

## Global Challenges at the Intersection of Trade, Energy and the Environment

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# The liberalisation of EGS trade and the need for a distinct EGSA<sup>1</sup>

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## **The Liberalization of EGS Trade and the Need for a Distinct EGSA**

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### **Introduction**

As nations throughout the world become more focused on reducing carbon emissions and increasing the amount of energy produced from renewable sources, global trade in these environmental goods and services (EGS) will play a critical role. In anticipation of December's United Nations Framework Convention on Climate Change (UNFCCC) meeting in Copenhagen, countries are debating goals for carbon emission reduction as well as the means to achieve these goals. Furthermore, governments are in the process of enacting policies that are intended to facilitate the adoption of clean energy technologies. Ultimately these incentives will achieve the greatest deployment of low-emission technologies when they make investment in such projects profitable compared with alternatives. Measures that increase the cost or slow the implementation of clean energy projects therefore actually exacerbate an existing financial disadvantage faced by such projects and inhibit the realization of the fundamental policy goals governments are pursuing. Yet, many WTO member states continue to retain or are planning to enact trade-restricting barriers and tariffs for cleaner energy EGS. This amounts to simultaneously taking one step forward and one step backwards.

Amid the worst and farthest-reaching global recession since the Great Depression, the deployment of renewable energy, energy efficiency, carbon capture and storage, and other environmental goods and services creates an opportunity to stimulate domestic economies and global commerce through the creation of new industries. Economic growth and greenhouse gas (GHG) reduction can be achieved simultaneously, but only with sound policies that promote trade and remove onerous restrictions.

To seize the momentum and provide a trade-related contribution to fight climate change, it is time for governments to make a firm commitment to reducing the costs they impose on EGS. An environmental goods and services agreement (EGSA) modeled on the Information Technology Agreements offers a vehicle for such a contribution. An EGSA would demonstrate practical resolve on trade-related environmental issues, while also creating progress on general trade liberalization. Some may argue that a free-standing EGSA would undermine the Doha Round, but it makes little sense to delay action on climate-change-related cost reduction.

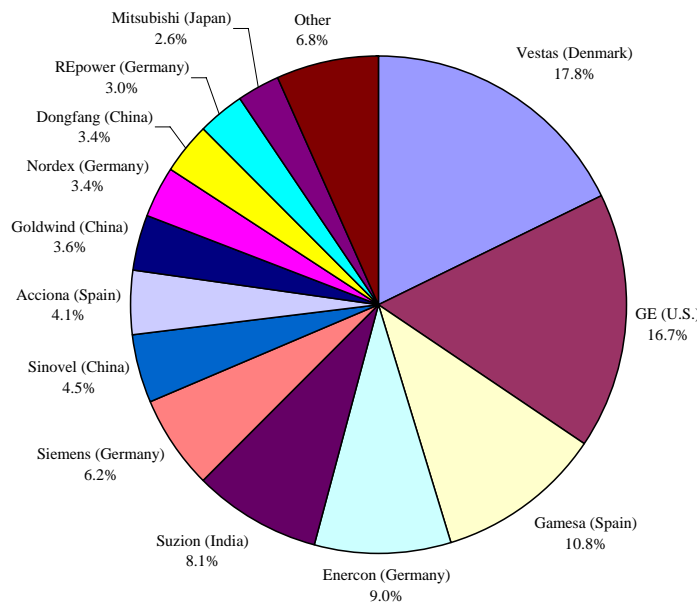
The Doha Round is critical for further liberalization of the global economy and will significantly benefit emerging economies. However, a distinct EGSA would allow for discussions on environmentally sound trade to continue without being hampered by other issues that currently lack support among WTO members.

This paper will focus on low-emission energy products, particularly wind turbines (with some facts on other low-emission technologies), to provide examples of trade restrictive tariffs and non-tariff barriers being imposed by governments.

**Tariffs**

According to the U.S. International Trade Commission (USITC), five nations (Denmark, Germany, India, Japan and Spain) exported a combined 91% of wind turbines in 2008. Illustrated in the graph below, more than 93% of wind turbine production is concentrated among firms based in seven nations: Denmark, U.S., Spain, Germany, India, China and Japan.

Major Wind Turbine Manufacturers Market Share in 2008, by OEM



Source: USITC, "Wind Turbines: Industry & Trade Summary," June 2009. p. 3

The concentration of wind turbine production reflects the benefits of economies of scale and learning inherent in the manufacture of sophisticated, technology-intensive products. This does not mean wind turbine production will not expand to additional countries – in fact, such expansion is occurring. However it does indicate how counterproductive it is to maintain or create tariff barriers.

As of July 2009, a majority of WTO member states still impose tariffs on wind turbines, solar panels and large gas turbines (> 5 MW). For wind turbines, tariffs are levied by nearly 60% (91 of 153) of the countries, with a mean tariff of 7.4%. Solar panels have a tariff in nearly 43% (65 of 153) of the countries, with a mean tariff of 8.8%. Large gas turbines face tariffs in more than 55% of the countries (85 of 153), with a mean tariff of 6.6%. With manufacturers fighting to reduce costs and make low-emission energy competitive with less environmentally friendly

alternatives, it is difficult to justify the government imposition of these additional tariff costs. The tables below are sample schedules of applied tariffs on these three classes of EGS.

#### Applied Wind Turbine Tariffs in 2009

<b>Wind Turbine Tariffs</b>	
Brazil	14.0%
Mexico	10.0%
China	8.0%
S. Korea	8.0%
India	7.5%
Russia	5.0%
U.A.E.	5.0%
E.U.	2.7%
U.S.	1.3%

Source: World Trade Organization, "Tariff Download Facility." HS Code: 850231. Accessed online, 24 September 2009.

#### Applied Solar Panel Tariffs in 2009

<b>Solar Panel Tariffs</b>	
Russia	20.0%
India	15.0%
U.A.E.	5.0%
Columbia	5.0%
Brazil	3.8%

Source: World Trade Organization, "Tariff Download Facility." HS Code: 854140. Accessed online, 24 September 2009.

#### Applied Large Gas Turbine Tariffs (> 5 MW) in 2009

<b>Gas Turbine Tariffs</b>	
Nigeria	10.0%
Russia	10.0%
India	7.5%
S. Korea	6.3%
Canada	4.8%
E.U.	4.1%
China	3.0%
U.S.	1.3%

Source: World Trade Organization, "Tariff Download Facility." HS Code: 841182. Accessed online, 16 October 2009.

Brazil recently raised its applied tariff on certain wind turbines (< 2 MW) from 0% to 14% in advance of a major auction process for a wind farm project. Originally, the government sought to ban the importation of these turbines but shelved those plans after recognizing that such action would breach its WTO obligations.

The rapidly growing volume of EGS trade means that the total value of tariffs imposed is becoming quite significant. In 2008 trade in wind turbines and wind turbine parts reached nearly \$6.6 billion, from \$1.4 billion in 2003. The removal of these and other EGS-related tariffs by a critical mass of countries would send a strong signal: WTO nations are ready to address climate change and the increased need for cleaner energy, while remaining committed to the liberalization of global trade.

### Non-Tariff Barriers

In addition to tariffs, non-tariff barriers (NTBs) can serve as impediments to trade and are often even more destructive to greenhouse gas reduction goals and worldwide economic recovery than traditional tariffs. These barriers can take several forms: import bans, local content regulations, preferential contract bidding for domestic firms, restrictive technical standards, and government procurement restrictions, among others. Amid the global recession, many nations have instituted new NTBs. The table below highlights three recent NTBs in China, Canada and the U.S.

#### Recent Global NTBs

<u>Country</u>	<u>NTB Type</u>
China	Government procurement; preferential contract bidding; "Buy Chinese"
Canada	Local content restrictions; Quebec and Ontario
U.S.	Government procurement; "Buy American"

*Source: News releases and legislative records.*

### China

China represents both a great opportunity, because of the country's need to find alternatives to traditional coal-fired power, and a competitive challenge in the field of environmentally friendly power generation products. The Chinese government announced a \$586 billion stimulus package in November 2008 to shore up the nation's economy, but included a government procurement restriction. Dubbed the "Buy Chinese" policy, the stimulus mandated that "government investment projects should buy domestically made products unless they cannot be obtained in reasonable commercial conditions in China." At the same time, China has designated "Independent Innovation Products" and provides special procurement preferences for those products.

In June 2009, no foreign-owned wind turbine supplier was selected in a \$7 billion wind turbine competition. Fundamental factors such as life cycle cost and investment rate of return were not considered in the evaluation process. According to the Chinese Wind Energy Association, only 24% of newly installed capacity in 2008 was sourced from abroad.

#### Canada

The Canadian province of Quebec applied a local content requirement for wind turbines in 2007, and Ontario may replicate the policy this year. The Quebec policy mandates that at least 60% of wind turbine development costs must be incurred locally in Quebec. In addition to being a difficult metric to track, concentrating development costs in a single province may lead to increased energy prices due to the reduced pool of suppliers and engineers.

Ontario passed its Green Energy Act in June 2009 and one of the provisions that is currently being finalized is the local content restriction. Foreign governments and corporations have requested it be limited to 10-15%, but some politicians in Ontario have called for a 60% level, analogous to Quebec. Analysts have already said that a stringent local content restriction can harm the economy of Canada's largest wind-power-producing province and increase overall energy costs for end-users.

#### U.S.

"Buy American" provisions were included in the American Recovery and Reinvestment Act of 2009. Although the final legislation exempted "relevant manufactured goods [that] are not produced in the United States in sufficient and reasonably available quantities," and required the U.S. to abide by its international trade obligations, Buy American provisions remained in the law. The stimulus earmarked \$43 billion for green technology and thus the policies affecting its investment are quite significant.

These non-tariff barriers serve as a major impediment to the proliferation of cleaner energy technologies. Governments may experience some short-term benefits in these forms of protectionism, but ultimately these policies will increase the cost of adopting low-emissions technologies. An EGSA that effectively addresses these NTBs would be greatly beneficial in allowing countries to access these cleaner energy technologies in a more efficient and economic manner.

### **EGSA History and Development**

Paragraph 31 of the Doha Declaration gives negotiators the ability to: "enhance the mutual supportiveness of trade and environment...to seek (iii.) the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services." The WTO Secretariat then followed up with a list of 480 goods and services that would fall under the classification. However, disagreement over a variety of other trade issues caused the Doha Round negotiations to be suspended in July 2008 without consensus on an EGSA.

A later study by the United Nations Conference on Trade and Development (UNCTAD) classified EGS in a different way. It concluded that breaking down EGS into three categories would be easiest: equipment, services and resources. The U.S., E.U., Canada and Japan responded to the UNCTAD report in April 2007 with a proposal that listed 153 goods and services as EGS under the UNCTAD system. The World Bank Group and U.N. Energy released a joint report shortly afterwards that proposed other ideas for an EGSA. The Asia-Pacific Economic Cooperation (APEC) also suggested further discussions on an EGSA after noting that trade liberalization would “advance the climate and security goals” of member countries. In November 2007, a joint E.U. – U.S. proposal called for tariff and non-tariff barrier reductions on EGS and laid the foundation for an EGSA distinct from WTO Doha Round negotiations. This progress was continued in July 2008 at the G-8 Summit in Japan. The G-8 memorandum read in part:

“Efforts in the WTO negotiations to eliminate tariffs and non-tariff barriers to environmental goods and services should be enhanced with a view to disseminating clean technology and skills. Additionally, consideration should be given to the reduction or elimination of trade barriers on a voluntary basis on goods and services directly linked to addressing climate change.”

Despite disagreement over other Doha Round issues, many plurilateral organizations have supported the idea of a distinct EGSA that would help countries achieve their renewable energy and carbon reduction goals. The Doha Round contains many valuable provisions, but it does not make sense to wait for progress on an EGSA. Serious discussions should commence with as many WTO members as possible to ensure that a broad consensus can be achieved.

## **Conclusion**

Tariffs and trade barriers represent discretionary government policies that increase the cost of environmentally friendly goods and services, thereby deterring their application. This in turn reduces nations’ abilities to address GHG emissions and increase cleaner energy sources. The enactment of these policy measures further widens the cost spread between traditional and cleaner energy.

Countries should strongly consider the adoption of a distinct EGSA outside of the Doha Round. An EGSA would have the benefit of not being mired in the more controversial trade issues that lack broad support. The long-term goal of an EGSA should be universal WTO member participation in removing both tariffs and non-tariff barriers for an agreed list of goods and services. The path to realizing that goal may involve interim agreements in the interest of demonstrating progress and removing barriers as rapidly as possible. For instance, an initial agreement might eliminate tariff barriers only, be limited to an already agreed upon product list (for instance, the list developed by the World Bank in 2007) and be adopted by a subset of WTO members accounting for most current trade in these products. Subsequently, additional

countries could sign on to the agreement, more products could be added and coverage could be extended to services and non-tariff barriers.

The Graduate Institute's **Centre for Trade and Economic Integration** fosters world-class multidisciplinary scholarship aimed at developing solutions to problems facing the international trade system and economic integration more generally. It works in association with public sector and private sector actors, giving special prominence to Geneva-based International Organisations such as the WTO and UNCTAD. The Centre also bridges gaps between the scholarly and policymaking communities through outreach and training activities in Geneva. Its goal is to provide an innovative research basis for solutions that address the medium-term challenges facing the world trade system broadly defined and economic integration more generally.