

Barrett, Scott; Khalilian, Setareh; Langhammer, Rolf J.; Magariños, Carlos;  
Pommerening, Dieter

**Conference Paper**

## Reconciling trade and carbon governance

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## The Global Polity

# Reconciling Trade and Carbon Governance

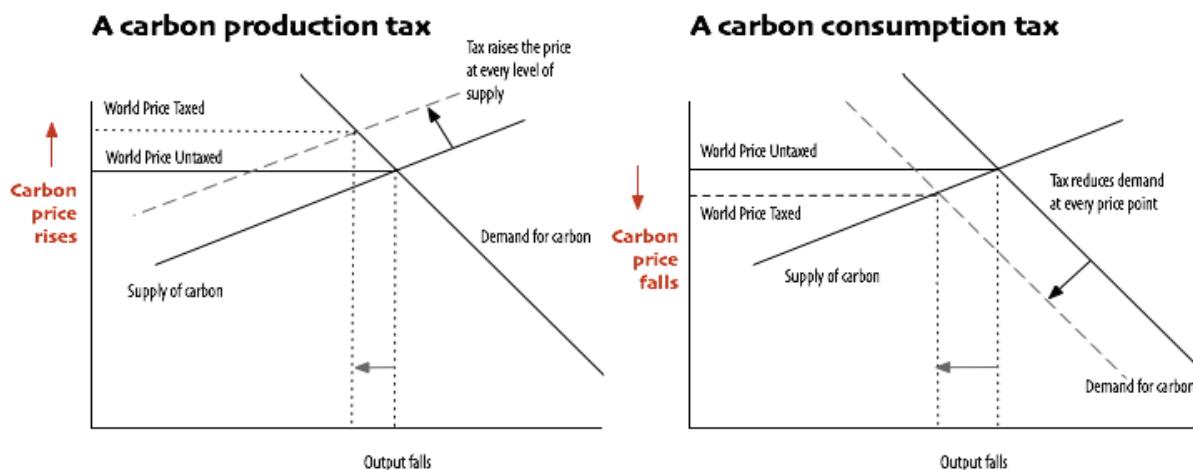
### The Challenges

Never before has the nexus between environmental protection and trade measures been so concretely discussed in WTO circles. And never before has the traditional view that trade measures are both inferior to other measures and irreconcilable with WTO rules been questioned so fiercely.

The challenge is that the gap between (mostly rich) countries which are willing to cap greenhouse gas emissions through national legislation and emission trading schemes and those (mostly emerging) economies which are still relatively inactive in this respect has widened. To reach level playing field and to protect their existing industrial patterns, important members of the former group such as France propose to impose border carbon adjustment (BCA) measures on imports from the latter group through taxes.



Cases for such taxes comprise the argument that such “green protection” is necessary to discourage circumvention of national legislation by outsourcing “dirty” industries and to smoothen industry adjustment towards less emission-intensive technologies. Countervailing arguments are powerful as well. They range from discrimination and protectionism in disguise to outright ineffectiveness because of inducing “dirty” non-tradable activities and negligible effects on trade flows via price changes. In short, opponents reject the view that carbon leakage could be offset via BCA measures.







Yet, the ethical questions of climate change remain unsolved and crucial and it can not be denied that trade-related activities such as transport and travel burden the environment via emissions.

- Which options could prevent international disputes on BCA measures in case there is no agreement between industrialized and developing economies?
- Should there be a “peace clause” obliging countries to seek negotiation rather than taking all disputes to the WTO and if so, how should developing countries be motivated to agree on that?
- Should developing countries be financially compensated if they commit themselves to the carbon tax system and should compensation be differentiated depending on whether the countries join now or later?
- Are there valuable alternatives to BCA measures such as requiring multinational companies to adopt the environmental standards of their home countries when they invest abroad or voluntary labeling schemes that empower consumers?

## **Proposed Solutions**

### **Scott Barrett**

*Lenfest-Earth Institute Professor of Natural Resource Economics, Columbia University*

What is the problem? Climate change and international trade are inextricably linked. An effective climate agreement can not ignore international trade. The trade system can not pretend that climate change can be addressed without changing the trade rules.

The note prepared for this conference suggests that the problem is trade leakage, but there is another problem—deterring free riding. The Montreal Protocol has been very effective in protecting the ozone layer. A key reason is that Montreal incorporates trade restrictions. It uses these restrictions to deter countries from not participating in the agreement. In doing this, it also eliminates trade leakage.

Crucially, the trade restrictions in Montreal were agreed, not imposed. The agreement to incorporate trade restrictions also addresses related issues, such as the “fairness” question of who should pay for emission reductions. It is essential that trade restrictions be seen to be legitimate. Otherwise, their use will likely trigger retaliation. As unsuccessful as we have been in addressing climate change, we could do even worse. We could continue to fail to address climate change and also spark a trade war.

How to proceed? Our approach to negotiating a climate agreement must change. Rather than negotiate economy-wide emission limits, we should break the problem up, treating different gases and sectors separately and differently. For example, one of the gases controlled by the Kyoto Protocol, HFCs should be addressed by a separate agreement, designed in the same way as Montreal. Alternatively, HFCs should be incorporated in the Montreal Protocol. Trade restrictions would be appropriate and effective in reducing this one greenhouse gas, without stimulating trade frictions.

The trade insensitive sectors like electricity should be addressed separately. Trade restrictions would not be effective in limiting these emissions. A benefit in addressing these sectors separately is that any trade tensions would not spillover to cause broader economic harm.

The emissions of the trade-sensitive sectors such as steel and aluminum can be addressed by creating a new “level playing field.” Such process standards would need to be enforced by both producing and consuming states.



The emissions of sectors such as transportation may be addressed most effectively by technical standards. Trade restrictions based on product standards (provided these are not meant to be protectionist) are WTO-legal and easy to enforce.

Kyoto did not limit the emissions of international air travel and marine transportation, leaving these to be regulated by the International Civil Aviation Organization and the International Maritime Organization. Unfortunately, neither organization has limited the emissions of these sectors. Frustrated with this lack of progress, the European Union has proposed incorporating international air transport emissions within its Emissions Trading Scheme, and using trade restrictions for enforcement—an action opposed by the United States, which has threatened to retaliate.

It is not obvious how this will play out. One possibility is that the EU will back down. Another is that the EU will impose the planned restrictions and the US will not respond. A third possibility is that the EU will impose the planned restrictions and the US will retaliate in some fashion. A fourth possibility is that the main parties will avoid conflict by striking a compromise through ICAO. This would be a far more preferable outcome—a model, perhaps, for how to resolve similar conflicts.

## **Setareh Khalilian**

*Kiel Institute for the World Economy*

## **Rolf J. Langhammer**

*Kiel Institute for the World Economy*

## **Technology transfer**

Instead of a carbon border tax, those countries already active in the field of emission capping could encourage the transfer of clean technology, either by regulation that asks all their companies to employ their national technology and environmental standard in all production sites world-wide, or by focusing on clean technology in their development aid projects.

## **Labeling schemes**

Developed countries could introduce regulation that asks for labeling of all products in terms of their carbon foot print—similarly to the fair trade labeling schemes, these indications could invite consumers to make use of their power. It is likely that countries who find their trade businesses impeded by this labeling could file a case to the Dispute Settlement Mechanism of the WTO for incommensurate trade disruption, but in case of climate change the WTO could uphold the labeling requirements, as it did in case of health and safety regulations of the EU.

## **Financial compensation**

In order to find an agreement between the former and the latter group, a global emission system, or a global price on carbon could be negotiated with the help of financial compensation for developing countries.

Similarly to the Montreal Protocol, a global fund could be set up with the help of the revenues created for example by a carbon tax. Developing countries could become eligible for receiving transfers from this fund.

The criteria for receiving funds could be either the amount of aid needed to adapt to climate change, or the costs of the carbon tax for the economy of the relevant country. To calculate



either sum, the help of several international organizations such as World Bank, UNEP and UNDP is needed.

## Carlos Magariños

*CEO, Global Business Development Network*

**Proposal 1: To settle a body (at UN or the World Bank) responsible for the development and issuance of statistics of national GDP growth net of Carbon Emissions effects. The new body would offer technical cooperation to include the measurement of Carbon emissions in the National accounting systems of the countries willing to join the program.**

**Such accounting system would be used to base an award system for commercial benefits (like tariff reductions in multilateral trade negotiations) and/or financial benefits (like faster and cheaper access to technology transfer funding) to countries that adopt cap and trade regimes to reduce CO<sub>2</sub> emissions.**

The best way to deal with Carbon emissions seems to be the development of a global cap and trade regime. The experience of the implementation of the Kyoto protocol, so far, demonstrated that such aim has proved elusive. For that reason an adequate set of incentives to encourage coordination at the global level among economies working at different levels of development would be useful.

To develop such incentives, however, better accounting of the effect of carbon emissions on the environment (similar to the concept of depreciation of capital, in this case, natural capital) should be included into the national accounting systems.

Current national accounting systems, where national income, gross domestic product, balance of payments, among others are found, have become tools to analyze a country's situation and therefore for policy decision making matters. However, this approach, with more than 50 years of intense use, does not include factors that could be influencing directly the wealth of nations.

In this sense, the increase in national income is usually a means of economic growth, moreover, depending on how large the increase to positively affect the GDP per capita measure, one would say that there is a welfare improvement. However, at the same time, these increases may be accompanied by severe destruction of the scarcest resource to men disposition: the environment. Notwithstanding, it seems that traditional economic accounting have not considered this withdrawals in its analysis, models and information systems, which leads one to think that conventional accounting methods would not be an exception.

Particularly, continuous changes in countries' natural resources (environmental assets) should be constantly analyzed and under supervision because these recurrent changes will determine the country's future productive capacities, therefore, its future output, consumption, and economic system. Consequently, the interdependence between economy and environment must lead to rethink the traditional national accounting system, making sure that the environment and associated agents are not considered just as an external factor in economic analysis. Instead, it should be internalized in the wealth of countries' accounting.

In other words, the integration of a "national green accounting system" will allow to avoid such distortions mentioned above caused by traditional national accounting systems:

- the failure to address the accounting for environmental protection expenditures as social costs;
- the failure to address the degradation of environmental quality from external effects in production and consumption activities;
- the failure to address the scarcities of natural resources that threaten the sustained productivity of the economy.



Furthermore, a key factor proposed states that, when incorporating environmental assets national economic analysis, there will also be an additional incentive to coordinate the implementation of policy measures that foster the preservation of this “new national production factor” (the environment) in order to preserve and improve economic competitiveness among countries. These include the incorporation of market-oriented measures that appear to be the most viable since it establishes a system of regulated prices by supply and demand on the cost of reducing carbon emissions.

Therefore, following the example of developed countries, it is necessary for developing countries, whose growing technology industries are still operating on a carbon-intensive basis, to introduce market measures as a cap and trade system that allows them to preserve their environmental assets and, thus, improve its new national accounts, which should have already internalized the environmental factor.

This system may enhance the degradation of environmental assets through the measurement of net production of pollution which includes not only the country's capacity to pollute but also their ability to absorb it. This net value could be used to calculate the CAP in each country and thereby implement the mechanism of emission trading to meet the shortfall or surplus of permits. In this sense, the added value of the bonds would give an economic value both to pollute as to maintain environmental assets, generating in this way, incentives for countries to preserve their environmental resources.

However, the discussion point could lie on what basis should refer to calculate the net output of pollution. One approach would be based on consumption, one that includes trade in goods manufactured in countries that are net exporters of carbon to carbon net importers or vice versa. As a matter of fact, nowadays, there are exiting models that explain the concept of net effect of emissions resulting from trade, where the main variables are production and consumption-based emissions.

In this sense, the difference between production emissions (FPr) and consumption emissions (FCr) represents the net effect of emissions embodied in trade (EET) and therefore equals emissions embodied in exports (EEE) less emissions embodied in imports (EEI). The purpose of this theory is to put in plain words that sharing responsibility for emissions among producers and consumers could facilitate international agreement on global climate policy that is now hindered by concerns over the regional and historical inequity of emissions.

## **Dieter Pommerening**

*Vice Chairman, Felix Schoeller Holding*

## **Climate change**

1. Anthropogenic CO<sub>2</sub>-emissions net of current absorption is increasing and may cause imbalances with hereto unclear impacts. Therefore CO<sub>2</sub>-mitigation at least is a worthwhile precautionous reassurance strategy.
2. Anthropogenic CO<sub>2</sub>-emissions can be avoided or abated to a very large extent at reasonable cost. Policy makers, CO<sub>2</sub>-“producers” and consumers have to rethink their strategies and codes of conduct, i.e.:
  - Subsidies for bio-fuels must be reevaluated.
  - Techno-industrial CO<sub>2</sub> sequestration might be a useless dead end in view of afforestation potentials.
  - Redirection of development aid programs are a worldwide priority.
  - Profitable CO<sub>2</sub>-saving potentials are at hand and just need the will for execution regardless of Kyoto, Bali or Copenhagen.



3. Reduction of deforestation and affordable afforestation need measurable/controllable enforcement/incentifyable mechanisms—the most important agenda item for UN-sponsored agencies. Probably a new agency with a clearly defined charter to execute and monitor solution oriented policies is required.

**"We could achieve a lot, if we wanted to!"**

Please see the following link for further details:

[dieterpommerening.wordpress.com/2010/09/13/climate-change-2](http://dieterpommerening.wordpress.com/2010/09/13/climate-change-2)