

# Environmental Goods Agreement

## *A New Frontier or an Old Stalemate?*

By William A. Reinsch, Emily Benson, and Catherine Puga

---

### *Introduction*

Beginning in July 2014, 18 participants representing 46 members at the World Trade Organization (WTO) **launched** plurilateral negotiations to reduce tariffs on environmental goods. Negotiations were initiated under the **Doha Ministerial Declaration**, which called for the “reduction, or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.” The WTO Environmental Goods Agreement (EGA) negotiations followed the 2012 conclusion of an Asia-Pacific Economic Cooperation (APEC) agreement that liberalized tariffs on **54 environmental goods**, primarily covering **industrial products**, such as steam condensers to minimize air pollution and air filtering and purifying machinery. At the time, the original participating countries in WTO negotiations represented 90 percent of trade in environmental goods under negotiation. The effects of a deal would likely be modest, although a new EGA would represent a step in the right direction. Furthermore, it would signal to the global community that the world trading system was capable of tackling climate change within a defined set of rules that could prove useful for more far-reaching changes in the future.

In 2016, however, talks collapsed. The most fundamental problem was that negotiators struggled to reach an agreement on what constituted an **environmental good** and how broadly that definition should extend across various sectors. For example, disagreements persisted around **dual use goods**, or those that have ambiguous or debatable effects on the environment. Talks were also limited by the structure of the discussions. Negotiations centered around “**categories**” of goods as defined by the World Customs Organization’s Harmonized System (HS) codes, as is true with all WTO tariff negotiations. This negotiation used HS-6 codes, which cover categories rather than individual

products, leading some countries to claim that the scope of what constituted an environmental good was too broad.

The EGA also was criticized for what it failed to include, namely services and non-tariff barriers. Environmental **services** include infrastructural environmental services, such as wastewater treatment, and non-infrastructure services, such as air pollution mitigation. Arguably, **non-tariff barriers** (NTBs), such as opaque licensing practices, product standards, and testing procedures, pose more of a limit on trade in environmental goods than tariffs. Limiting the agreement by excluding NTBs and services seemed woefully inadequate to certain countries.

Negotiations also suffered from lack of participation. Developing countries, except for China and Costa Rica—and eventually Turkey—did not participate, in part because they felt the wealthy countries negotiating had less at stake. The average applied tariff among negotiating countries on goods on the APEC list was **around 0.5 percent**, meaning APEC countries did not have much to give up, compared with developing countries who had much higher average applied rates. Major economies like **Brazil and India** did not participate over fears of a spike in cheaper, foreign imports. This dynamic played out during the now infamous EU-China bicycle debacle, in which China wanted to define bicycles as an environmental good, while the Europeans did not.

Another more fundamental problem was that two of the participating powerhouses—China and the United States—had their own demands and political pressures, which complicated negotiations. China received significant criticism for making onerous, last-minute demands that would have decreased the number of items covered and changed the rules for determining what constituted a critical mass of countries and products. Indicative of how far China pushed other member states during the negotiations, on December 4, 2016, the last day of the ministerial conference, China arrived with a list of products that **significantly diverged** from the list that had received near consensus. Cecilia Malmström, who at the time was the European Union’s chief trade commissioner, **said** the unexpected list of goods from China “made it impossible to find an agreement. We were too far away from each other.”

On the U.S. side, the Obama administration attempted to conclude the deal **rapidly** during its last months in office, which some experts believed was too much, too quickly. As talks disintegrated, the Trump administration assumed office. The Trump administration never clearly articulated a stance on EGA negotiations and declined to take a leadership role in ongoing negotiations at the WTO. Given complications with Chinese demands, a general lack of agreement on products to cover, and a gap in U.S. leadership, very little progress was made between 2016 and 2021, and there has been limited optimism for negotiations to restart. Furthermore, other pressing issues, such as fishery subsidies and the dispute settlement body, have played increasingly prominent roles within the WTO system, meaning member states may have less bandwidth to focus on restarting EGA negotiations.

Since taking office, President Biden has demonstrated a dedication to global engagement, and domestic politics could help the Biden administration make headway at the WTO. In 2021, two separate groups of congressional representatives, a group of **Republicans** and a group of **Democrats**, officially called on the administration to restart EGA negotiations. U.S. Trade Representative (USTR) Ambassador Tai **stated** in her congressional hearing that she would “seek stakeholder input in the EGA and assess its consistency with the Build Back Better Agenda.” As the Biden administration builds out its domestic and international agendas, both of which focus heavily on climate change mitigation, and as the European Union and China fine tune their own environmental policies, WTO members have a fresh opportunity to renew EGA negotiations. This paper will assess what went wrong during the

initial EGA negotiations and propose a path forward for the international trade community to restart the negotiations.

## *EGA Negotiations: A Long History*

The **Doha Ministerial Declaration** called for the “reduction, or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.” Initially, negotiators explored the possibility of a multilateral agreement encompassing all WTO members. Within the WTO, **open plurilateral agreements** are implemented on a most-favored nation (MFN) basis, meaning signatory countries extend tariff cuts to all WTO members, not just the other signatories. In order to prevent freeriding –nonparticipating countries would benefit from other countries’ tariff reductions without making any of their own entry into force of agreements is usually contingent upon participating countries meeting the requirement that they collectively represent at least 80 percent of global trade in goods or services under negotiation, a “critical mass” of world trade.

*As the Biden administration builds out its domestic and international agendas, both of which focus heavily on climate change mitigation, and as the European Union and China fine tune their own environmental policies, WTO members have a fresh opportunity to renew EGA negotiations.*

Following the collapse of the Doha Round in 2008, a swift realization that the EGA negotiations would be far more complex than initially anticipated, and the desire to leverage the successful negotiation of the **APEC Environmental Goods Agreement** in 2012, EGA negotiators opted instead to pursue a plurilateral negotiation format.

In July 2014, 18 participants representing 46 WTO members **launched** negotiations to reduce tariffs on environmental goods. The EGA ultimately went through **18 rounds of negotiations**. As initial negotiations began, participants agreed to structure negotiations around **specific categories** of environmental goods, such as products for air pollution control and products for environmental remediation. Each round of negotiations covered a specific category. During **Round 5** in March 2015, Turkey and Iceland joined negotiations, and countries concluded initial product group nominations. Ensuing rounds of negotiations focused on specific product groups, including identifying which small product groups were controversial. Progress was steady and slow, but talks were reinvigorated in June 2016 after China assumed the G20 presidency. A U.S. negotiator at the time emphasized that China had an ambitious agenda and sought tangible outcomes in trade and environment. U.S. negotiators were quick to leverage Chinese ambition to commit to establishing a timeline for concluding talks, initially set for December 2016. However, talks collapsed in December 2016 and have not been reinitiated.

### **DETERMINING THRESHOLDS**

At the time, original participating countries **represented** roughly 90 percent of trade in environmental goods under negotiation, meaning participants not only met the critical mass threshold but also that the conclusion of a deal would have far-ranging consequences. There was widespread agreement to follow the International Trade Administration’s (ITA) model, which established critical mass of trade at 90 percent of global exports. China, however, wanted critical threshold to include both global exports and imports

since that ultimately would have compelled India to join. Participating countries included the United States, the European Union, New Zealand, Australia, and China. India opted not to participate, which allowed negotiations to proceed since countries could meet the threshold without India. Brazil, concerned about the potential implications of an EGA on Brazil's large **ethanol industry**, also chose not to participate. Without China, however, negotiating countries would have been unable to meet the 80 percent threshold, and negotiations absent China would have allowed the country to benefit from freeriding on reduced tariffs for environmental goods. In other words, China's participation in EGA negotiations was critical both to reach critical mass and to prevent China from becoming a free rider.

**SPECIAL AND DIFFERENTIAL TREATMENT AND PHASE-INS**

China's proposal included different phase-in periods for developing countries and would have allowed them to retain tariffs of up to five percent on up to five percent of the products. At the time, this would have provided special treatment to Costa Rica, Turkey, and, most importantly, China. On the other hand, the U.S. **proposal** for phase-ins followed the 2015 ITA model, which broke down phase-ins into four distinct baskets. Basket One goods would liberalize tariffs upon entry into force of the agreement, eliminating 75 duties on percent of covered tariff lines. Basket Two goods included a three-year phaseout in four equal tariff reductions for products not covered in the first basket. The third basket included a five-year phaseout in six annual reductions to a maximum of 15 percent of covered tariff lines. Basket Four, where China put 40 percent of 201 products, included a seven-year phaseout in eight equal annual tariff reductions to a maximum of five percent of covered tariff lines. In other words, China sought to delay the liberalization of certain goods in which it did not specialize or have a majority market share.

**EGA TIMELINE**



Source: Data pulled from FerDI, the WTO, the ICTSD, APEC, and the Canadian government.

## Defining Environmental Goods

### OECD, APEC, EU, AND WTO DEFINITIONS

An immediate challenge at the outset of negotiations was how to define an environmental good. To date, there is no standard, universally agreed upon definition. However, the Organization of Economic Cooperation and Development's (OECD) 1999 working **definition** of environmental goods and services is largely regarded as the most complete definition that exists. According to it, environmental goods are those that “measure, prevent, limit, minimize, or correct environmental damage to water, air, and soil, as well as problems related to waste, noise and eco-systems. This includes cleaner technologies, products, and services that reduce environmental risk and minimize pollution and resource use.”

At its core, the OECD list was a conceptual exercise in defining environmental goods rather than a practical application of a definition for use in immediate negotiations.

The **APEC agreement**, concluded in 2012, is the world's preeminent agreement on liberalizing the trade of environmental goods. Much narrower in scope than the OECD's framing of environmental goods, the APEC agreement ultimately included 54 product categories. The agreement primarily covered **industrial products**, such as bamboo flooring, steam condensers that minimize air pollution, and filtering and purifying machinery. The goods covered tended to represent interests of developed countries, who are the primary exporters of much of the “**end of line**” technology included in the APEC list, such as heavy machinery. China, the United States, Australia, and Japan were all **signatories** to the APEC agreement, **accounting** for half of the top ten global exporters of environmental goods. Underscoring the difficulty of defining an environmental good, there is only a **30 percent overlap** between the OECD list and what was ultimately covered in the APEC agreement. Further, all of the APEC negotiated HS codes were included on the lists of goods negotiated during WTO EGA talks.

Representing yet another approach to defining environmental goods, in 2016 the European Union **defined** environmental goods as: “Products that directly contribute to environmental protection and climate mitigation by helping clean the air and water, helping manage waste, contributing to energy efficiency, controlling air pollution, and generating renewable energy.”

This includes goods ranging from thermostats to polysilicon for solar panels. Highlighting the growing urgency to combat climate change, the EU definition much more explicitly mentions renewable energy compared to the OECD definition. Nevertheless, the stark differences among items deemed “environmental” underscores fundamental problems in how countries approach relevant definitions of goods.

With the APEC agreement concluded in 2012, the WTO EGA negotiations that followed in 2014 loosely took into account APEC definitions, although EGA negotiators never conclusively defined what constituted an environmental good. This lack of agreed-upon definition made concluding a deal more difficult since the lack of definitional framework allowed for significant deviation among primary negotiating parties. The initial list under consideration at the WTO was significantly larger at the outset of negotiations. At its largest, the list included **411 products**. However, a **leaked list** from November 2016 ultimately included 304 product lines, and all APEC products were included on that list. The WTO list organized items into **10 sectors** based on environmental use:

- air pollution control
- cleaner and renewable energy

- energy efficiency
- environmental monitoring analysis and assessment
- environmental remediation and clean-up
- environmentally preferable products
- noise and vibration abatement
- resource efficiency
- solid and hazardous waste management
- wastewater management and water treatment.

The WTO list substantially expanded environmentally friendly goods, including ones for natural resource protection. For instance, and in contrast to the APEC list, the WTO list includes items like specific kinds of fishing nets with sea turtle excluder devices, made infamous in the 1990s during the WTO Shrimp-Turtle case. In 2016, the United States [applied tariff rate](#) for this item was 8.755 percent, the highest among participating OECD countries and higher than China. The WTO list also expanded products under the renewable energy category. Like the APEC list, the WTO list also dealt primarily with components. For instance, solar panels as an end product are not included on the list, but various components are, such as photovoltaic panels and electricity converters.

A significant difference between the APEC and WTO lists underscores the changing nature of the global environmental goods economy: the treatment of electric vehicles. The APEC list does not directly mention electric vehicles (EVs), while the [expanded](#) WTO list includes many components that are critical for EVs, such as the Harmonized Tariff Schedule of the United States (HTS) codes covering a specific kind of fuel cell or those covering lithium-ion batteries. Under a renegotiation of the EGA, EVs and their component parts would likely need to be covered. However, the degree to which EVs are beneficial to the environment would likely invite further discussion and perhaps disagreement.

### **ENVIRONMENTAL IMPLICATIONS, STRUCTURAL PROBLEMS, AND OMISSIONS**

Another problem in defining what constitutes an environmental good is to what degree an item actually benefits the environment. For example, one environmental advocacy group [found](#) that only sixteen of the nominated tariff lines would legitimately have net beneficial environmental effects, while a majority of covered items would have a neutral effect. Meanwhile, approximately 11 percent of covered items were deemed to have had an explicitly negative environmental impact. Furthermore, biodiversity and environmental costs remain unclear for certain product categories, such as coniferous wood.

According to the WTO list, “wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable.” However, deforestation is an increasingly charged topic, particularly in countries like Brazil, where the Amazon is now emitting more [carbon](#) than it absorbs. The European Union’s new [Forest Strategy](#), which the European timber industry opposes, aims to plant three billion trees annually in a bid to rehabilitate destroyed forests and capture greenhouse gas emissions. Agreeing to liberalize trade of goods that contradict other domestic and international policies underscores a core tension between trade and climate policy.

In addition to definitional problems, structural challenges also emerged around harmonized system tariff codes. HS products typically represent categories rather than specific products. For instance, WTO negotiators included **certain kinds of mufflers** in negotiations. Mufflers are used in wind turbines to reduce noise – a frequent complaint of people living near wind farms – but can also be used to reduce noise in airplanes. Wind turbines are clearly an environmental good, while airplanes are not. APEC negotiators attempted to rectify this challenge by relying on “**ex-outs**,” descriptions of a specific product to ensure that the correct tariff is being applied. An ex-out would allow a country to specify that the tariff would only be applied to mufflers being imported for use in airplanes, not in wind turbines. Trade negotiations use six-digit numbers for each product, but many countries tack on additional numbers to their customs schedules to more clearly specify sub-sections of products and to ease implementation for customs officials. However, these add-ons are not harmonized across countries, leading to complexities when it comes to specifying tariff rates. Moreover, ex-outs can also be used to evade tariff limits. For instance, signatories to the APEC agreement agreed to cut tariffs on **certain electric motors** to five percent or less. These motors, HS-6 850164, are used in wind turbines and other renewable energy sources. However, as of 2019, China **maintained** a tariff of 10 percent on these motors. While APEC commitments are voluntary, China also maintains a longer, more specific customs code for those products and thus uses an “ex-out” description to clarify which motors are covered. However, their description is different from the description in the APEC agreement, meaning that, according to China, the motors do not fall under the scope of the APEC agreement. However, the 2017 **Trade Facilitation Agreement** sets out provisions for customs cooperation that seeks to remedy some of these disparities.

In addition to persistent disagreement regarding environmental goods definitions, challenges also emerged surrounding what was omitted from negotiations, namely services and non-tariff barriers to environmental goods. Environmental **services** can include infrastructural environmental services, such as wastewater treatment, and non-infrastructure services, such as air pollution mitigation. The current **definition** of environmental services is relatively limited and largely based on services that public utilities traditionally provide. Some services, such as engineering services that maintain wind turbines, do not meet the current definition of providing an “environmental service.” Questions also abound as to how far the definition should extend. For instance, it is unclear whether a law firm providing support to a pollution abatement project should be regarded as providing an environmental service. Most environmental services are **covered** under Article 1, Mode 3 of the General Agreement on Trade in Services (GATS), which is defined by a commercial presence in another country, such as an environmental consulting firm establishing a subsidiary in a different country. However, there are often restrictions on foreign commercial presences, particularly those providing public utilities. The European Union has **local procurement rules** for energy, water, and sanitation and public utilities, all of which are environmental services.

In 2019, Australia, Canada, Mexico, New Zealand, and Switzerland called for removing barriers to trade in environmental services, in part noting that technological advances have opened significant new opportunities for cross-border trade of services. Currently, 59 of 164 WTO members, including the European Union, have **committed** to liberalizing trade in environmental services. Therefore, it is likely that a renegotiation of the EGA would need to deal with demands to include environmental services. Furthermore, environmental goods and services are inextricably linked. Goods **linked with services** such as trash compactors, which often have no use outside of solid-waste management, constitute tethered goods. Additionally, many environmental goods lack value without their associated services. For example, a solar panel means very little if the consumer does not have the ability to install and maintain the panel. The lack of environmental services in the EGA makes it significantly more difficult

to liberalize environmental trade, particularly since a physical good absent its companion service represents an incomplete item.

Overcoming barriers to services liberalization is challenging. Many of the barriers, such as rules limiting foreign ownership of companies, complex visa procedures, and limitations of stay on foreign suppliers are not unique to environmental services and would require countries to overhaul their immigration and incorporation rules. Moreover, some experts argue that **non-tariff barriers**, such as opaque licensing practices, varying product standards, and testing procedures, limit trade in environmental goods significantly more than tariffs. Therefore, while the inclusion of services and non-tariff barriers to environmental trade may complicate negotiations, their inclusion would more fully capture the entire environmental goods supply chain and barriers to the resiliency of those supply chains.

#### **WHO DID NOT PARTICIPATE**

EGA negotiations were also criticized for the relatively limited number of participants. The only developing countries who participated in negotiations were China and Costa Rica. EGA participants were **motivated** to negotiate for two primary reasons: they needed access to foreign environmental goods to meet domestic demand and wanted market access for domestically produced environmental goods. Domestic demand and growth positively correlate with high domestic environmental standards that establish a market for green goods. Developing countries often have weaker environmental standards and smaller industries and thus might have lacked motivation to participate. However, the **greatest growth potential** for environmental goods is in developing countries, and yet developing countries have some of the highest tariff rates on environmental goods. For instance, in 2016, **tariffs** on fuel cells were low among participating OECD countries, while the tariff rate in developing countries was generally much higher. While China's fuel cell tariff rate was just 1 percent, both Brazil and India's were closer to 8 percent, and South Africa's rate was 11 percent. Brazil, India, and South Africa did not participate in EGA negotiations.

*While the inclusion of services and non-tariff barriers to environmental trade may complicate negotiations, their inclusion would more fully capture the entire environmental goods supply chain and barriers to the resiliency of those supply chains.*

The EGA was negotiated on an MFN basis. Therefore, non-participating countries would benefit from reduced tariffs in participating countries, while failing to liberalize their own tariff schemes. For some countries, this was an incentive not to participate. For example, China was initially reluctant to join the EGA negotiations for fear of competition from cheap imports from India. Meanwhile, India was concerned that cheaper Chinese goods would flood its domestic market, putting local manufacturers out of business. In an **analysis** of the pros and cons of joining EGA negotiations, India's Export-Import Bank stated explicitly that India would be able to benefit from freeriding, that most export destinations of Indian green goods were not participants in EGA negotiations, and that joining the EGA would threaten domestic industry in India. The prospect of substantial freeriding concerned a number of the participating countries which led to a debate over the critical mass of participants that would be required.

#### **ECONOMIC BENEFITS OF TRADING ENVIRONMENTAL GOODS**

Varying definitions make it difficult to quantify the scope of trade of environmental goods. The **OECD** estimates that between 2003 and 2016, international trade in environmental goods more than doubled



and that trade in environmental goods accounts for 8.1 percent of global trade. The market for many environmental goods **correlates** with countries, who already have robust policies that promote the use of such goods. For example, countries with policies favorable to the large-scale use of solar panels generate increased demand for those products and components, and tariff rates on environmental goods vary accordingly. The **U.S. International Trade Commission (ITC)** estimates that in East Asia, North America, and the European Union, the simple average tariff on environmental goods is 3 percent, with a peak at 7 percent. This contrasts with Southeast Asia and South America, where tariffs on environmental goods average 6 percent and 7 percent with highs of 15 percent and 12 percent, respectively. However, using the narrower list of APEC defined goods, two **economists** estimated that, as of 2014, high-income countries had an average applied tariff of about 0.5 percent on environmental goods. The broader WTO list had an **average tariff rate** of 3.4 percent among negotiating countries. Furthermore, average applied tariffs rise as a country's per capita income decreases, meaning that the conclusion of an agreement on environmental goods would be particularly beneficial to developing countries. Overall, **studies** estimate that a successful EGA conclusion could increase the value of environmental goods trade by \$24 billion.

To what degree the EGA offers economic benefits depends both on countries engaged in trade, as well as goods being traded. At the time of the negotiations, the European Commission published a **report** assessing the impact of the proposed EGA based on the APEC list and a list submitted by a group of nine countries called the "Friends of Environmental Goods." The report acknowledges that due to the low level of applied tariffs on environmental goods in negotiating countries, an agreement would not likely have a broad macro impact. However, it is possible that an agreement would benefit specific products and countries. For example, China has **imposed** a 35 percent tariff on biogas water heaters, which an EGA would mitigate. Canada's **impact assessment** found that Canadian imports of environmental goods would not increase substantially because Canadian tariffs on relevant goods are already fairly low. However, Canadian exports of environmental goods could increase, particularly to China. Another study **found** that an agreement on environmental goods would boost Chinese environmental goods exports by 9.8 percent, equal to \$27 billion. Furthermore, it is possible that an EGA would also lead to greater Chinese imports of environmental goods and thus boost environmental quality within the country. The International Centre for Trade and Sustainable Development (ICTSD) **estimated** that U.S. households would benefit from lower energy bills and greater energy efficiency associated with cheaper imports of LED and CFL bulbs, solar control window films, and bicycles. ICTSD estimated that these efficiencies would lead to increased savings of \$845 million per year. Overall, countries negotiating the EGA by and large already had low tariff rates on environmental goods, which correlates with stronger domestic environmental policies that encourage the production and use of environmental goods. Nevertheless, the EGA would support additional trade in environmental goods, particularly for specific products with higher tariffs, such as water heaters.

## *The Eleventh Hour: Why Negotiations Collapsed*

### **CHINESE DEMANDS**

According to experts interviewed for this project, the primary reasons for the collapse of EGA talks related to definitional differences, changing political factors among member states, and, from the onset of negotiations, a Chinese reluctance to conclude a deal. In December 2016, European Union trade commissioner Cecilia Malmström **cited challenges** in negotiating with China as the primary reason why negotiators were not able to conclude a deal. In the remaining days of the ministerial meeting, the Chinese surprised counterparts by presenting a **new list** of products for tariff reduction that substantially diverged from what had been previously discussed and expected. The Chinese list specifically removed gas turbines, certain electric motors, gas controls, and parts of polysilicon solar panels. These sudden Chinese demands

supported negotiators' suspicions that the Chinese had decided they did not want an agreement and that it designed objections in a way that was intended to torpedo talks. Furthermore, the Chinese negotiator at the time was Wang Shouwen, a vice minister. His leadership position in the talks, as opposed to the more senior Commerce Minister Gao Hucheng, led other countries' negotiators to question the seriousness of Chinese negotiation efforts.

In addition to redlining the working items list at the last minute, China also expressed pointed concern about freeriding. The plurilateral format of the EGA would have required that a critical mass of countries trading environmental goods participate in the agreement, which in turn would help mitigate concerns about freeriding. However, negotiators **could not agree** on where to set the threshold, as both 80 percent and 90 percent were proposed in draft documents. China, supportive of a 90 percent threshold, also proposed a **snapback mechanism**, meaning countries would be able to revert or "snap back" their tariff cuts if trade of covered products between EGA members dropped below 70 percent of global trade of those products and if at least 3 percent of global trade in the products covered belonged to a WTO member not party to the agreement. This mechanism likely targeted countries like India and Brazil, where domestic green industries are growing, but who did not engage in negotiations.

Tensions also emerged over proposed Chinese tariff phaseouts. Upon implementation, EGA members would be required to phase out tariffs on covered products. The United States **called** for the majority of tariffs to be eliminated upon entry into force with a capped number of tariffs phased out in three years, five years, and seven years, allocating only 25 percent of covered products into the longer seven-year category. The Chinese, however, **demand**ed that tariff relief occur for 40 percent of all covered products in five- and seven-year phaseouts. Furthermore, the Chinese proposal included special provisions for developing countries. Overall, these Chinese demands were not well received by other negotiators.

### **THE EUROPEAN UNION, CHINA, AND BICYCLES**

Underscoring many of the complexities at the heart of EGA negotiations, one of the most famous conflicts during EGA talks regarded the treatment of bicycles. All interviewees for this project immediately pointed to bicycles as the core issue that led to the collapse of talks—an issue that underscores other persistent areas of disagreement among negotiators. As a zero-carbon form of transportation, bicycles clearly constitute an environmental good. The EU domestic bicycle industry is robust. It **employs** 90,000 workers across 800 small and medium-sized enterprises (SMEs), largely **concentrated** in Portugal, Italy, Germany, Poland, and the Netherlands, which collectively accounted for 70 percent of total EU production in 2019. Issues surrounding bicycle dumping in Europe date to 1991, when the European Union first **initiated** an anti-dumping investigation against China following a complaint by the European Bicycle Manufacturers Association (EBMA). The European Union did ultimately conclude that China was dumping bicycles, and as a result, in 1993, the European Union **imposed** a 30.6 percent anti-dumping duty on bicycle imports from China. Since then, that duty has been **increased** to 48.5 percent in 2019, and it has been renewed until 2024. In other words, EU bicycle manufacturers have benefited from nearly 30 years of high tariffs and are loathe to let them go.

An EU Commission report **argues** that the EU bicycle industry would not have existed without anti-dumping duties, limiting the flexibility with which European negotiators could approach tariff reductions during EGA talks. Ultimately, EGA negotiators focused more on the components of bicycles, such as tires, tubes, chains, valves, and saddles, but complete, non-motorized bicycles were also included on the **proposed list**. Essentially tanking the negotiations, China proposed the inclusion of all bicycle components and complete bicycles. Australia, Switzerland, Israel, and Taiwan supported the inclusion of a variety of components,

while Switzerland also nominated whole bicycles. An EU negotiator stated that the European Union could potentially have been flexible on the bicycle issue, particularly regarding components, had the Chinese been willing to agree on other issues. However, from the Chinese perspective and according to interviewees for this project, the European refusal to designate bicycles as an environmental good amounted to veiled protectionism that significantly reduced their credibility and challenged the earnestness of European efforts to make progress on liberalizing environmental goods for the benefit of the climate. At the time that negotiations stalled, European Union trade commissioner Cecilia Malmström **stated** that bicycles had become “totemic” for China. Today, China is the world’s **largest manufacturer** of bicycles, meaning further tariff reductions could result in significant expansion into the EU market.

## **U.S. ELECTIONS**

Domestic politics in the United States also factored into negotiations. In early 2016, under a working assumption that Hillary Clinton would assume the presidency, the Chinese agreed to participate in negotiations, anticipating a continuation of the Obama administration’s policies. However, during the final negotiating rounds, President Obama was nearing the end of his term, and Hillary Clinton’s lead in the presidential election against Donald Trump was shrinking. In December 2016, observers **noted** that Chinese political positions shifted after the U.S. election as they sought to capitalize on what was largely regarded as a closing window to conclude negotiations. Between the 17th and final 18th round of negotiations, Donald Trump won the election, leading many negotiators in Geneva to conclude that, if not completely doomed, the window for negotiations was rapidly closing.

Based on his choice of advisers, as well as strong protectionist campaign rhetoric (Trump **regarded** efforts to fight climate change as “putting this country at a competitive disadvantage” and referred to climate change as a “hoax”), it was clear to those in Geneva that the incoming president had little appetite to engage in multilateral negotiations, let alone those centered on environmental and climate change mitigation goals. This abrupt political change was especially clear to the Chinese, who had no appetite for renegotiating a deal with the incoming administration, leading some experts to believe that the Chinese purposefully tanked negotiations to avoid having to renegotiate the terms with a new administration. Fears that talks would collapse escalated when the Trump administration assumed office. USTR Ambassador Lighthizer was not interested in negotiating plurilateral tariff cut arrangements, fearful of tariff reciprocity and freeriding among non-parties to the EGA. Furthermore, Lighthizer had long been skeptical about MFN and WTO tariff schedules, and so it was immediately clear to EGA negotiators that he would not restart plurilateral tariff negotiations. However, negotiators disagree about the extent to which China would have been a big winner in an EGA deal. Concerns about handing the Chinese a victory, even a limited one, have carried over from the Trump era to the Biden administration.

## **RENEGOTIATION LIMITATIONS**

As calls increase for the global trading community to restart EGA negotiations, it is important to note limits to what WTO member states are able to accomplish. First, it was and remains extremely difficult to define an environmental good. For example, while concrete can be an integral element of a carbon neutral building, concrete production has **deleterious effects** on the environment. As clearer climate definitions emerge within domestic climate policies, such as specific measurements of methane emissions or the carbon footprint of steel production, this could add pressure to negotiating member states to more clearly consider and define the environmental costs of goods under consideration. In turn, putting a carbon price on goods would likely lead to a drastic reformulation of the original list, setting talks back by several years. Furthermore, a significant outstanding question is whether environmental services should be included in the EGA negotiations. As the current meltdown of

[recycling supply chains](#) illustrates, lowering tariffs on environmental services, including recycling and repurposing, would help make renewable headway in key industries, from e-waste to methane collection. However, including environmental services in the next round of negotiations may not be worth the associated risk. Determining a list of environmental goods was laborious enough for negotiators, and adding services to the mix may invite further disagreement and slow a process that began over two decades ago.

Another complicating factor in negotiations is the 80 percent mandatory threshold. This requirement means that a critical mass of the world's largest economies—and therefore the countries with some of the most globally connected commercial ties—will need to participate. In other words, China's participation in negotiations for an MFN agreement is critical. Without China, negotiating parties cannot reach a critical mass. Similarly, the European Union and the United States are also necessary participants, although pursuing a closed plurilateral would obviate the need to meet this critical threshold. However, each country is approaching the EGA negotiations from places of self-interest, considering domestic political considerations that can be a major barrier to flexibility in negotiations, as the EU bicycle case makes clear.

Solar panels underscore just how complex renegotiating an agreement on environmental goods would be. For example, at face value, solar panels seem like low-hanging fruit; they clearly constitute an environmental good. Serious issues persist regarding the international trade of solar panels. In 2018, [30 percent tariffs](#) were applied to imported solar panels after the ITC found evidence of Chinese dumping. It is difficult to foresee a scenario in which the United States would agree to import tariff-free solar panels from China, particularly following extensive legal and political debates within the U.S. domestic legal system. This one persistent issue alone, which could potentially become the equivalent bicycles dispute in a new round of EGA negotiations, does not portend well for the EGA negotiations.

Another complicating factor is the domestic political pressure from coalitions in the United States. Environmental groups have historically opposed trade deals of any kind, regardless of their environmental chapters and clauses. During Trans-Pacific Partnership (TPP) talks, environmental groups were extremely reluctant to endorse the TPP publicly, despite the inclusion of a state-of-the-art environmental chapter. Similarly, when the North American Free Trade Agreement (NAFTA) renegotiations launched, environmental nongovernmental organizations were quick to dismiss the agreement as environmentally harmful and did not endorse the final United States-Mexico-Canada Agreement (USMCA), despite the inclusion of a relatively strong environmental chapter. While the Trump administration disregarded the views of environmentalists, the Biden administration is sympathetic to environmentalist policy preferences and would likely be reluctant to support an agreement that did not meet their approval, potentially complicating an EGA renegotiation.

## *Where EGA Negotiations Stand*

### **ROOM FOR OPTIMISM**

Despite these obstacles, there is room for optimism when it comes to the potential to jumpstart negotiations. Within the global trading system, there is an urgent desire to demonstrate the relevance of the WTO, where a lack of political will has stymied meaningful action. Facilitating the conclusion of a deal on environmental goods would demonstrate to the global community that the WTO is relevant and capable of fulfilling its core duty of liberalizing trade. Furthermore, concluding a deal on environmental goods would lend credibility to the WTO as an institution attuned to global needs, particularly as trade skeptics point to globalization as having facilitated an environmental race to the bottom. In addition, the growing

body of scientific evidence on the human-made causes of climate change, as well as the increasing number of extreme weather events visible worldwide, has lent urgency to the cause of climate change mitigation. An EGA would only be a small step, but it would be an important one to reaffirm the value of the WTO and its ability to address current issues.

Compared with the EGA, other ongoing environmental discussions within the WTO are orders of magnitude more complex. For example, there is a growing appetite to discuss environmentally harmful subsidies at the WTO, an effort New Zealand is leading. The United Kingdom, Iceland, and Switzerland have also explicitly mentioned environmentally harmful subsidies. While creating binding WTO rules to deal with environmentally harmful subsidies would fine-tune otherwise broad commitments from APEC and the G20, these talks are more complex than relatively simple tariff reductions on a list of goods. Eliminating fossil fuels or agricultural subsidies promises to be a historically contentious issue. Overall, proposals like the European Carbon Border Adjustment Mechanism (CBAM) or U.S. procurement related to the domestic climate agenda [underscore](#) both the global appetite for fighting climate change but also the complexities of achieving these goals within existing multilateral legal frameworks.

By comparison, other environmental initiatives under consideration among specific member states make the EGA seem simple and, therefore, easier to achieve. For example, the European Union's CBAM proposal has invited considerable backlash from the global trading community, which regards it as an essentially protectionist policy that would shield European manufacturers against cheaper foreign imports. As currently proposed, the CBAM seeks to apply a carbon border tax on imports by sector, targeting cement, iron and steel, aluminum, fertilizers, and electricity. Implementing this proposal in a way that is consistent with WTO nondiscrimination rules is already proving to be a headache for the European Union, whose allies and adversaries alike are preparing WTO litigation strategies. On the United States' side, the Biden administration's ambitious climate proposals, coupled with increased content requirements under "Buy American," could also encounter resistance within the WTO for violation of subsidy rules.

Recent domestic policies among WTO members, such as the European Union's CBAM and Chinese emissions trading system (ETS), [underscore](#) the growing need for a comprehensive, multilateral approach to climate change. A core competency of the WTO is to facilitate multilateralism and prevent new trade barriers. The recognition that climate change requires a globally coordinated effort is reflected in ongoing plurilateral discussions within the WTO. There are currently 18 participants representing 46 WTO members negotiating on tariff eliminations for environmental goods, but most participants are from developed countries. China, Turkey, and Costa Rica are the only participating countries from developing countries, and no African countries are participating. In an additional indication that talks could potentially move forward, the trade and environmental sustainability structured discussions (TESSD) consists of 53 WTO members, who are working to [make progress](#) on environmental measures at the WTO, including on environmental goods, ahead of the November 2021 12th Ministerial Conference (MC12). Furthermore, the success of the agreement in APEC demonstrates that multilateral environmental trade agreements can be concluded. In 2021, following the addition of Indonesia, there are 19 APEC members who are fully compliant with the environmental goods provisions. The executive director of the APEC Secretariat [hailed](#) APEC's environmental goods list as "one of APEC's significant success stories."

In addition to the international consensus around the need to fight climate change, U.S. reengagement in multilateralism could potentially help jumpstart EGA negotiations. In April 2021, President Biden [convened](#) 40 world leaders at the Leaders Summit on Climate, which sought multilateral reengagement

on combating climate change. Calls to resume EGA negotiations are supported by the likes of the U.S. Chamber of Commerce, a group that has historically been slow to endorse major climate change mitigation policies. Overall, the relative simplicity of an agreement on environmental goods tariffs, together with a global consensus on the need to combat climate change, and the desire for multilateral engagement indicate that there is room for optimism regarding a potential renegotiation.

### **A DOSE OF REALITY**

Despite a growing urgency to combat climate change and WTO member states' recognition that trade policies can play an integral role in bringing about positive environmental change, there are several outstanding issues that make the renewal of EGA negotiations difficult, primarily the definitional problems, Chinese reluctance to engage earnestly, a lack of urgency from the United States, and the limited scope of EGA negotiations, all described above. First, definitional problems surrounding environmental goods still persist. It is unlikely that negotiating parties with wide differences would easily reconcile those differences in renewed rounds of negotiations. For example, it is difficult to envision a scenario where China and the United States agree to eliminate tariffs on solar panels, but an EGA that does not cover solar panels would likely face credibility questions. An agreement to eliminate normal duties but where countries would retain the right to impose anti-dumping/countervailing duties in the event of unfair trade practices would address the problem from a trade perspective, but it would leave solar panels more expensive and thus deter growth in their installation.

Many of the same definitional issues would carry over from the last round of negotiations, but other, newer technologies could further complicate a consensus on environmental definitions. EVs, for example, are becoming much more common than they were during the previous negotiations. Excluding EV component parts from the environmental goods list would reduce EGA significance. At the same time, it is understandable that certain component parts, such as lithium batteries, may not be regarded as particularly environmental, especially among human rights and environmental groups.

*There are several outstanding issues that make the renewal of EGA negotiations difficult, primarily the definitional problems, Chinese reluctance to engage earnestly, a lack of urgency from the United States, and the limited scope of EGA negotiations.*

Another problem relates to long-standing geopolitical fissures. As recent cases demonstrate at both the bilateral and multilateral levels, China is in no hurry to work with the European Union or the United States within the international trading system. The global community is still dealing with Chinese overcapacity, as demonstrated by the reluctance of the Biden administration to remove several of the Trump era tariffs. China's likely failure to fulfill its Phase One trade purchase obligations also underscores its patchy record of following through on international commitments. Within the WTO, China faces other persistent criticisms, including fundamental questions about whether its economy is market-driven. As Wall Street Journal trade reporter Jacob Schlesinger [wrote](#), "China swallowed the WTO." The prevalence of this sentiment further throws into question the ability of the WTO to play its role as an arbiter of trade disputes. Nevertheless, it remains in both the short-term and long-term interests of China and the United States to demonstrate to the international community that they are capable of earnest negotiations that would help solve a global commons problem. It would also demonstrate a mutual commitment to using a multilateral forum to resolve disputes. In other words, difficult as it may be, renegotiating the EGA would add diplomatic credibility to both countries, while demonstrating a clear desire to rehabilitate a gridlocked international organization.

Another major problem is that the United States does not appear to be in any hurry to conclude any trade agreements. The Biden Administration and USTR in particular are sensitive to political pressure coming from the more progressive members of the Democratic party as well as organized labor. While negotiating a trade commitment with climate change mitigation as a central goal would assuage some fears among the progressive left, experts interviewed for this paper emphasized that the Biden administration appears reluctant to move to jumpstart EGA negotiations.

Finally, it may be that negotiating tariff reductions on environmental goods is simply not worth the effort it would require. APEC commitments were **MFN-tariff reductions and voluntary**. Therefore, countries outside of APEC benefitted when APEC members reduced tariff rates, but APEC countries were not required to act. This voluntary status ensured that the APEC agreement would not violate existing WTO rules. Most countries have **reduced** their tariffs accordingly. However, tariffs on the 54 items were generally already quite low among APEC countries. If every country **implemented** the agreement and set tariffs at no more than 5 percent, the overall simple average tariff would be 1.8 percent, a small difference from the average prior to implementation. Certainly, there are individual products that would benefit from full implementation. China still **maintains** a 10 percent tariff on certain waste incinerators, though they excuse this through an ex-out. However, the political importance of the APEC agreement is significant. The APEC agreement served as a springboard for EGA negotiations, which would be binding and cover far more products. It also serves as proof that major countries like the United States and China can negotiate and reach a successful outcome on environmental issues.

### *A Roadmap for a Restart*

To jumpstart talks, the United States can lead by adding a fresh perspective and new momentum that bridges the Biden administration's agenda of protecting workers and climate alike. However, a fresh agreement means the United States and its global partners cannot simply pick up where negotiations left off. If the EGA negotiations are to hold any promise, the definitions and processes surrounding them merit a fundamental re-imagination. If nothing else, WTO member states have proven exceptionally creative at finding ways to do what they want, and so member states should apply that same creativity to environmental goods.

First, the United States should lead by proposing a new framework for negotiations that avoids many of the pitfalls of previous approaches to defining environmental goods. This new framework would focus on the primary drivers of climate change and seek to liberalize goods that play a direct role in combating climate change. Today, the top contributors to global greenhouse gas (GHG) emissions are, from most to least emitting: 1) energy use in industry, 2) agriculture, forestry, and land use, 3) energy use in buildings, 4) energy use in transport, and 5) other categories, such as fugitive emissions. The international community should begin by negotiating an agreement to liberalize goods with specific capabilities to tackle these top five emissions categories. By no means exhaustive, the below table suggests HTS items for negotiators to consider under this framework. The table below suggests that negotiators begin with five goods for each of the five top contributing categories of global GHG emissions. In general, these categories would have direct impacts on climate change mitigation, such as filtering air pollution on an industrial scale or treating contaminated water. Many, but not all, of these goods were included on previous WTO and APEC lists, though new items have been added to account for changes in technology. Among these items previously negotiated, preference was given to those where there was a relatively broad consensus on the need to reduce tariffs, for example, items on which the European Union, Canada, Japan, and United States had previously agreed. This table provides a working list of goods likely to achieve international consensus while demonstrating that the core goal of the negotiation is climate-focused, which should move the needle on domestic politics.

## ENERGY USE IN INDUSTRY: 24.2 PERCENT

Energy use in industry accounts for roughly 24.2 percent of global GHG emissions. This includes more targeted categories, such as iron and steel, which together account for 7.2 percent of GHG emissions. This category also covers smaller sectors, such as food and tobacco, machinery, and paper and pulp production.

### EXAMPLE GOODS

1. **HTS 3507.90** – Enzymes used in CO<sub>2</sub> capture
2. **HTS 3907.99** – Bioplastics
3. **HTS 8406.81** – Geothermal turbines
4. **HTS 8501.61** – Electric motors and engines used in renewable energy plants
5. **HTS 8504.40** – Electric transformers and static converters used to convert renewable to conventional energy

### BENEFITS

Liberalizing trade of these goods would play a crucial role in driving down emissions from energy use in industry. Enzymatic CO<sub>2</sub> capture allows for the low-cost capture of CO<sub>2</sub> from stationary emissions sources, such as oil production operations, and can also be used for soil bio-remediation and biological treatment of wastewater. Steam turbines can be used for co-generation, which allows for more effective use of energy than conventional generation.

## AGRICULTURE, FORESTRY, AND LAND USE: 18.4 PERCENT

Together, agriculture, forestry, and land use account for 18.4 percent of GHG emissions. The largest emitting subcategory is livestock and manure, which accounts for 5.8 percent of GHG emissions. Agricultural soils emit 4.1 percent of GHG emissions, whereas crop burning emits 3.5 percent of emissions. Deforestation is responsible for 2.2 percent of global emissions, while cropland accounts for 1.4 percent and rice cultivation accounts for 1.3 percent.

### EXAMPLE GOODS

1. **HTS 3101.00** – Organic fertilizers
2. **HTS 4601.21** – Mats and matting screens of vegetable materials and bamboo to prevent erosion and protect soil
3. **HTS 4418.72** – Builders' wood (bamboo)
4. **HTS 9015.80** – Tools to measure and monitor the climate (ozone layer, tsunamis, natural risks planning, and others)
5. **HTS 8418.61** – Refrigerators, freezers, and food storage equipment with non-HFC refrigerants, such as CO<sub>2</sub>

### BENEFITS



Reducing waste, increasing ecosystem resiliency, and shifting agricultural practices can help reduce the amount of GHG emissions generated by agriculture, forestry, and land use. These suggested HTS codes would help fortify soil, reduce CO<sub>2</sub> from commercial refrigeration, and liberalize the trade of climate measurement instruments.

### **ENERGY USE IN BUILDINGS: 17.5 PERCENT**

Energy use in buildings accounts for roughly 17.5 percent of global GHG emissions. This percentage includes both commercial buildings, which account for 6.6 percent of GHG emissions, as well as residential buildings, which account for 10.9 percent of GHG emissions.

#### **EXAMPLE GOODS**

1. **HTS 6806.10** – Slag wool used for insulation, including in buildings
2. **HTS 8402.12** – Steam boilers and heat recovery steam generators
3. **HTS 4505.10** – Agglomerated cork used for building insulation
4. **HTS 9031.90** – Thermostats that assist in automatic regulation

#### **BENEFITS**

As the climate warms and cooling systems become more prevalent, it is important to reduce tariffs on items that play key roles in enhancing building efficiency, whether through retrofitting or building new construction. In addition to reducing tariffs on items such as insulation and LED lightbulbs, prioritizing high-tech items that help optimize energy, such as AI-powered HVAC control systems, will reduce emissions from residential and commercial buildings alike.

### **ENERGY USE IN TRANSPORT: 16.2 PERCENT**

Energy use in transport accounts for 16.2 percent of GHG emissions. The highest GHG emitting subcategory of transport is road transport, which accounts for 11.9 percent of GHG emissions. Aviation accounts for 1.9 percent of GHG emissions, whereas shipping is responsible for roughly 1.7 percent. Rail and pipelines respectively account for 0.4 percent and 0.3 percent of GHG emissions.

#### **EXAMPLE GOODS**

1. **HTS 8407.90** – Spark ignition engines that use waste heat
2. **HTS 8507.80** – Electric accumulators used in wind and solar
3. **HTS 9032.81** – Automatic voltage and current regulators with smart grid applications
4. **HTS 9026.10** – Instruments for measuring airflow, including indoor air pollution
5. **HTS 8608.00** – Railway and tramway fixtures

#### **BENEFITS**

As countries around the world rethink their public infrastructure amid a changing climate, liberalizing the trade of biogas engines, railway track fixtures, and sodium-sulfur batteries will affect transportation and electric grids alike.

### **OTHER: 18.5 PERCENT**

Remaining miscellaneous categories represent 18.5 percent of GHG emissions. Unallocated fuel combustion represents 7.8 percent of GHG emissions, and fugitive emissions from energy production account for 5.8 percent of emissions. Energy in agriculture and fishing is responsible for 1.7 percent of GHG emissions, while landfills and wastewater contribute 1.9 percent and 1.3 percent, respectively, to emissions.

#### **EXAMPLE GOODS**

1. **HTS 3802.10** – Activated caron for air and water purification
2. **HTS 8421.21** – Centrifuges to prevent toxic waste from entering air and water streams
3. **HTS 8419.60** – Machinery to remove pollutants from air and water
4. **HTS 8419.50** – Machinery to remove pollutants via condensation
5. **HTS 9013.90** – Instruments for measuring the climate, including natural disasters, anthropogenic change, and pollution

#### **BENEFITS**

As pollution is increasingly linked with climate change, countries should work to liberalize goods that eliminate impurities, filter out pollution, monitor oceans, and create a cleaner and less toxic environment.

### **INDUSTRY (CHEMICALS AND CEMENT): 5.2 PERCENT**

Together, chemicals and cement account for 5.2 percent of GHG emissions. Cement on its own is responsible for 3 percent of global GHG emissions, while chemicals account for 2.2 percent of emissions.

#### **EXAMPLE GOODS**

1. **HTS 3920.10** – Plates to line landfills to prevent contaminating water sources and to reinforce soil
2. **HTS 8514.20** – Furnaces and ovens to destroy hazardous wastes
3. **HTS 8479.82** – Machines for carbon sequestration and soil remediation
4. **HTS 3802.10** – Activated carbon for pollution purification
5. **HTS 8483.60** – Transmission shafts to prevent leakages

#### **BENEFITS**

The production of chemicals and cement emits GHG and can have other negative environmental impacts. Countries should work to liberalize trade in goods that can reduce the amount of waste produced from the chemical and cement industries, monitor and mitigate chemical runoff, and support carbon sequestration in cement.

Source: Hannah Ritchie and Max Roser, “CO<sub>2</sub> and Greenhouse Gas Emissions,” published online at OurWorldInData.org, 2020, <https://our-worldindata.org/co2-and-other-greenhouse-gas-emissions>; “Harmonized Tariff Schedule (2021 Basic Revision 8),” U.S. International Trade Commission, <https://hts.usitc.gov/>.

It is important to note two limitations to this list. First, it is not exhaustive and would be subject to fine-tuning by individual governments and their trade negotiators. Since 6-digit HTS codes are standardized globally and can be further specified via ex-outs, this path seeks to avoid additional problems that may arise from having to coordinate additional specifications relating to HTS codes. However, by limiting the scope of goods covered to a simple number of 30, this proposal lowers the bar for success among negotiators since the total number of goods covered would be significantly less than the items covered under the APEC agreement at the same it refocuses attention on items that would have climate-mitigating impacts. Beginning with a more limited number of items, which exclude some of the more controversial items on previous lists, should help move the negotiations forward.

Second, the table relies on six-digit HTS codes, which offers some benefits and some drawbacks. Six-digit HTS codes are broad categories, meaning a deal to liberalize tariffs on a six-digit code would encompass a greater number of goods than a more specific HTS number, such as a 10- or 12-digit code. If the goal of an agreement is to liberalize tariffs on as many goods as possible—especially if operating under the already stricter parameters suggested in this paper—then pursuing a six-digit code for negotiations would be both simplest and cover the greatest number of goods. However, relying on six-digit codes leaves negotiators to deal with ex-outs. Ex-outs for HTS codes further specify which goods within each HS-6 category would be treated as environmental and therefore subject to the tariff reductions under the final agreement. For example, the table includes HTS code 4418.72 for joinery and carpentry wood. It would be the task of government officials and negotiators to further specify relevant ex-outs, which in this case could include bamboo products since bamboo is more environmentally friendly than wood harvested from old-growth forests. In other words, by including bamboo as an ex-out, negotiators would agree only to liberalize tariffs on bamboo wood products and not those wood products designated as more environmentally harmful. Since ex-outs are not always the most efficient way to identify environmental goods within broader HTS codes, the HTS system should be updated to better reflect new technologies so that, for example, EVs and gas vehicles have their own 6-digit HTS line to better facilitate tariff applications. Additionally, if talks are launched using six-digit codes as basic framework, negotiators should work toward further specification and aim to conclude a deal with greater specificity, for example using 10-digit HTS codes, which would obviate the need to negotiate ex-outs. In other words, this approach provides diplomatic latitude in the initial stages of negotiations but encourages negotiators to seek further specificity in ensuing rounds. While far from encyclopedic, this table seeks to recalibrate the approach to what is considered an environmental good.

## *A New Framework*

There are several benefits of this new framework. First, it would reinvigorate the EGA discussion by putting direct climate change mitigation at the forefront of multilateral trade policy objectives. The world is running out of time. The global [carbon clock](#), which measures how long humans have before the amount of CO<sub>2</sub> in the atmosphere causes ecological collapse, serves as a constant call to action: the international community must act swiftly within every existing multilateral framework to combat climate change. While the WTO is

not a forum focused explicitly on climate policy, it can still play an integral role in helping countries speed up their respective climate agendas, and an agreement on environmental goods would represent a tangible step in the right direction. According to the [WTO](#), “Freer trade is not an end in itself; it is tied to crucially important human values and welfare goals . . . Among these goals are raising standards of living, optimal use of the world’s resources in accordance with the objective of sustainable development, and protection and preservation of the environment.” Concluding a deal on environmental goods—specifically those with direct roles in reducing pollution and fighting climate change—would help member states maximize the existing WTO toolbox for international trade.

Second, this new framework offers countries a workaround to some of the topics that sank previous negotiations. For example, the deployment of bicycles, even on an industrial scale, is not going to capture carbon or industrial fugitive emissions. Producing and using more bicycles may help society reduce emissions over time, but it would be far too little to put the international community on the right path. Instead, negotiators should start with a list of items that is aimed at mitigating climate change on an industrial scale. This table also explicitly avoids other goods that are likely to slow or imperil negotiations from the start, such as lithium-ion batteries or solar panel components. Those individual goods are already the subject of fierce debate bilaterally and multilaterally, and it would be a mistake for negotiators to lump those goods in with a set of other goods that could have an immediate positive impact on combating climate change. Furthermore, like bicycles, the large-scale deployment of solar panels is laudable but unlikely to have a major mitigation effect in the immediate term unless it can be achieved on an industrial scale (akin to nearly [8 billion](#) solar panels in the United States alone). Furthermore, the installation of new solar panels on an industrial scale would need to result in the closure or phasing out of fossil fuel production facilities such as coal plants.

Third, there are increasing calls to measure goods traded through their carbon content or carbon footprint, akin to what is outlined in the European Union’s CBAM, which takes a sectoral approach to measuring carbon. However, there is currently no agreed-upon international framework or universal standard by which to measure carbon content. Bicycles, for example, consist largely of steel and aluminum, and therefore account for at least some greenhouse gas emissions during manufacturing and transport. Realizing the complexities of measuring carbon content and carbon footprints, the structure this paper proposes for negotiations obviates the need to measure carbon content by only including goods on the list that are deemed to have a direct effect on mitigating climate change.

Fourth, this framework does not necessarily represent massive tariff cuts to environmental goods, which also lowers the bar for negotiators. Most of the proposed HTS codes already have low average tariffs. HTS Code 8608.00 covering certain railway components [had](#) an average tariff in EGA negotiating countries in 2020 of 2.2 percent, but South Korea’s tariff is 8 percent. HTS Code 9013.90 covering certain oceanography monitoring equipment had an average tariff of 0.9 percent, but the United States maintained a tariff of 5.1 percent in 2020. HTS Code 8407.90 covers biogas heaters and had an average applied tariff of 2.2 percent, but China maintained a 14 percent tariff. Harmonizing these tariff rates and reducing already low tariffs to zero is a critical step in liberalizing the trade of environmental goods.

In terms of structuring negotiations, there is debate over whether a plurilateral or multilateral agreement would be the best approach. A plurilateral agreement would reduce the possibility of free-riding; it would be more easily reached and faster to conclude; and it would incentivize others to join over time. The costs of a plurilateral agreement are that a smaller number of countries would participate; others may be slow to join; and the overall impact on climate change mitigation would be smaller since there would be fewer participating member states at the outset. Therefore, a plurilateral approach would likely mean more limited progress on climate than a multilateral agreement.

## *Realizing the complexities of measuring carbon content and carbon footprints, the structure this paper proposes for negotiations obviates the need to measure carbon content by only including goods on the list that are deemed to have a direct effect on mitigating climate change.*

The central risk of a multilateral agreement, on the other hand, is increased free-riding since liberalization benefits would extend to all WTO members. However, a multilateral agreement would involve a larger number of member states, and China would need to participate in order to meet any likely minimum threshold. A multilateral agreement's main benefit is that it would include more participants, which would mean a greater impact on the climate, even though the list of covered goods would be shorter than in the previous negotiation.

In addition to recalibrating the structure and definitions at the heart of EGA negotiations, the United States should pursue other means of moving the negotiations forward. First, it should pursue a multilateral agreement on environmental goods. If an agreement were not reached in two years, the United States would lead a shift to a plurilateral format among like-minded countries with an interest in the swift conclusion of a deal. This initial step favors a big tent approach that leads to more trade liberalization, which would have a greater impact on climate change mitigation. However, given the higher risk of failure that multilateral negotiations pose, as well as the possibility that negotiations would drag on interminably, the recommendation leaves open the alternative of switching to a plurilateral agreement if a predetermined deadline is not met.

Second, the United States should insist the tariff reductions apply to normal duties, but governments should be allowed to retain their right to impose anti-dumping and countervailing duties or take safeguard actions consistent with WTO rules. This was already the case with original EGA negotiations, but explicitly building in these protections would signal a commitment to liberalize trade in environmental goods, while explicitly upholding trade laws.

Third, the United States should accept the 80 percent critical threshold and the Chinese snapback at 70 percent but provide no special exceptions for developing countries. A threshold of 80 percent would allow negotiating countries to pursue a deal without having to meet an arbitrarily high standard of goods traded, which may otherwise mean that certain countries, such as India, would need to participate. Agreeing to the snapback provision would serve as a concession to the Chinese, while simultaneously building in protections for U.S.-produced goods. However, since China still receives developing country status at the WTO, the United States should work to ensure that the agreement contains no special exceptions for developing countries in order to ensure China must meet the same commitments as developed nations.

Fourth, the United States should abandon the ITA structure for phasing-in tariff reductions and provide for all tariffs going to zero immediately upon entry into force of the agreement. Climate change is an existential threat, and an immediate reduction of tariffs would hasten the deployment of climate change mitigating technologies. Furthermore, such an arrangement would signal to the world that the WTO is an international forum capable of producing agreements that have an immediate impact.

## *Conclusion*

Climate policy and the multilateral trading system both need a creative revitalization to show that they are capable of addressing the twenty-first century's most pressing problem. While jumpstarting EGA negotiations

is not the most significant action nations could take, it nevertheless would add credibility to international actors as well as the trading system itself. A new EGA will increase efficiency and resiliency by helping countries exchange goods and technologies vital to efforts to combat climate change. Furthermore, China and the United States have clear political motivations to conclude an environmental goods deal. Both are significantly behind the European Union when it comes to climate progress, and reaching a deal, however limited in scope, would add momentum to global efforts to mitigate climate change. On the U.S. side, committing to an agreement on environmental goods would also demonstrate that the country is back and reengaging in earnest with the multilateral system—a core goal of the Biden administration.

Despite the need for progress on a new agreement on environmental goods, many of the experts interviewed for this project discounted the idea that new EGA negotiations were feasible and that a deal could be concluded. In large part, this opinion was based on the assumption that concluding new trade agreements is a bottom-tier priority for the Biden administration and that it would remain very challenging for the United States and China to reach even a limited agreement in the near future. While experts expressed skepticism about whether a new EGA could be concluded, many of them, including key negotiators present during initial negotiations, were not prepared to surrender. Trade experts view an environmental goods agreement as a win-win-win for trade, the environment, and development, and many of them expressed a sincere desire that countries launch renegotiations immediately. Indeed, if the end goal is to demonstrate both the aptitude of the WTO for tackling the nexus of trade and climate issues—while simultaneously combating climate change itself—the international community should agree to restart negotiations.

*Climate policy and the multilateral trading system both need a creative revitalization to show that they are capable of addressing the twenty-first century's most pressing problem.*

The administration's reluctance to pursue a new EGA directly conflicts with its agenda to improve global quality of life, combat climate change, grow the domestic economy, and reengage with multilateral partners. Hopefully, the new framework proposed here will put direct climate change mitigation at the forefront of multilateral trade policy objectives and offer member states a viable path to circumvent some of the topics that sank previous negotiations. The proposed framework also avoids some of the drawbacks that result from other methods of defining environmental goods, including classifying goods according to their carbon intensity. Altogether, this new framework, which is more limited and targeted in scope, offers a viable starting point for member states to rethink their entrenched views on a potential agreement on environmental goods. Once this base level liberalization of goods is completed, countries should then work to reach a second agreement on non-tariff barriers and environmental services and to expand the tariff coverage of the first one. A small but consequential multilateral agreement—one that includes the European Union, China, and the United States—would demonstrate that the diplomatic toolbox isn't rusty—it just needs a revitalized approach. ■

**William A. Reinsch** holds the Scholl Chair in International Business at the Center for Strategic and International Studies (CSIS) in Washington, D.C. **Emily Benson** is an associate fellow with the CSIS Scholl Chair in International Business. **Catherine Puga** was an intern with the CSIS Scholl Chair in International Business.

*This report is made possible with generous funding from the Hewlett Foundation.*

**This report is produced by the Center for Strategic and International Studies (CSIS), a private, tax-exempt institution focusing on international public policy issues. Its research is nonpartisan and nonproprietary. CSIS does not take specific policy positions. Accordingly, all views, positions, and conclusions expressed in this publication should be understood to be solely those of the author(s).**

**© 2021 by the Center for Strategic and International Studies. All rights reserved.**