Making the International Trade System work for Climate Change

4th Global Climate Policy Conference

São Paulo, Brazil | 17 August 2018

Michael Mehling
Massachusetts Institute of Technology & Strathclyde University
Largest interregional fluxes of emissions embodied in trade (Mt CO2 y−1) from dominant net exporting countries (blue) to the dominant net importing countries (red).

Steven J. Davis, and Ken Caldeira PNAS 2010;107:12:5687-5692
Why Trade Matters for the Climate (2)

CO₂ Emissions in Imported Goods as a Share of Domestic Emissions
Glen Peters et al., 2012 (updated); Global Carbon Project
Trade, Trade Policy and Climate Action

• Around 8 Gt CO$_2$e embedded in internationally traded goods (~2 Gt in net transfers); this results in a sizable ‘carbon accounting loophole’

• Rise in nationalism and protectionism is spurring a retrenchment both in international trade and climate policy, threatening multilateral cooperation

• Paris Agreement achieves breadth of participation at the expense of centralisation, normativity and, at least initially, depth; flexibility still cannot prevent defection and will contribute to heterogeneity in the near term, and may aggravate concerns about competitiveness and emissions leakage

• Several climate policy responses interact with or infringe on international trade rules, such as subsidies for conventional and low-carbon fuels and technologies (incl. e.g. local content rules); technology standards; market-based instruments; and border adjustment provisions.
How the trade regime could support climate action

**Institutional**
- Improve transparency and accountability between WTO and UNFCCC

**Rules**
- Authoritative interpretation of GATT
- Reform DSB: upgrading standing of UNFCCC and Paris Agreement

**Tools**
- More climate expertise in WTO dispute settlement mechanisms

**Regime evolution**
- Including climate policy rules in RTA negotiations
- Intensify negotiations of plurilateral agreements under WTO (e.g. EGA)
Making the Trade System more Supportive of the Paris Agreement: Options

1. Legal changes: WTO
2. Procedural changes in institutions and practices
3. Actions under Plurilateral/Regional Trade Agreements
1. Legal changes: WTO

1(A). Amending the text of the WTO agreements

1(B). Adopting 'Waivers' releasing Members from legal obligation under the WTO agreements

1(C). Adopting an 'Authoritative Interpretation' of WTO agreements/provisions

1(D). Adopting a Peace Clause for ‘climate measures’

2. Procedural changes in institutions and practices

3. Actions under Plurilateral/Regional Trade Agreements
Mapping the Options (2)

1. Legal changes: WTO

2. Procedural changes in institutions and practices

   2(A). Ensuring technical expertise on climate change in relevant WTO dispute panels and the Appellate Body

   2(B). Enhancing coordinated efforts between the WTO and UNFCCC through more intensive use of existing forums (e.g. CTE, SBSTA)

   2(C). Creating a new institutional setup under the WTO [e.g. a WTO ‘Committee on Trade, Environment and Climate Change’]

   2(D). Modification of the product classification system (World Custom Organization’s Harmonized Commodity Description and Coding System)

3. Actions under Plurilateral/Regional Trade Agreements
Mapping the Options (3)

1. Legal changes: WTO

2. Procedural changes in institutions and practices

3. Actions under Plurilateral/Regional Trade Agreements
   
   3(A). Intensifying efforts under plurilateral approaches [e.g. Environmental Goods Agreement (EGA)]

   3(B). Including climate-friendly provisions in RTAs that are undergoing negotiation as well as in future RTAs

   3(C). Reviewing existing RTAs with the aim of making them more climate-friendly

   3(D). Cooperation on bringing PA forward by trade-related measures among like-minded countries (e.g. EU-China)
Assessing the Feasibility of Options

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Facilitating Fossil Fuel Subsidy Reform: Rationale

- Fossil fuel subsidy: “A government intervention that supports the producers or consumers of fossil fuels”
- Various forms, e.g. producer or consumer tax rebates, price supports, direct transfers, unpriced externalities
- Estimated between US$ 260-5,300 billion/year
- Undermine mitigation efforts, divert public funds, tend to be regressive, distort trade and investment

G20 commitment in September 2009:

“phase out and rationalise over the medium term inefficient fossil fuel subsidies”, a pledge echoed by the Asia Pacific Economic Cooperation (APEC) group.
Facilitating Fossil Fuel Subsidy Reform: Options

- Technical assistance and capacity building
- Improved transparency
- Pledges and follow-up through reporting and review
- Political declaration
- Amendment of ASCM (e.g. expansion of category of prohibited subsidies)

New WTO Agreement on Fossil Fuel Subsidies
What Are Border Carbon Adjustments (BCAs)?

• **Border carbon adjustments (BCAs)** seek to alleviate negative impacts of uneven climate policies by including imports or exempting exports.

• They can take different **forms**, e.g.:
  - a tariff or other fiscal measure applied to imported goods
  - extension of other regulatory compliance obligations to imports
  - instance through tax or regulatory relief for exports

• They have three main **objectives**:
  - level the playing field in competitive markets
  - prevent leakage of carbon emissions to jurisdictions with weaker policies
  - incentivise trade partners to strengthen their own climate efforts
Growing Calls for BCAs (1)

**Ernst-Ulrich von Weizsäcker**, President of the Club of Rome (2 June 2017):
‘it would, symbolically, be a lovely idea’

**Rachel S. Williams**, Managing Director, Sandbag Climate Campaign (11 October 2017):
‘border carbon adjustments merit reconsideration’

**Lakshmi Mittal**, Chairman and CEO, ArcelorMittal (13 February 2017): ‘A carbon border tax is the best answer on climate change’
Growing Calls for BCAs (2)

Emmanuel Macron, President of France (26 September 2017):
‘une taxe aux frontières de l’Europe sur le carbone, c’est indispensable.’

Catherine McKenna, Minister of Environment and Climate Change, Canada (11 October 2017):
‘Border carbon adjustments are something we need to look at, ideally through the World Trade Organisation’
Growing Calls for BCAs (3)

Rodolfo Lacy Tamayo, Undersecretary for Environmental Policy and Planning, Ministry of the Environment, Mexico (November 2016): ‘A carbon tariff against the U.S. is an option for us’

Climate Leadership Council (7 February 2017): ‘Border adjustments for the carbon content of both imports and exports would protect American competitiveness and punish free-riding by other nations, encouraging them to adopt carbon pricing of their own.’
Legal Context

- **Non-discrimination principles** in WTO law:
  - Most-Favoured-Nation: equal treatment of trading partners (Art. I GATT)
  - National Treatment: equal treatment of domestic & foreign products (Art. III GATT)

- **Exemptions** are possible under specific circumstances:
  - Art. XX (b) GATT: measures ‘necessary’ to protect human, animal or plant life or health
  - Art. XX (g) GATT: measures ‘relating to’ the conservation of exhaustible natural resources

- Some **consequences for BCAs**:
  - BCAs should avoid differentiating between trade partners
  - BCAs should account for climate efforts of trade partners
  - BCAs should ensure basic fairness and due process during design and implementation
  - Introduction of a BCA should be preceded by serious, across-the-board negotiations
  - BCAs should demonstrate a sufficient environmental nexus
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Region</th>
<th>Coverage</th>
<th>Calculation Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Allowance Import Requirement (FAIR)</td>
<td>2007</td>
<td>European Union</td>
<td>Imports and exports of goods at risk of carbon leakage, in relation to countries without comparable action</td>
<td>Average carbon intensity of EU goods, corrected for average free allowance allocation to production (multiplied by the imported weight)</td>
</tr>
<tr>
<td>Carbon Inclusion Mechanism (CIM)</td>
<td>2009</td>
<td>European Union</td>
<td>Imported and exported goods at risk of carbon leakage, in relation to countries which do not cooperate under a new international climate agreement on mitigation, or without carbon pricing for the sectors covered by the EU ETS</td>
<td>Average direct emissions of a European producer, minus the free allocation received based on product benchmarks, multiplied by the volume of imported goods</td>
</tr>
<tr>
<td>Border Adjustment Proposal for the Cement Sector</td>
<td>2016</td>
<td>European Union</td>
<td>Imported cement and clinker from countries without adequate mitigation efforts and/or carbon content pricing equivalent to EU</td>
<td>Average emissions from EU production (or less, if lower emissions can be proven) minus European benchmark-based free allocation value, multiplied by the number of goods imported</td>
</tr>
<tr>
<td>American Climate and Energy Security Act (HR 2454)</td>
<td>2009</td>
<td>United States</td>
<td>Goods from eligible industrial sectors and manufactured items for consumption from countries that do not meet specific standards outlined in the bill, and that are not exempted for low emissions or a low level of development</td>
<td>National greenhouse gas intensity rate in covered countries for a category of covered goods; an allowance adjustment factor for the allowances that were allocated free of charge in the United States; and an economic adjustment ratio for foreign countries</td>
</tr>
<tr>
<td>Californian Emissions Trading System</td>
<td>2011</td>
<td>California</td>
<td>Electricity imported into California from neighbouring states, provided these are not linked to the Californian Emissions Trading System</td>
<td>All emissions reported for imported electricity from unspecified sources are considered above the coverage threshold, and subject to a default emissions factor multiplied by a transmission loss correction factor</td>
</tr>
<tr>
<td>Climate Leadership Council (CLC)</td>
<td>2017</td>
<td>United States</td>
<td>Exports from sectors with greater than 5% energy cost in final value should have any carbon taxes rebated, and non-emissive fossil fuel products should be exempt; not further specified</td>
<td>Not further specified</td>
</tr>
</tbody>
</table>
Five Design Steps

1. Determine Scope and Coverage
   - Products and trade flows, affected countries, and climate policies

2. Calculate the Embedded Carbon
   - Scope of covered emissions and methodology used for their calculation

3. Determine Adjustment Level
   - Differential between domestic and foreign carbon constraints

4. Determine Revenue Use
   - Allocation of revenue to specified countries and purposes

5. Decide Expiration
   - Periodic review and expiration once leakage rate falls below a certain level
Design Steps and Related Process

**Decide on Introduction of BCA**
- Notify intent to introduce BCA and open dialogue with potentially affected countries
  - Engage affected countries in bi- or multilateral negotiations on leakage reduction

**Determine Scope & Coverage**
- Notify intended coverage of goods and sectors

**Calculate Embedded Carbon**
- Launch participatory process to calculate sectoral average benchmarks for direct emissions and regional emission factors for indirect emissions
- Allow procedure to document performance that exceeds benchmark

**Determine Adjustment Level**
- Create process to document performance that exceeds benchmark
- Consider independent process for determination of implicit carbon price

**Determine Revenue Use**
- Engage with developing countries on possible use of revenue

**Review and Expiration**
- Periodic review and expiration once leakage rate falls below a certain level

- Design Step
- Related Process
Facilitating Border Carbon Adjustments: Options

- Amending WTO Rules for BCAs
- Adopting a Waiver for BCAs
- Adopting an authoritative interpretation to allow BCAs
- Agreeing on a ‘peace clause’ for BCAs
- Amending the WCO Harmonized System (HS)

Regional or Plurilateral Cooperation on BCAs
Summary of Proposal:


https://go.nature.com/2KXN75b

Questions? Please ask, or contact me at:
@ mmehling@mit.edu
📞 (617) 324-7829