



# AID-FOR-TRADE: CASE STORY

WORLD BANK

## Environmental Goods and Services

## EGS Case Story

For over ten years, international institutions including the World Bank and the WTO have worked to mainstream climate change in trade policy through unilateral reforms and international negotiations. Recent analytical work performed at the World Bank illustrates some of the potential gains and challenges. The Uruguay Round changed the perception of environmental issues and trade when it exhorted the WTO to make the promotion of sustainable development and the protection of the environment one of its objectives. Indeed, Uruguay's successor Round, Doha, was dubbed the 'Round for developing countries and the protection of the environment'. In 2001 the WTO invited member countries to negotiate the reduction or elimination of tariffs and non-tariff barriers (NTBs) - i.e. all obstacles to free trade - applied on Environmental Goods and Services (EGS). EGS range from products good for the environment such as biodegradable material, to goods produced in an environmentally friendly way such as organic food, to goods that go into the making of environmentally friendly products, e.g. components that go into the manufacturing of a windmill.

The objective was a "triple-win"—notching up trade, aiding the environment and buoying development. If countries could coordinate on lower tariff and non-tariff barriers applied to environmental goods, the decrease in costs would encourage the production, trade and use of environment-friendly technologies and stimulate innovation and technology transfer. With the lowering of barriers in high-income countries, developing countries could more easily produce and sell EGS products in the markets of high-income countries, and also buy high quality EGS products from global markets. Making environmental goods cheaper and more accessible to everyone would, in turn, raise global energy efficiency, improve water and sanitation in developing countries, and reduce emissions. As long as the definition of what an environmental good or service was kept broad – to encompass a wide range of products and services

that avoided damaging the environment, and as long as countries participated wholeheartedly, the scheme could work.

Ten years on, results are encouraging. Taking a broad definition of EGs that encompasses 384 goods at the six-digit level of the harmonized system, which comprises in all about 5'000 goods (but excluding services), in the five years following the start of the Doha Round (2002-2007), 102 countries have "substantially" reduced tariffs, i.e. reduced them by at least five percentage points. If one defines a tariff-reducing "event" as one where a tariff was reduced by at least five percentage points on one of the 384 EGs, there were in all 9'522 such events. Overall, the extent of tariff reduction was 10.4%, and in 68% of the cases, imports increased significantly. That imports would go up when tariffs go down should not come as a surprise; however, the magnitude of the average import surge following a tariff-reducing event is noteworthy---78.9% on average. That is, the 9'522 tariff-reducing events on EGs succeeded in boosting trade in those goods by substantial amounts. Putting it differently, the average import surge following a tariff-reducing event was \$10 million, creating significant business opportunities for firms producing EGs and encouraging the spread of technologies.

The countries that embraced these changes the most were middle-income developing countries which had, in the second half of the '90s, fairly high tariffs on EGs (about 10%, not quite as high as those of low- income countries which stood at 14%). Between 2002 and 2007, upper middle-income countries accounted for 2'500 of the 9'522 tariff-reducing events, with an average tariff reduction of 15 percentage points – i.e. where tariffs may have been 30% before, they now came down to 15%. India and China were among the leaders in these tariff reductions in the developing world, reflecting the progressive greening of their development strategies and their quest for technological leadership in the that growing sector. In just two years, between 2004-2005, India reduced tariffs on environmental goods 541 times, with an average near 10% reduction (i.e. a ten-percentage-points reduction). China

also made on average 10% tariff reductions on 191 EGs, which though smaller in number would translate to a substantial volume of imports given China's size and strong economy. Amongst the top reducers were also some countries not often caught in the thick of the trade dialogue: Iran accounted for 297 tariff-reducing events, with a strong 30% average reduction; Libya did so 304 times, reducing tariffs on average by 24%. The countries that protected EGs most ended up being those that reduced tariffs most, reflecting both larger scope for tariff reductions but also in some cases genuine policy shifts.

Notwithstanding these real successes, international agreement on a coordinated scheme for EGS tariff reduction has proved elusive. While the WTO provided impetus and a talking space for negotiations, the motives moving individual countries were not always aligned with the inherent value of freeing up trade on environmental goods. Partly, this was a coordination problem. For instance, countries have yet to agree not even on which goods should be singled out for liberalization, but even on how one should think about selecting them. Some have proposed a list approach whereby a list of products was to be unanimously agreed upon. To date, four lists have been proposed with little overlap or common logic. For instance, of the 44 products proposed by Saudi Arabia under the "Environmental Technology" heading, only 3 were classified by other countries as belonging to this category. Developing countries like the Philippines argue that many products on the lists that are currently on the negotiating table are of export interest primarily to industrialized nations.

India and Argentina have proposed a different approach based on 'define-by-doing', where national authorities would select projects that would temporarily benefit from increased market access. Brazil, pulling in another direction, proposed a 'request-offer' approach that might better reflect the interests of developing countries. Countries would request specific tariff cut commitments on products of

interest, and these tariff cuts would then be undertaken by all WTO members. The list approach has been gaining increasing traction in spite of the difficulties of agreeing on a common list.

Compounding the difficulties in product selection was the inherent difficulty of simply defining an environmental good. Countries could not opt for the definition 'environmentally preferable product' (EPP): an EPP is one for which a substitute product exists that is not environmentally friendly (such as an energy efficient appliance versus a regular appliance). But restricting trade on a number of products that have been popularly used would constitute bias and lead to all kinds of litigious problems for the WTO. Instead countries were forced to choose EGs by their 'end-use': i.e. whether that item went towards the creation or provision of an environmental service. Though this is the classification adopted, because it relies on a WTO commodity coding convention, it does not allow for the inclusion of environmental services, only environmental goods. Also, the coding itself is not comprehensive, compelling lists to leave out some goods. Furthermore, 'end-use' classification is unable to filter out parts and components that are used not just to make environmentally friendly goods but many more. To take an extreme example, how do we know whether steel components destined for use in nuclear energy plants are not being used to make nuclear warheads?

Not only has there been poor consensus on how to define EGs and how to choose EGs, there has also been serious selection bias in terms of countries participating in the negotiation by wealth and global coverage: only 11 countries participated in the discussions over lists, all high-income ones except the Philippines. Partly, this reflects the reality that environmental problems vary across countries. No single technology or sub-technology is likely to individually hold back climate change. However, the lack of consensus and limited overlap across EG products belies what might really be a protectionist motive behind a country's proposals. Firstly, none of the countries listed products on which they themselves maintained high import tariffs, tariffs that would have to come down were the products suggested on

lists taken up. Secondly, of all the EG products proposed for import tariff reduction so far, the EU and the US stand the most to gain in terms of increased exports. When countries put forward their lists of EGs, most put forward several goods in which they had a comparative advantage: Saudi Arabia had a revealed comparative advantage (as measured by Balassa's index) in 72% of the products it suggested; Japan in 40% of its suggested products; the US 36%; New Zealand and the EU 27 about 30%; and Canada 23%. Once the list was finalized, all these countries continued to benefit by inclusion of their suggested products. Countries that had no export advantage in the products they proposed as environmental goods were Switzerland, Norway, and Korea amongst others.

In sum, political economy motives and the positions of protected producers dominated in the making of country lists. The case reveals that the best intentions on the part of multilateral agencies can be rendered ineffective by the political motives of individual states. Here, some of the objectives of the environmental tariff reduction scheme were met in no small measures, with lower tariffs and significantly increased imports of EGs. But until greater clarity is achieved, with wider-ranging unanimity, on how to measure the source (i.e. the EG), the channel of impact and the impact (i.e. the environmental benefit), these tariff reductions and increased imports could well just be part of the gradual global retrenchment in tariffs on total trade that has taken place over the last decade. In that case what we would be measuring is not the success of an environmental scheme per se, but the success of multilateral tariff reductions.