change” to examine the interaction between free trade and climate change, and to explain the mutual supportiveness between the GATT/WTO and climate change regimes.<sup>26</sup> Meanwhile, various technologies for mitigating climate change such as wind turbines, hydropower equipment, solar water heaters, and solar power panels, have been identified under the GATT/WTO framework and discussed in the Doha negotiations.<sup>27</sup>

#### ***D. Moving Forward: Regional Trade Agreements as Laboratories***

The interaction between the GATT/WTO and climate change legal regimes has experienced four important stages of reconciliation. These are: (1) creation and development as independent, self-contained legal regimes; (2) potential clash between them for climate change mitigation and adaptation; (3) implementation of simultaneous and harmonious duties; and (4) mutual support for the potential climate change disasters.

Due to the multinational structure of the GATT/WTO and climate change regimes, however, the global consensus on agenda would be delayed in the future. The stalemate of the Doha Round trade negotiations was a good example. It took over ten years to put ‘teeth’ into the UNFCCC with the Kyoto Protocol’s enter into force in 2005. Given the past track, about ten years would be needed for the Paris Agreement to be fully implemented. Whether the international community can achieve the ambitious target for climate change in time depends on when the Paris Agreement will enter into force. Thus, it has not been confirmed if the two legal regimes can make progress with regard to climate change. The key to mutual supportiveness will be regional trade agreements which are pioneers in putting into practice the ideas of both legal regimes.

Regional trade agreements carry different characters from the GATT/WTO with the viewpoints of history, norms and demands. Also, “regional forums can provide countries with an opportunity to coordinate their positions and reach consensus among themselves before they move to the multilateral arena.”<sup>28</sup>

### 3. Different ‘Ethos’ between Regional Trade Agreements and the GATT/WTO

#### *A. The History: Not a Rib from the GATT/WTO*

Regional trade agreements can be broadly defined as “a group of countries, which have created a legal framework of cooperation covering an extensive economic relationship, with the intention that it will be of indefinite duration, and with a foreseen possibility that the region will economically evolve in the future.”<sup>29</sup> It is erroneous to think that regional trade agreements are fully subordinate to the GATT/WTO. This may be due to either the reflection of Article XXIV of the GATT 1994, or the lack of knowledge about regional trade agreements. Actually, regional trade agreements would not be completely subject to the GATT/WTO, but complement them.

It is doubtful that any regional trade agreement is just a part of the GATT/WTO solely from a historical perspective. The earliest example of a regional trade agreement is German Zollverein, formed between 18 small states in Germany in 1834.<sup>30</sup> It was a kind of customs union.<sup>31</sup> There was a regional trade agreement in Africa which was concluded between the East African Community of Kenya, Tanzania, and Uganda (hereinafter East African Community).<sup>32</sup> The East African Community began in 1917<sup>33</sup> as a regional trade agreement between Kenya and Uganda, and then expanded with Tanzania up to 1927.<sup>34</sup> In Latin America, the idea of industrial complementation and free commerce was up by Argentina and Brazil in 1939.<sup>35</sup> The British also presented the “Imperial Free Trade” structure in the 1920s, which attempted to combine the British Empire and shared markets with one another.<sup>36</sup> Subsequently, the representatives of Great Britain and commonwealth nations set the basis for a preferential trading system in 1932.<sup>37</sup>

#### *B. The Norm: Having Different Rules from the GATT/WTO*

Regional trade agreements and the GATT/WTO have some different rules for those reasons. First, they would have different rules owing to the diversity of territories (regional v. global). Second, regional trade agreements are established on a country-by-country basis, so that many of them may lay down different rules to meet the specific needs of member countries.<sup>38</sup> The NAFTA is a good example. The goals of the NAFTA and the GATT/WTO are somewhat different.

First, the NAFTA emphasizes more friendship and cooperation among member countries than the GATT/WTO.<sup>39</sup> Second, the NAFTA focuses not only on raising standards of living and ensuring full employment,<sup>40</sup> but also on improving working conditions and enforcing workers' rights. Third, with regard to full use of resources, expanding production of goods, reducing tariffs and other barriers to trade, and eliminating discrimination, the NAFTA goes further to enhance the competitiveness of firms and to foster creativity and innovation under intellectual property rights.<sup>41</sup> Pursuant to goals above, the NAFTA lays out distinct rules on special topics, such as energy, agriculture, standards, competition policy, and intellectual property, in its text.<sup>42</sup>

### ***C. The Demand: Regional Trade Agreements Needed***

Today, over 625 regional trade agreements have been notified to the GATT/WTO<sup>43</sup> and many other negotiations for regional trade agreements are on their way.<sup>44</sup>

#### **1. The Need for Economy**

There is a need for market opening.<sup>45</sup> Unlike the 1960s when regional trade agreements were set to pay attention to high tariffs and protect intra-industries, new regional trade agreements would be concluded for developing competitive market among member countries.<sup>46</sup> An example is the South American Common Market ("MERCOSUR") established between Argentina, Brazil, Uruguay, and Paraguay in 1991.<sup>47</sup>

On the other hand, there was a need to use regional trade agreements to supplement the GATT/WTO. As of January 2017, the WTO membership reached 164 countries.<sup>48</sup> Because the WTO involves the negotiation of all members, it would easily be imagined that "too many cooks spoil the broth" and as a result, the WTO seems to yield to fewer outcomes.<sup>49</sup> In contrast, negotiations between countries of one regional trade agreement would take less time, producing more outcomes. Regional trade agreements can fill deficiencies, like suspension of WTO negotiations.

#### **2. The Need for Non-Economic Aspects**

Under the GATT/WTO, non-economic issues have arisen in the trade negotiation

arena<sup>50</sup> such as environmental protection, labor standards, social securities, and human rights.<sup>51</sup> The WTO Secretariat's report on trade and environment<sup>52</sup> maintained that most environmental problems would ensue from over-consumption and the wanton disposal of waste products.<sup>53</sup> It maintained that the root cause of environmental degradation<sup>54</sup> is not trade, but government subsidies.<sup>55</sup> Moreover, due to different cultures, living standards, and economic growth of the GATT/WTO members, it is easier for a small number of countries in a region to have consensus on the non-economic issues than the WTO with 162 members.<sup>56</sup> Therefore, regional trade agreements may become a better vehicle to accomplish those non-economic goals.<sup>57</sup>

The European Union ("EU") is a noticeable example of advancing environmental protection measures in tandem with the economic integration.<sup>58</sup> In particular, the Single European Act of 1987 set objectives and principles of the environment of the EU.<sup>59</sup> Today, the tripartite administrative structure of the EU - the European Commission, the European Court of Justice, and the European Parliament - hold the accumulation of environmental regulation and authority in the Single Market.<sup>60</sup>

## **4. Tackling Climate Change: From Regional Trade Agreements to the GATT/WTO**

So far, the restriction from the GATT/WTO on regional trade agreements has been minimum and concrete; it is related to duties or other restrictions on commerce regulations, because each product cannot be higher than the country's commitment to the GATT/WTO. This minimum requirement not only allows regional trade agreements to grow according to its nature, but also works as a safety valve to prevent protectionism from revival. Meanwhile, by taking advantage of the fast growing regional trade agreements, it becomes possible to deal with climate change by inserting relevant rules into them.<sup>61</sup>

### ***A. Environment and Climate Change Regulations in Present Regional Trade Agreements***

Environment issues are of regional trade agreements' concern, just like trade-

related issues, such as investment, intellectual property and competition. Some regional trade agreements do have environment-related provisions. Take the Framework Agreement on Comprehensive Economic Cooperation among the Governments of the Member Countries of the Association of Southeast Asian Nations and the Republic of Korea (hereinafter ASEAN-Korea Agreement) for example. Article 3.1 (Scope and Implementation of Cooperation) of the ASEAN-Korea Agreement provides: “1. The Parties, on the basis of mutual benefits, shall explore and undertake cooperation projects in the following areas: ... (k) environmental industry...” Article 11 (Environmental Industry) of the ASEAN-Korea Agreement states: “2. (a) cooperation in environmental technologies and policies, such as compressed natural gas technology and policy; (b) cooperation in environmental capacity building of industries and exchanges of information and experiences of environmental industries...”

Most environment-related parts in regional trade agreements are presented in a framework structure or as guidance and principles. Environment-related articles thereof use broad-meaning phrases, such as “undertake cooperation projects,” “cooperation in environmental technologies,” “cooperation in environmental capacity building,” “cooperative activities in environmental management,” etc. It has been argued that these general phrases or articles produce less outcome than they should have been. However, from an optimistic angle, something is always better than nothing, especially when the whole picture is blurred. Meanwhile, these broad-meaning phrases do create binding obligations on contracting parties according to the principle of *pacta sunt servanda*. These obligations may be thought as ‘soft’ ones, but they do not mean ‘no effect’ at all.

One more issue has been raised here: Do environment-related parts in regional trade agreements cover climate change issues? Or can these parts be construed broadly to include climate change issues? The answer is positive for sure. Although climate change is an interdisciplinary issue, its main objective is environmentally oriented. Also, Agreement between Japan and the United Mexican States for the Strengthening of the Economic Partnership (hereinafter Japan-Mexico Agreement), *e.g.*, shows that regional trade agreements deal with climate change more specifically in the environmental chapter. Article 147 (Cooperation in the Field of Environment) of the Japan-Mexico Agreement stipulates:

1. The Parties, recognizing the need for environmental preservation and improvement to promote sound and sustainable development, shall cooperate in the field of environment. Cooperative activities under this Article may include:

....

(b) promotion of capacity and institutional building to foster activities related with the Clean Development Mechanism under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, as may be amended, by means of workshops and dispatch of experts, and exploration of appropriate ways to encourage the implementation of the Clean Development Mechanism projects;

....

### ***B. New Regional Trade Agreements to Combat Climate Change***

Many regional trade agreements do not have environment-related rules therein. Even while the environment-related rules are explicitly mentioned in a few regional trade agreements, most provisions are read with a broad wording as a guidance or cooperation for environmental protection. In order to cope with climate change by means of regional trade agreements more actively, it is necessary to insert climate change chapters, or at least climate change provisions, in new regional trade agreements.<sup>62</sup>

Four significant principles should be noticed when moving towards next generation of regional trade agreements with climate change chapters. First, these new regional trade agreements should involve as many developed and developing countries as possible simultaneously, in order to avoid and remedy the carbon-leakage problem and the shortcoming of the Kyoto Protocol without tangible obligations on developing countries. Second, climate change related provisions in these agreements should comprise a concrete and strong commitment to respond to climate change, as opposed to an open and very flexible approach, such as cooperation in environmental issues.<sup>63</sup> Third, these climate change chapters need to deal with climate change mitigation and adaptation at the same time. The Earth is proven to be getting warmer, causing negative impacts on human ecosystems. Therefore, it is important not only to curb greenhouse gas emissions from contracting parties, but also to help vulnerable contracting parties to adapt to the challenging environmental problems. Fourth, these new regional trade agreements are focusing on 'trade' in essence. Thus, it should be bear in mind that climate change related provisions must not cause detriment or constitute a disguised

restriction on trade.<sup>64</sup> Ideally, these climate-related provisions and trade-promoted provisions should be mutually supportive of each other.

### *C. The Trans-Pacific Partnership as an Example*

#### **1. The Trans-Pacific Partnership and Its Climate Change-related Part**

The TPP is an Asia-Pacific regional trade agreement. It was originated from the Trans-Pacific Strategic Economic Partnership Agreement signed by Brunei, Chile, New Zealand, and Singapore in 2005. The TPP was concluded in February 2016 among 12 countries including Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the US, and Vietnam through negotiations. The parties concerned are waiting for ratification.<sup>65</sup> As of 2015, these contracting parties had a collective population of about 800 million with a combined GDP of nearly USD 29 trillion (around 39 percent of the world's GDP), and had already contributed to about 40 percent of world trade.<sup>66</sup> The TPP is regarded as a mega-regional trade agreement.

The TPP is a large and comprehensive agreement dealing with many aspects of trade-related issues. The objective of the TPP is to reduce as many tariffs and barriers as possible, and to level the playing field for all contracting parties.<sup>67</sup> The TPP has 30 chapters with 506 articles and 122 annexes,<sup>68</sup> which enhance existing trade rules in the GATT/WTO. The Environment Chapter (Chapter 20) has 23 sections and is regarded as “the most far-reaching ever achieved in a trade agreement.”<sup>69</sup> This chapter creates obligations for the TPP parties to work on environment issues, such as ozone layer, marine environment, biodiversity, invasive alien species, fisheries, low emissions and conservation. This Environment Chapter sets up commitments for all contracting parties to fully implement and enforce the chapter through measures that are transparent, cooperative and publicly participated.<sup>70</sup> Furthermore, it requires all TPP governments to eliminate environmentally harmful subsidies; to facilitate trade in environmental goods and services; and to reaffirm their commitments to implement multilateral environmental agreements to which they are contracting parties.<sup>71</sup>

Section 15 of Article 20 (Transition to a Low Emissions and Resilient Economy) particularly targets climate change problem. This section requires contracting parties to take collective actions, according to Section 12 (Cooperative

Frameworks) and, on the basis of each party's capability, to transit to low emissions economy. Cooperation areas include "energy efficiency, development of cost-effective, low-emissions technologies and alternative, clean and renewable energy sources, sustainable transport and sustainable urban infrastructure development, deforestation and forest degradation, emissions monitoring, market and non-market mechanisms, low-emissions, resilient development and sharing information and experiences in addressing these issues."<sup>72</sup>

## 2. A Review of the Trans-Pacific Partnership and Its Climate Change-related Part

Now, it is worth reviewing the climate change-related part by the virtue of the significant principles and making recommendations. First, the TPP has not recruited China as a member yet, while it is going to be a large and comprehensive regional trade agreement mixed with developed countries and developing countries. Since China's GDP ranks second in the world and contributes to about 23 percent of the world's greenhouse gas emissions (ranks the first place in the world),<sup>73</sup> the effectiveness of the TPP would go down *without China* as a new regional trade agreement equipped with the climate change combat function. [Emphasis added] China's absence in the TPP might be due to the geopolitics between China and the US. In the long term, however, it is still possible that China would be on board, because the final aim of the TPP is to expand the agreement encompassing all twenty-one members of the Asia-Pacific Economic Cooperation.<sup>74</sup>

Second, the TPP and its climate change-related part are still not concrete enough in view of the second significant principle. Its Environmental Chapter requests subsidy elimination if harmful to climate system, trade facilitation in climate change combating goods and services, and implementation of climate change treaties. Meanwhile, the TPP sets a specific section (Section 15 of Article 20) with over ten cooperation items to help contracting parties switch to low emissions economy. These climate change related regulations are more concrete and specific than traditional regional trade agreements which have just a few part targeting environment issues. However, the TPP actually can go further with strong terms on obligations. *E.g.*, the TPP can: clearly state that all contracting parties should make efforts to limit the temperature increase within 1.5 °C

instead of 2°C; set up ambitious greenhouse gas emissions reduction target than the Kyoto Protocol and the Paris Agreement for contracting parties; and lay out methodologies, which are transparent, accountable, and reliable for contracting parties to submit to their nationally determined contributions to the global response to climate change.

Finally, on the basis of the third and the fourth principles, the TPP can have more regulations on trade related adaptation actions. Although those cooperation items listed in the TPP cover issues about climate change reduction and mitigation, their emphasis is still more on greenhouse gas emissions reductions. The TPP as a next generation regional trade agreement should create more advanced trade-related adaptation services, such as financial services, telecommunication services, health services, and environment services for climate change impacts and disasters.

## 5. Conclusion

The GATT/WTO is not just a static organization, but also a complex forum developing with social changes. For a long time, economists have been trying to find out whether regional trade agreements are harmful or beneficial to the GATT/WTO regime. International lawyers are concerned about the meaning of relevant regulations of the GATT/WTO on regional trade agreements. Additionally, political scientists examine whether regional trade agreements reduce the willingness of national leaders to join new negotiations of the GATT/WTO. These questions, however, are going to fade away.

This article has argued that regional trade agreements as a regional approach have merits and advantages of pursuing harmonization and cooperation of legal regime under the GATT/WTO framework in relation to climate change. Regional trade agreements can provide opportunities for a group of countries to negotiate commitments and rules in order to cope with climate change that go beyond what is possible in the multilateral arena.

Today, human survival is at stake due to global warming. In crisis, however, a little change in the idea could produce profound outcome. Regional trade agreements turn out to be the key to working out mutual supportiveness between

the GATT/WTO and the climate change legal regimes since regional trade agreements have a different character from the GATT/WTO. The GATT/WTO gave considerable latitude to regional trade agreements in terms of Article XXIV of the GATT 1994 and the Understanding. In this course, all the evidence shows that the number of regional trade agreements will grow quickly in a couple of decades. New regional trade agreements covering climate change chapters are equipped with solid measures and objectives to cope with global warming. They are eventually going to make the multilateral consensus for environmental protection.

## REFERENCES

1. Rio Declaration princs. 3 & 4.
2. WTO & UNEP, *TRADE AND CLIMATE CHANGE: WTO-UNEP REPORT 80* (2009).
3. J. Sharkey, *Skywriting, Collective Disappearance and Other Ways to up the Revolution*, N. Y. TIMES, Dec. 5, 1999, at 7. *See also* *Protesters Attempt to Influence World Trade Talks*, ENVIRONMENT NEWS SERVICE [hereinafter Protesters], Dec. 14, 2005, available at <http://www.ens-newswire.com/ens/dec2005/2005-12-14-05.asp> (last visited on Feb. 2, 2017).
4. Protesters, *id.*
5. *Id.*
6. S. Charnovitz, *Current Development: World Trade and the Environment: A Review of the New WTO Report*, 12 GEO. INT'L ENVTL. L. REV. 523-4 (2000).
7. *Id.*
8. *Id.*
9. A. Revkin, *Biologists Note Polar Bear Cannibalism*, N.Y. TIMES, Jan. 13, 2007, available at <http://www.nytimes.com/2006/06/13/us/13brfs-006.html?ex=1171083600&en=49c7b64c141815bd&ei=5070> (last visited on Feb. 2, 2017). *See also* D. Lawler, *February Smashes Global Temperature Record, Says Nasa*, TELEGRAPH, Mar. 13, 2016, available at <http://www.telegraph.co.uk/news/earth/environment/globalwarming> (last visited on Feb. 2, 2017).
10. J. Romero & K. Siegwart, *A Survey of Kyoto Tools for Greenhouse Gas Reductions: Speculations on Post-Kyoto Scenarios*, in INTERNATIONAL TRADE REGULATION AND THE MITIGATION OF CLIMATE CHANGE: WORLD TRADE FORUM 13, 16 (T. Cottier et al. eds., 2009).
11. T. Stocker, *Earth in the Greenhouse: A Challenge for the Twenty-First Century*, in Cottier et al. eds., *id.* at 4-8.
12. K. Kennedy, *The GATT-WTO System at Fifty*, 16 WIS. INT'L L. J. 423 (1998). *See also* J. JACKSON, *THE WORLD TRADING SYSTEM: LAW AND POLICY OF INTERNATIONAL ECONOMIC*

- RELATIONS 16 (2d ed. 1997).
13. P. Mengozzi, *The Present State of Research Carried Out by the English-Speaking Section of the Centre for Studies and Research of the Hague Academy of International Law*, in THE WORLD TRADE ORGANIZATION 60 (1997).
  14. UNFCCC, FCCC/CP/2015/L.9/Rev.1 (Dec. 2015), available at <https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf> (last visited on Feb. 2, 2017).
  15. K. Kulovesi, *Climate Change and Trade: At the Intersection of Two International Legal Regimes*, in CLIMATE CHANGE AND THE LAW 420 (E. Hollo, K. Kulovesi & M. Mehling eds., 2013).
  16. Official Records of the General Assembly, Fifty-seventh Sess., Supp. No. 10, ch. IX. A, ¶¶ 492-494, U.N. Doc. A/57/10, available at [http://legal.un.org/ilc/documentation/english/reports/a\\_57\\_10.pdf](http://legal.un.org/ilc/documentation/english/reports/a_57_10.pdf) (last visited on Feb. 2, 2017).
  17. See generally B. LOMBORG, COOL IT: THE SKEPTICAL ENVIRONMENTALIST'S GUIDE TO GLOBAL WARMING (2007); R. CARTER, CLIMATE: THE COUNTER-CONSENSUS (2010).
  18. *Supra* note 15, at 421-2.
  19. N. STERN, THE STERN REVIEW: THE ECONOMICS OF CLIMATE CHANGE xv (2007).
  20. D. Tsitsiragos, *Climate Change Is a Threat – and an Opportunity – for the Private Sector*, CAPITAL FIN. INT'L, Jan. 6, 2016, available at <http://cfi.co/europe/2016/01/ifc-climate-change-threat-and-opportunity-for-private-sector> (last visited on Feb. 2, 2017).
  21. *Id.*
  22. P. NEWELL & M. PATERSON, CLIMATE CAPITALISM: GLOBAL WARMING AND THE TRANSFORMATION OF THE GLOBAL ECONOMY 1 (2010).
  23. C. WOLD, D. HUNTER & M. POWERS, CLIMATE CHANGE AND THE LAW 442 (2009).
  24. The *pacta sunt servanda* doctrine requires countries to implement their treaties' obligations in good faith so that measures can be fulfilled with no conflicts. For details, A. Aust, *Pacta Sunt Servanda*, in VIII MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 15-8 (R. Wolfrum ed., 2012).
  25. M. Cossy & G. Marceau, *Institutional Challenges to Enhance Policy Co-ordination: How WTO Rules Could Be Utilised to Meet Climate Objectives?*, in Cottier et al. eds., *supra* note 10, at 372.
  26. WTO & UNEP, *supra* note 2, at 82.
  27. *Id.* at 80. See also WTO, DG Azevêdo Welcomes Progress in Environmental Goods Agreement, available at [https://www.wto.org/english/news\\_e/news15\\_e/envir\\_14dec15\\_e.htm](https://www.wto.org/english/news_e/news15_e/envir_14dec15_e.htm) (last visited on Feb. 2, 2017).
  28. J. Kim, *Harnessing the Regional Trade Agreements for the Post-2012 Climate Change Regime*, in CLIMATE AND TRADE POLICIES IN A POST-2012 WORLD 57-8 (UNEP ed., 2009).
  29. D. DAS, REGIONALISM IN GLOBAL TRADE 8 (2004).
  30. J. FRANKEL, REGIONAL TRADING BLOCS IN THE WORLD ECONOMIC SYSTEM 1 (1997).
  31. *Id.*

32. A. BHALLA & P. BHALLA, REGIONAL BLOCS: BUILDING BLOCKS OR STUMBLING BLOCKS 3 (1997).
33. *Id.*
34. *Id.*
35. R. Bernal, *Regional Trade Arrangements in the Western Hemisphere*, 8 AM. U. J. INT'L L. & POL'Y 684-5 (1993).
36. S. Cone, III, *The Promotion of Free Trade Areas Viewed in Terms on Most-Favored-Nation treatment and "Imperial Preference,"* 26 MICH. J. INT'L L. 571 (2005).
37. *Id.* at 572.
38. C. Wagner, *Introduction*, 28 ST. LOUIS U. PUB. L. REV. 4 (2008).
39. X. de Vanssay & E. Mahant, *Three's Company and Fifteen's a Union: The Comparative Political Economy of NAFTA and the European Union-Integration or Liberalization*, in REGIONAL TRADE BLOCS, MULTILATERALISM AND THE GATT 133 (T. Geiger & D. Kennedy eds., 1996).
40. GATT 1994 pmb1.
41. *Supra* note 39.
42. C. O'Neal Taylor, *The U.S. Approach to Regionalism: Recent Past and Future*, 15 ILSA J. INT'L & COMP. L. 422 (2009).
43. WTO, Regional Trade Agreements, available at [https://www.wto.org/english/tratop\\_e/region\\_e/region\\_e.htm](https://www.wto.org/english/tratop_e/region_e/region_e.htm) (last visited on Feb. 2, 2017).
44. WTO, List of All Early Announcements Made to WTO, available at <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (last visited on Feb. 2, 2017).
45. S. Powell, *Regional Trade Agreement and the WTO in the Americas: New Issues as the Pace of Economic integration Quickens*, 13 FLA. J. INT'L L. 52 (2000).
46. *Id.* See B. Kerremans & B. Switky, *Introduction*, in THE POLITICAL IMPORTANCE OF REGIONAL TRADING BLOCS 1, 1 (B. Kerremans & B. Switky eds., 2000).
47. J. Tavares de Araujo, Jr. & L. Tineo, *Harmonization of Competition Policies among MERCOSUR Countries*, 24 BROOKLYN J. INT'L L. 441 (1998).
48. WTO, Members and Observers, available at [https://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org6\\_e.htm](https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm) (last visited on Feb. 2, 2017).
49. Sungjoon Cho, *Breaking the Barrier between Regionalism and Multilateralism: A New Perspective on Trade Regionalism*, 42 HARV. INT'L L. J. 432 (2001).
50. J. JACKSON, THE JURISPRUDENCE OF GATT & THE WTO 106 (2000).
51. *E.g.*, the Caribbean Basin Initiative, a preferential trade agreement between the US and Caribbean countries, has labor standards on working conditions, right to organize, and right to bargain. See P. van Dijck, *NAFTA: A Model for the WTO*, in CHALLENGES TO THE NEW WORLD TRADE ORGANIZATION 141 (P. van Dijck & G.t Faber eds., 1996).
52. *Supra* note 6, at 523.
53. *Id.* See also Kennedy, *supra* note 12, at 34.
54. *Supra* note 6. See also K. Kennedy, *Trade and the Environment: Implications for Global*

- Governance: Why Multilateralism Matters in Resolving Trade-Environment Disputes*, 7 WID. L. SYMP. J. 31 (2001).
55. *Supra* note 6. See also Kennedy, *id.* at 34.
56. S. Gaines, *Environmental Protection in Regional Trade Agreements: Realizing the Potential*, 28 ST. LOUIS U. PUB. L. REV. 265 (2008).
57. *Id.*
58. *Id.* at 266.
59. G. Faber, *The EC and the WTO: Different Fields to Level?*, in van Dijck & Faber eds., *supra* note 51, at 107-8.
60. *Supra* note 56.
61. R. LEAL-ARCAS, CLIMATE CHANGE AND INTERNATIONAL TRADE 407 (2013).
62. *Id.* at 407.
63. *Supra* note 29, at 62.
64. *Supra* note 61, at 408.
65. For details, see Eric Yong-Joong Lee, *Trans-Pacific Partnership (TPP) as a US Strategic Alliance Initiative under the G2 System: Legal and Political Implications*, 8 J. EAST ASIA & INT'L L. 333-4 (2015), available at [http://journal.yiil.org/home/pdf/publications/2015\\_8\\_2\\_pdf/02-issue.pdf](http://journal.yiil.org/home/pdf/publications/2015_8_2_pdf/02-issue.pdf) (last visited on Feb. 2, 2017).
66. IMF, World Economic Outlook Database (Apr. 2016), available at <https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx> (last visited on Feb. 2, 2017).
67. TPP pmbl.
68. The complete version of the Trans-Pacific Partnership Agreement is available at Office of the United States Trade Representative, Read the Deal, available at <https://ustr.gov/tpp/#text> (last visited on Feb. 2, 2017).
69. Office of the United States Trade Representative, Chapter 20 Environment, available at <https://ustr.gov/sites/default/files/TPP-Final-Text-Environment.pdf> (last visited on Feb. 2, 2017).
70. TPP art. 20.7-20.9 & 20.12.
71. *Id.* art. 20.2-20.4 & 20.18.
72. *Id.* art. 20.15.
73. IBRD, World Bank Open Data, available at <http://data.worldbank.org> (last visited on Feb. 2, 2017).
74. *Supra* note 61, at 412.

