



# Working Together: How To Make Trade Contribute to Climate Action

By Dr. Rafael Leal-Arcas

## Introduction

The days of mutual distrust between the trade and climate agendas are long gone (Leal-Arcas, 2013). Today, numerous areas of symbiosis between the two agendas have been recognized, including emissions trading schemes, border carbon measures and labelling schemes, to name but a few (ICTSD, 2011). Both trade and climate have irrefutable links to sustainable development, making it a logical step to explore the potential for mutual cooperation and factor this into response measures. Moreover, both regimes can offer a system of carrots and sticks.

Given this context, climate response measures should aim at minimizing trade impacts; response measures that solely factor in climate change mitigation goals, without acknowledging trade repercussions, may end up hindering sustainable development on other fronts. In this respect, Article 3.14 of the Kyoto Protocol commits its parties to strive to minimize adverse economic, social and environmental impacts on other parties, especially developing countries and in particular, those identified in Articles 4.8 and 4.9 of the UN Framework Convention on Climate Change (UNFCCC).

How can we further capitalise on trade measures' ability to address climate change mitigation? Is the overall impact of current climate response measures trade restrictive? Or, do these measures manage to achieve both environmental and economic goals? How can current governance of climate and trade be expanded or amended to make climate response measures more trade-friendly or to use trade more effectively toward achieving climate action goals? This paper explores these questions while putting forth several proposals for using trade tools to further progress toward climate change mitigation.

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## Proposals for incorporating trade into climate response measures

Trade has already proven to be a powerful tool in achieving environmental goals. For example, the Montreal Protocol restricted parties from trading in ozone-depleting substances with non-parties. This served the dual purpose of encouraging wide participation (the Montreal Protocol now has 196 parties), and removing any competitive advantage that a non-party might enjoy (that is, preventing leakage to non-participating jurisdictions) (Leal-Arcas, 2013). Moreover, the success of the Montreal Protocol lies in the fact that trade was not actually restricted (Barrett, 2010). Climate change, however, is a far more complex issue, both connected with and giving rise to a host of other issues and areas, including greenhouse gas (GHG) emissions, clean energy technology, knowledge transfer, investment in low-carbon economies, development assistance, carbon capture and storage and adaptation. While this makes response measures more challenging, it also presents more potential areas of cooperation across different regimes and disciplines. This paper proposes several ways trade goals can feed into climate goals and vice versa.

### RTAs with Chapters to Promote Climate Change Mitigation

This paper proposes the introduction of a regional model for promoting climate change mitigation, technology transfer and sustainable energy for all as an alternative to the present structure of the UNFCCC/Kyoto Protocol framework. Given the proliferation of regional trade agreements (RTAs)—especially in the form of bilateral treaties—in the international trading system, this section proposes creating RTAs with climate change chapters, thus embedding climate goals within bilateral, trilateral and plurilateral trade agreements. Involving major GHG emitters through RTAs and economic partnership agreements that include contingent climate mitigation efforts can be an effective avenue toward reducing GHG emissions and could therefore move both the trade and climate agendas forward harmoniously. Climate-related chapters

could promote, among other things, trade and investment in environmental goods and services and climate-friendly products and technologies. In fact, this is already being planned for the Transatlantic Trade and Investment Partnership (TTIP) (European Commission, 2013a).

Given that the major GHG emitters are large economies, the most effective climate-related RTAs would be large, such as the Trans-Pacific Partnership (TPP) Agreement, the TTIP, or the Regional Comprehensive Economic Partnership. Indeed, given how proactive developing countries are in the conclusion of RTAs, the option of climate-related RTAs would be an effective way to make progress towards a future global climate change agreement, especially since the Kyoto Protocol imposes no concrete obligation on developing countries. In this sense, climate-related RTAs can be used as legal mechanisms to further the multilateral climate change agenda, while also including major developing countries. A further option for such ‘environmentally conscious’ RTAs is to include provisions related to climate change adaptation efforts. These could take the form of knowledge transfers and capacity-building, infrastructural and agricultural support, *et cetera*. The advantage of such an approach lies not only in providing trade incentives for GHG emissions reduction, investment in renewable energy or other climate change mitigation goals, but also in that it circumvents the currently arduous multilateral trading process to make use of the ever-expanding network of RTAs around the world.

RTAs promoting climate mitigation goals can have strong benefits for economic growth in developing countries, delivering both environmental and trade wins. In fact, in a 2007 speech, former World Trade Organization (WTO) Director-General, Pascal Lamy, cited the benefits of trading with developing countries that are exporters of climate-friendly products: Indonesia, one of the world’s top 10 exporters of steam condensers; India, a top exporter of hydraulic turbines; and Malaysia, which is among the world’s top five exporters of photovoltaic cells.<sup>1</sup> All these cases represent clear examples where the trade and climate agendas can work together.

1 WTO (2007). “Lamy: Doha could deliver double-win for environment and trade.” Obtained from [http://www.wto.org/english/news\\_e/sppl\\_e/sppl83\\_e.htm](http://www.wto.org/english/news_e/sppl_e/sppl83_e.htm).

## WTO Treatment of Renewable Energy

Certain climate response measures, such as feed-in tariff schemes for renewable energy, have been the subject of disputes at the WTO, bringing their consistency with the Subsidies and Countervailing Measures Agreement, as well as national treatment obligations under the General Agreement on Tariffs and Trade and the Agreement on Trade-Related Investment Measures into question.<sup>2</sup> With the share of renewable energy at close to 20 percent of global final consumption (UNEP, 2013), investment and innovation in the renewables sector are only set to increase. Is the WTO's "nature as a body focused on negotiated outcomes" (Wilke, 2011) a plausible or effective mechanism for addressing disputes that are likely to arise with increasing frequency? Arguably, there is a need to examine WTO rules and work toward removing any systemic 'obstacles' to the scale up and take up of renewable energy.

Confusion about how the WTO system may accommodate measures aimed at the promotion of renewable energy could strengthen the case for a separate specific agreement on the matter, or an explanatory note containing clarificatory guidelines issued by the WTO Ministerial Conference under its existing mandate and powers. Such a note could contain an illustrative index/table with a series of examples of pro-renewables measures and their classification as WTO-consistent or -inconsistent, according to the policy motivation behind them (given that there may be a variety of hidden policy objectives), their adverse effects and the specific WTO rules that are engaged (Leal-Arcas and Filis, forthcoming 2014). Given the need for input from climate experts, this is an area where the climate and trade regimes need to work together to arrive at a mechanism that is both fair and effective.

## Emissions Trading Scheme - Going Global, Inclusion of Aviation and Shipping

There are difficulties when it comes to developing a single global carbon market with comprehensive coverage of economic sectors and countries. A promising intermediary step between

the creation of a global carbon market with comprehensive coverage of economic sectors and countries and the current situation, therefore, could be a sectoral approach to emissions trading. Unilateral, bilateral, plurilateral, or regional arrangements could target GHG emissions reductions in specific sectors, such as electricity generation, motor vehicles, aviation, shipping, cement and aluminium, always aiming for greener or more efficient technology, as opposed to simply applying bans or restrictions. Such measures will require across-the-board cooperation.

An example of a unilateral trade-related climate change measure is the inclusion of aviation in the European Union's (EU) emissions trading scheme (ETS).<sup>3</sup> The EU faced a maelstrom of criticism after attempting to expand its ETS to aviation (Leal-Arcas, 2013). Regardless of the fundamental legal question at the heart of the matter, i.e., whether it is "legal or legitimate to take unilateral measures against global carbon emissions as a response to the collective action problems that are frustrating multilateral efforts at climate mitigation" (Howse, 2012),<sup>4</sup> the disgruntled reaction of the international community reflected the disjointed approach to climate response measures globally—an approach that will have to become more cohesive if mitigation efforts are to be realized.

The EU's current compromise means that from 1 January 2014, flights to and from countries outside the European Economic Area (EEA) will be exempt for the emissions that take place outside EEA airspace. Only the emissions from the proportion of a flight taking place within EEA airspace will be covered. This is by no means a long-term solution, given that "aviation is the fastest growing source of greenhouse gas emissions in the transport sector and the most climate-intensive form of transport. Aviation emissions have more than doubled in the last twenty years and the sector accounts for 5% of global warming."<sup>5</sup> Thus, while the attempt to include aviation in the EU ETS may not have succeeded, it did serve as a

2 For more information on proposals regarding a Sustainable Energy Trade Agreement and Sustainable Energy Trade Initiatives, see ICTSD; (2011); *Fostering Low Carbon Growth: The Case for a Sustainable Energy Trade Agreement*; International Centre for Trade and Sustainable Development, Geneva, Switzerland, [www.ictsd.ch](http://www.ictsd.ch).

3 Obtained from [http://ec.europa.eu/clima/policies/ets/index\\_en.htm](http://ec.europa.eu/clima/policies/ets/index_en.htm).

4 Obtained from <http://ictsd.org/downloads/2012/05/the-inclusion-of-aviation-in-the-eu-ets-wto-law-considerations.pdf>, pp. 28 ff.

5 'Grey day for environment as Europe reduces its aviation emissions coverage,' 16 October 2013. Obtained from <http://www.airportwatch.org.uk/?p=17951>.

'wake-up call' of sorts, bringing to the forefront the need for a 'principled approach,' i.e., a solution in which "fundamental principles of sustainable development are observed" (Gehring and Robb, 2013). Possible response measures include switching to more fuel-efficient engines and aircraft designs and using 'greener' fuels as well as more efficient use of airspace and airports (Howse, 2012).<sup>6</sup>

Regardless of the aviation stalemate, the EU ETS has succeeded in promoting low-carbon strategies in many major-emitting industries. A growing number of countries, such as Australia, Canada, Japan, New Zealand and the United States, is integrating cap-and-trade schemes into their national climate policies (Jotzo and Betz, 2009). It may eventually be possible to geographically expand the EU ETS to a global level by multilateralizing current and future regional ETS in the world (e.g., in Australia, Kazakhstan and Korea).<sup>7</sup> However, before moving forward with such schemes, one should bear in mind the potential challenges and opportunities when linking the EU ETS to other emissions trading schemes. For instance, current low carbon prices in the EU market have led to reduced investment in low-carbon technologies, and it is worth waiting to see whether the various options under consideration for reviving the market, such as reducing the number of permits traded and other longer-term structural reforms, prove successful.

In a positive step towards global cooperation on aviation emissions, the International Civil Aviation Organization (ICAO) agreed in October 2013 to develop a global market-based measure for international aviation.<sup>8</sup> The idea is to create a multilateral mechanism to govern GHG emissions from international aviation to be implemented by

ICAO members by 2020.<sup>9</sup> With the participation of ICAO's 184 member states, perhaps the EU's vision of addressing the climate challenges posed by international aviation will actually come to fruition.

The attempt to expand the EU ETS to aviation also points to the logic of acknowledging another key area where trade policy and climate policy need to cooperate: shipping. According to the International Maritime Organization (IMO), more than 90 percent of global trade flows engage international shipping.<sup>10</sup> This suggests that current levels of global trade flows and, *ex fortiori*, global consumption would not be possible without the shipping industry, not least because of the competitive pricing of freight transport through this means. While according to the International Chamber of Shipping, "shipping is the least environmentally damaging form of commercial transport and, compared with land-based industry, is a comparatively minor contributor to marine pollution from human activities,"<sup>11</sup> it remains an industry that cannot be overlooked when it comes to climate response measures: shipping causes about 3 percent of total carbon dioxide (CO<sub>2</sub>) emissions.<sup>12</sup> So far, in relation to reducing the CO<sub>2</sub> emissions of the shipping industry, the IMO, and more specifically its Marine Environment Protection Committee, has put together a bundle of measures that, among other things, include an index system analogous to that used to rate vehicles and electrical appliances, to classify new vessels according to their energy efficiency; a template for a Ship Energy Efficiency Management Plan for vessels, new and old alike, to monitor and improve performance in relation to CO<sub>2</sub> emissions; and ideas for possible economic tools to encourage GHG emissions reduction (Leal-Arcas, 2013).

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- 6 Obtained from <http://ictsd.org/downloads/2012/05/the-inclusion-of-aviation-in-the-eu-ets-wto-law-considerations.pdf>, pp. 28 ff.
- 7 See similar views by the EU Commission, "International Carbon Market," obtained from [http://ec.europa.eu/clima/policies/ets/linking/index\\_en.htm](http://ec.europa.eu/clima/policies/ets/linking/index_en.htm).  
Kazakhstancarbon, "The GHG emissions trading system," obtained from <http://www.kzc.kz/en/legislation/ghg-emissions-trading-scheme>.  
Bloomberg New Energy Finance, "South Korea's Emissions Trading Scheme," 10 May 2013, obtained from <http://about.bnef.com/white-papers/south-koreas-emissions-trading-scheme/>.
- 8 Obtained from <http://www.icao.int/Newsroom/Pages/mbm-agreement-solid-global-plan-endorsements.aspx>.
- 9 Obtained from <http://climate-iiisd.org/news/icao-assembly-to-develop-a-global-market-based-measure-for-international-aviation/>.
- 10 Obtained from <http://www.imo.org/About/Pages/Default.aspx>.
- 11 Obtained from <http://www.marisec.org/shippingfacts/environmental/>.
- 12 Obtained from <http://www.marisec.org/shippingfacts/environmental/atmospheric-pollution.php>.

While there is talk of the EU expanding its ETS to shipping, there is no reason the international community should sit back and let the EU go it alone once again, only to result in an outcry about legal objections similar to the one that occurred in the case of aviation. The importance of a global approach to include shipping in emissions trading schemes is clear: one that involves other UNFCCC parties for a more efficient and effective response to climate change mitigation. Moreover, a pre-emptive approach, acting together, may help safeguard against measures that are too trade-restrictive.

### Stronger Governance of Energy Trade

The nexus between energy and climate change encompasses a range of issues, such as clean energy subsidies, carbon taxes and border adjustment for carbon emissions. Thus far, the overall approach toward addressing the role of energy in climate change mitigation has involved finding incentives to reduce fossil-fuel emissions. However, a more holistic approach toward achieving greener energy may prove more effective in the long run. In other words, arguably, we need more cohesive energy trade governance. International trade in energy spans a number of key policy areas, including trade, investment, economic development and environmental protection, and currently, the international community does not provide cohesive governance over it (Leal-Arcas and Filis, 2013).

On the contrary, governance of energy trade arises by default, rather than design, through the *ad hoc* interplay of different aspects of the international economic system. The role of trade in promoting energy efficiency and raising the share of renewable energy in the global energy mix cannot be overestimated. For example, there is potential to incorporate energy-efficient provisions within regional and multilateral trade agreements; there are trade incentives to better manage competition and invest in technologies, such as up-to-date energy grids, and possibilities for importing/exporting cutting-edge technologies through trade and bilateral cooperation agreements.

In this context, numerous bilateral arrangements on energy and climate exist; in fact, since the faltering of a global climate treaty, bilateral agreements aimed at reducing GHG emissions have increased exponentially. Examples of such agreements are the US-Mexico Bilateral Framework on Clean Energy and Climate Change and the Australia-EU Partnership Framework. These bilateral arrangements promote trade relations between parties, while incorporating approaches to clean energy promotion and climate change mitigation. One significant bilateral agreement in this regard is the TTIP. An initial EU position paper on raw materials and energy acknowledges that the multilateral trade system would “benefit from a stronger set of rules in the area of energy and raw materials” and suggests that the TTIP could make an important contribution to the development of this process. Areas where specific raw material and energy provisions could be developed include transparency, market access and non-discrimination, trade in sustainable energy and competitiveness as well as energy security (European Commission, 2013b).

It is worth determining to what extent such bilateral arrangements, as well as current energy trade rules (at WTO, Energy Charter Treaty, and UNFCCC levels, for example) enhance sustainable energy, and therefore climate change mitigation goals. If the TTIP or TPP prove successful in enhancing trade relations while promoting sustainable energy, could their provisions be applied to a multilateral agreement on energy trade? Might an overarching General Agreement on Trade in Energy, or a Sustainable Energy Trade Agreement, be the next logical step? Any such agreement would need to have a strong ‘environmental voice’ to avoid merely facilitating energy flows without factoring in environmental impacts and promotion of more efficient and renewable energy. In other words, to quote Pascal Lamy, “trade regulations are not, and cannot be, a substitute for environmental regulations.”<sup>13</sup> Any global energy trade agreement aimed at enhancing energy security along with environmental protection would need strong input from a major environmental forum, such as the UNFCCC.

13 WTO (2007). “Lamy: Doha could deliver double-win for environment and trade.” Obtained from [http://www.wto.org/english/news\\_e/sppl\\_e/sppl83\\_e.htm](http://www.wto.org/english/news_e/sppl_e/sppl83_e.htm).

## Conclusion

While the trade and climate change mitigation agendas may appear to be at odds on the surface, there is plenty of room for mutual collaboration. Numerous schemes, such as emissions trading and border carbon measures, have proven worthwhile, and a range of additional opportunities for potential support are worth exploring. Regional trade agreements, with their rapid proliferation across the globe, present a logical forum for incorporating climate mitigation provisions. Another area where trade policy can contribute to climate change goals is the treatment of renewable energy at the WTO. There is a need to examine WTO rules and work toward removing any systemic obstacles for facilitating trade in renewable energy. In addition, while the expansion of the EU ETS to aviation may not have proven to be a resounding success, it did bring to light the dire need for the international

community to cooperate and for trade and climate policymakers to work jointly to devise regulations that are both fair and effective.

Furthermore, the importance of cohesive governance for energy trade cannot be overlooked. The current fragmented governance of energy trade is not conducive to secure and sustainable energy for all. As renewable energy usage is only expected to grow, it becomes even more important to implement stronger rules for energy trade governance, which may lead to an overarching global energy trade agreement.

Overall, bottom-up policies that circumvent multilateralism can be powerful vehicles for change. Using such policies to capitalize on both trade and climate change goals is the key. In this respect, pragmatism should be the crucial element in moving the climate agenda forward: flexibility over rigidity and practical results over utopian ideals.

## Abbreviations And Acronymns

CO <sub>2</sub>	Carbon dioxide
EEA	European Economic Area
ETS	Emissions trading scheme
EU	European Union
GHG	Greenhouse gas
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
RTA	Regional trade agreements
TTIP	Transatlantic Trade and Investment Partnership
TPP	Trans-Pacific Partnership
UNFCCC	UN Framework Convention on Climate Change
WTO	World Trade Organization

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