



United Steelworkers' Section 301 Petition Demonstrates China's Green Technology Practices Violate WTO Rules

China engages in illegal practices that stimulate and protect its domestic producers of green technology, ranging from wind and solar energy products to advanced batteries and energy-efficient vehicles.

These practices have enabled China to emerge as a dominant supplier of certain green technologies. They also have facilitated the transfer of manufacturing and R&D investment from the U.S. to China, cost American workers the high-skilled green jobs of the future, and increased the U.S. trade deficit.

Many of these practices are direct violations of the obligations China undertook when it joined the World Trade Organization (WTO). Other practices are subject to challenge at the WTO as they improperly disadvantage U.S. industries and workers. A successful WTO challenge would require China to reform these unfair and predatory practices or subject itself to retaliation.

The United Steelworkers union – which represents workers in numerous sectors harmed by China's policies – is filing a petition under Section 301 of U.S. trade laws to end these unfair trade practices. The USW petition details the broad range of WTO-inconsistent policies that China has employed to vault ahead of the United States as a leading producer and exporter of green technologies. These practices include discriminatory laws and regulations, technology transfer requirements, restrictions on access to critical materials, and massive subsidies that have caused serious prejudice to U.S. interests. Together, these practices have given Chinese producers an upper hand in accessing investment, technology, raw materials and markets, while foreclosing these same opportunities to U.S. producers. The Chinese government has invested hundreds of billions of dollars to unfairly advantage its producers and exporters, undercutting U.S. companies and workers and distorting billions of dollars of world trade.

America's workers have already suffered too many lost jobs, closed factories and abandoned communities to sit idly by while other countries flout the rules and manipulate the system to gain a lead in the most important manufacturing sector of the future. The USW believes that the nation that leads the clean energy economy will lead the global economy. If America is to be that nation, it must ensure it can compete in an environment where all nations observe the rules. Investigation of the practices detailed in the USW petition will be an important step towards that goal.

The petition covers five broad areas of WTO violations by China in the green technology sector.

1. Restrictions of Access to Critical Materials

Dozens of vital green technologies – solar panels, wind turbines, advanced batteries, energy efficient lighting, and more – depend on critical raw materials derived from rare earth elements and other minerals. In many cases, there are no substitutes for these minerals in green technology applications, due to their unique physical and chemical properties. China produces more than 90 percent of the world's supply of these critical minerals. The U.S. currently produces no rare earth raw materials at all. Its last processing facility for such materials was purchased by the Chinese and its equipment shipped to China years ago.

China uses export quotas, taxes, and licensing procedures to restrict exports of these minerals to users in the U.S. and other countries. These restrictions raise prices for manufacturers outside of China, lower prices for those within the country, and create a powerful incentive to shift production to China in order to secure necessary supplies. Indeed, government officials in China have stated explicitly that the purpose of their export restraints on these minerals is to spur investment in downstream processing of such minerals within China instead of other countries. China has clamped down on the export of rare earth minerals particularly hard of late, slashing its

2010 export quota for rare earth minerals by about half from the prior year. This is at the same time that China was increasing its targets for domestic production of such minerals.

These export restrictions are a clear violation of China's WTO commitments. When China joined the WTO, it committed to eliminate export quotas and export taxes on all but a select list of products. Rare earth minerals and the other green technology inputs contained in the petition were not included on that list. Thus, quotas, taxes, and other restrictions on exports of these materials directly violate WTO rules.

The U.S., Europe and Mexico are already challenging at the WTO nearly identical restrictions that China imposes on a separate set of critical materials. The case for rare earths and the other minerals contained in the USW petition is just as strong, if not stronger.

2. Prohibited Subsidies Contingent on Export Performance or Domestic Content

Article 3 of the WTO Agreement on Subsidies and Countervailing Measures ("SCM Agreement") prohibits WTO members from granting subsidies that are contingent on export performance or on the use of domestic over imported goods. The prohibition includes subsidies whether the contingency is in law or in effect. China committed to eliminate all prohibited subsidies when it joined the WTO. The USW petition identifies five prohibited subsidy programs that China currently uses to benefit its producers and exporters of green technology.

"Ride the Wind" Program. This program gives wind power projects that use localized wind power equipment (that is, wind power equipment produced domestically instead of abroad), access to loan interest subsidies and priority connection to the power grid. Foreign joint ventures operating wind farms that purchase domestic equipment also enjoy preferential treatment in terms of value-added taxes and enterprise income taxes. While China agreed in 2009 to eliminate domestic content requirements for wind farms, it appears that it only eliminated one such requirement in a program separate from the "Ride the Wind" program. Thus, the program remains in effect. Because the explicit terms of the program require projects and firms to use domestic over imported goods to qualify for loan and tax subsidies, the program violates Article 3.1(b) of the SCM Agreement.

Special Fund for Wind Power Manufacturing. China's Ministry of Finance created this special fund in 2008. It provides a grant to producers of wind turbines in China of 600 RMB per KW, about five to ten percent of the cost of a turbine. To qualify for the grant, certain designated "critical" components of the turbines must also be produced in China. Turbine manufacturers must submit copies of their purchase agreements with component suppliers when applying for the grant. Because the regulations for the special fund explicitly require that turbine manufacturers use domestic over imported components to qualify for the grant, the program violates Article 3.1(b) of the SCM Agreement.

Export Product Research and Development Fund. The policy provides research and development grants from the central government's funds for exporters of goods listed in the catalogue of high-technology goods for export, which includes green technology products such as wind and hydro turbines, photovoltaic power systems, and advanced batteries. A company must export half or more of its production, or \$15 million at a minimum, to be eligible for the grant. Thus, the very terms of the policy itself make clear that the fund is only available to exporters, and eligibility is contingent on the level of export. The program is a prohibited export subsidy in direct violation of Article 3.1(a) of the SCM Agreement.

Export Credits from China's Export-Import Bank. China's ExIm Bank is the biggest in the world. In 2008, it provided five times more medium- and long-term export credits than the U.S. ExIm Bank. China's ExIm Bank provided more export credits in 2008 than all of the export credit agencies in the G7 countries combined. In 2009, export credits under just two ExIm programs exceeded \$174 billion. Exports of green technology have been a priority for China's ExIm Bank, and Chinese contractors are now involved in over half of the hydropower projects in the world, as well as many other renewable energy projects.

In 1978, the major official export credit agencies agreed, under the auspices of the OECD, to abide by minimum interest rates and maximum repayment periods in order to avert a global race to the bottom in export credits. Export credits that comply with these rules are protected from challenge under the SCM Agreement. Export credits that do not comply with these minimum standards, however, are potentially prohibited export subsidies under Article 3.1(a) of the SCM Agreement.

China has been invited to accede to the OECD rules, but has refused. China ExIm also flouts the OECD rules in practice. The U.S. ExIm Bank reports: “Most of the terms and conditions of their [China ExIm’s] financing *did* not and *do* not fit within the OECD guidelines.” The petition provides further evidence that China ExIm’s interest rates – some as low as one or two percent – fall below the OECD minimum and that its repayment periods – some as long as 20 years – extend beyond the OECD maximum. These rock-bottom terms by the world’s biggest export credit agency enable Chinese manufacturers to undercut and outbid U.S. exporters of green technology in markets around the world. These concessional terms also make China ExIm Bank’s export credits prohibited export subsidies under Article 3.1(a) of the SCM Agreement.

Export Credit Guarantees from Sinosure. Sinosure provided \$99 billion in export credit insurance for Chinese exporters in 2009, and it supports more than five times as much foreign investment and export volume in the average year as its U.S. counterpart, the Overseas Private Investment Corporation. Green technology is a priority sector for Sinosure, and its regulations direct the agency to provide discounted premium rates to exports of such goods. From January to July of 2009, for example, Sinosure underwrote \$1.25 billion in photovoltaic exports from China, covering nearly half of all Chinese exports of the product. The SCM Agreement lists export credit guarantee programs as one example of a potentially prohibited export subsidy, particularly if the premiums for such guarantees are inadequate to cover the program’s costs. From its creation in 2002 through 2008 (the latest year for which data are available), Sinosure ran at a cumulative loss of at least \$1.4 billion RMB. Sinosure’s export credit guarantee program is thus a prohibited export subsidy under Article 3.1(a) of the SCM Agreement.

3. Discrimination Against Imported Goods and Foreign Firms

Article III:4 of the GATT 1994 requires WTO Members to accord imported goods treatment no less favorable than that afforded to domestic goods in respect of all laws or regulations affecting their internal sale or use. Laws that condition the receipt of an advantage on the use of domestic over imported goods – local content requirements – are a classic example of a policy that violates Article III:4. In paragraph 3(a) of its Protocol of Accession to the WTO, China also agreed to accord foreign firms treatment no less favorable than that accorded to domestic firms with respect to the procurement of inputs and the conditions under which their goods are produced, marketed, or sold. China violates these commitments in several respects by discriminating against imported green technology goods and foreign green technology firms.

Local Content Requirements for Wind and Solar Power Plants. In 2009, China agreed to eliminate a provision that wind farms meet a 70% local content requirement in order to win approval. However, China’s policy for awarding concessions to operate such farms continues to mandate that the rate of domestic content be a factor in the bidding selection process. China approved construction of its first solar power plant in 2009, reportedly requiring that 80% of the equipment be made in China. A local government agreement with the U.S. company, First Solar, to build another solar power plant includes a commitment to develop a domestic supply chain for the facility. These requirements do not qualify as government procurement, which would be exempt from nondiscrimination disciplines as China is not presently a member of the Government Procurement Agreement within the WTO (though it is in negotiations to join). China is not directly purchasing the equipment or the power plants in question. Instead, it is conditioning approval for these power plants and agreement by its power grids to purchase electricity from such plants on the use of domestic over imported goods. This discrimination violates Article III:4 of the GATT 1994.

Bidding Preference for Domestic Wind Companies. China gives domestic firms a five percent preference in the bidding process for wind concessions, and poses other technical and procedural hurdles to foreign firms wishing to compete for the concessions. As a result, foreign firms have never been awarded a major wind farm concession, despite competitive bids. This discrimination violates paragraph 3(a) of China’s Protocol of Accession.

Exclusion of Foreign Firms from Access to Carbon Credits. The United Nations developed the Clean Development Mechanism to allow emissions-reducing projects in developing countries to raise funds by selling carbon credits to developed countries. The funds raised through such credits are often essential to the financial viability of a project. The Chinese government acts as the gatekeeper for access to such credits for projects undertaken in the country, and it prohibits any project owner that is not wholly-owned or controlled by a Chinese company to apply for such credits. This discrimination violates paragraph 3(a) of China’s Protocol of Accession.

Requirements in Agreements with State-Owned Enterprises. The petition describes a number of joint venture and supplier agreements with Chinese state-owned enterprises that appear to include domestic content requirements. In a 2008 agreement to supply Sinovel, a state-owned Chinese wind turbine manufacturer, American Semiconductor

Corporation agreed to localize production of converters so they would no longer be assembled locally with imported material. American Semiconductor had shifted converter production to China by 2010. To the extent the Chinese government and Chinese state firms are imposing domestic content requirements as a condition of agreement approval, the requirements violate Article III:4 of GATT 1994.

4. Technology Transfer Requirements for Foreign Investors

Paragraph 7.3 of China's Protocol of Accession to the WTO prohibits China from requiring that foreign companies transfer technology as a condition of investment approvals. China's laws give the government the right to approve or reject foreign joint venture agreements, and they state that transfer of advanced technology should be included in such agreements. In practice, foreign firms' investment agreements with state-owned partners or state financiers invariably contain requirements to transfer technology. Leading green technology corporations, including GE and Siemens AG, have begun to complain publicly about this "technology for market" strategy. In one 2009 example, Evergreen Solar, a U.S. company, had difficulty raising funds to open its own plant in China, and so it secured financing from a provincial government fund to enter into a joint venture agreement that requires Evergreen to license solar wafer technology to the new venture. As a result, Evergreen is now shifting solar panel production from its Massachusetts facility to China.

5. Trade-Distorting Domestic Subsidies

China's massive domestic subsidies to green technology are distorting trade and harming producers in other countries. In its economic stimulus package, for example, China gave more than \$216 billion to subsidize green technologies – more than twice as much as the U.S. spent in the sector and nearly half of the total "green" stimulus spent worldwide. These subsidies are helping Chinese producers ramp up production, seize market share, drive down prices, and put global competitors out of business. U.S. companies and firms have suffered the consequences as their exports are displaced, domestic market share erodes, prices plummet, and jobs are lost. The serious prejudice China's subsidies have caused makes them actionable at the WTO under Articles 5 and 6 of the SCM Agreement.

China's Subsidies Have Displaced U.S. Exports.

China's demand for wind energy equipment rose ten-fold from 2006 to 2009. During the same period, massive subsidies to Chinese producers displaced U.S. exports to China of wind turbine sets and the gears used in such turbines, which shrank by 81 percent and 67 percent, respectively.

Subsidized Chinese exports have also shut the U.S. out of the growing European wind market. In 2009, Chinese exports to Europe of the towers and masts used in wind turbines were nearly 19 times higher than they had been in 2006, while U.S. exports of the same product fell by more than a third.

In the solar sector, Chinese exports of solar cells and panels to Europe grew eight times over from 2006 to 2009, significantly faster than the growth in European demand. U.S. imports were basically flat over the period, and they fell sharply in 2009 as Chinese subsidies caused global prices for solar cells and panels to crash. China now has 34 percent of Europe's import market for solar cells and panels, while the U.S. has only 3.7 percent import market share.

China's Subsidies Caused Significant Price Undercutting and Lost Sales in the U.S. Market.

U.S. imports from China of the towers and masts for windmills have grown seventeen times over since 2006. The pace of import growth has far exceeded the rate at which the domestic market for wind power equipment has grown, eating into the market share of domestic producers.

China's massive subsidies to solar production created a glut in supply that drove down panel prices by 40% from 2008 to 2009. China used the subsidized prices to seize market share from U.S. producers. From 2008 to 2009, U.S. demand for solar power grew by a healthy 41% – but U.S. panel production barely grew by 7% while panel imports from China nearly doubled. At least four solar panel producers shifted production or sourcing from the U.S. to China in 2009 and 2010, eliminating more than 580 U.S. jobs.