

MIT Center for Energy and Environmental Policy Research



Pricing Carbon at the European Border





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13 December 2019

Flow of the Presentation

- 1. Adjusting Carbon at the Border: Overview
- 2. An EU Border Carbon Tax: What Do We Know?
- 3. Some Legal & Procedural Considerations



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 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
- 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



Growing Calls for BCAs (1)

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 (2)

Rodolfo Lacy Tamayo, then 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'

H.R. 109 (Green New Deal) (7 February 2019): '... enacting and enforcing ... border adjustments with strong labor and environmental protections—

(i) to stop the transfer of jobs and pollution overseas; and(ii) to grow domestic manufacturing in the United States'





IV

116TH CONGRESS H

H. KES. 109

Recognizing the duty of the Federal Government to create a Green New Deal,

IN THE HOUSE OF REPRESENTATIVES

February 7, 201

6. OCASIO-COITEZ (for berself, Mr. HASTINGS MS. TLAIR, Mr. SERIRANO, MS. CAROLAY B. MALONEY of New York, Mr. VARGAS Mr. ESPAILLAY, Mr. LYNCH, Ms. VIZLÁGUEZ, Mr. BLADINATIER, Mr. BENEMAY F. BOYLE, AND LAURENCH AND THE STREAM OF THE SERIES OF PERINSE OF PERINSE OF PERINSE OF THE SERIES OF THE S



Growing Calls for BCAs (3)



Lakshmi Mittal, Chairman and CEO, ArcelorMittal (13 February 2017): 'A carbon border tax is the best answer on climate change'



BusinessEurope, European Business Views on a Competitive Energy & Climate Strategy' (29 April 2019): 'The following options could be carefully assessed: ... Carbon border adjustments for imported products of certain sectors, preferably together with other economies through carbon clubs."'



Name	Year	Region	Coverage	Calculation Basis
Future Allowance Import Requirement (FAIR)	2007	European Union	Imports and exports of goods at risk of carbon leakage, in relation to countries without comparable action	Average carbon intensity of EU goods, corrected for average free allowance allocation to production (multiplied by the imported weight)
Carbon Inclusion Mechanism (CIM)	2009	European Union	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	Average direct emissions of a European producer, minus the free allocation received based on product benchmarks, multiplied by the volume of imported goods
Carbon Inclusion Mechanism for the Cement Sector	2016	European Union	Imported cement and clinker from countries without adequate mitigation efforts and/or carbon content pricing equivalent to EU	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
American Climate and Energy Security Act (H.R. 2454)	2009	United States	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	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
Climate Leadership Council (CLC)	2017	United States	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	Not further specified
Green New Deal (H.Res. 109)	2019	United States	Not further specified	Not further specified

A European BCA: What Do We Know? (1)

Political Guidelines of 16 July 2019:

'To complement this work, and to ensure our companies can compete on a level playing field, I will introduce a Carbon Border Tax to avoid carbon leakage. This should be fully compliant with World Trade Organization rules. It will start with a number of selected sectors and be gradually extended."

A Union that strives for more

My agenda for Europe

By candidate for President of the European Commission

Ursula von der Leyen



POLITICAL GUIDELINES FOR THE NEXT EUROPEAN COMMISSION 2019-2024



A European BCA: What Do We Know? (2)

 Mission Letter to Paolo Gentiloni, incoming Commissioner for the Economy, 10 September 2019:

'You should **lead** on the proposal of a **Carbon Border Tax**, working closely with the Executive Vice-President for the European Green Deal. This is a **key tool** to avoid carbon **leakage** and ensure that EU companies can compete on a level playing field. The Carbon Border Tax should be fully compliant with **WTO rules**.'

 Also mentioned in the Letters to Frans Timmermans (Executive Vice President), Phil Hogan (Trade) and Kadri Simson (Energy)



A European BCA: What Do We Know? (3)

COM(2019)640 on the European Green Deal of 11 December 2019

'Should differences in levels of ambition worldwide persist, as the EU increases its climate ambition, the Proposal for a revision of the Energy Taxation Directive June 2021 Proposal for a carbon border adjustment mechanism for selected 2021 sectors 2020/2021 Can New EU Strategy on Adaptation to Climate Changen to comply with World Trade Organization rules and other international obligations of the EU. It would be an alternative to the measures that address the risk of carbon leakage in the EU's [ETS]. EN



Some Legal Considerations: EU Law

- Article 192(2) of the Treaty on the Functioning of the EU: '[T]he Council acting unanimously in accordance with a special legislative procedure ... shall
 - adopt ... provisions primarily of a **fiscal nature**'
- Recital 24 of Directive 2003/87/EC, as amended by Directive (EU) 2018/410 of 14 March 2018:

'Directive 2003/87/EC should be kept under review in the light of **international developments** and ... could consider whether it is appropriate to **replace**, **adapt or complement** any existing measures to prevent carbon leakage with **carbon border adjustments** or alternative measures, provided that such measures are fully **compatible with** the rules of the World Trade Organisation, so as to **include in the EU ETS importers** of products which are produced by the sectors or subsectors determined in accordance with Article 10a ...'



Some Legal Considerations: WTO Law

Non-discrimination principle 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)
- Exceptions are possible under specific circumstances (Art. XX (b) and (g) GATT)
- 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 nat. resources
- Chapeau: "not ... a means of **arbitrary** or unjustifiable discrimination between countries where the same conditions prevail, or a **disguised restriction** on international trade"

Some consequences for BCAs:

- BCAs should avoid differentiating between trade partners & account for climate efforts
- BCAs should ensure fairness & due process and be preceded by serious negotiations
- BCAs should demonstrate a sufficient environmental nexus
- BCAs to exempt exports and BCAs coupled with free allocation are legally problematic



Carbon Inclusion Mechanism for Cement (2016)

Non-Paper circulated by France in Feb. 2016:

- Carbon Inclusion Mechanism (CIM) for the cement sector: energy intensive, low imports
- Based on average EUA shortfall of EU-based producers, but importers can demonstrate better emissions performance
- Envisioned progressive substitution of free allocation alongside rising CIM obligation
- Operationally would have integrated EU customs database and EU ETS registry

February 2016

"This is a courtesy translation and in the event there are any differences between the French and English texts, the French text governs"

Non-paper – Carbon inclusion mechanism for the cement sector

1. - The implementation by the European Union of a policy to reduce greenhouse gas emissions based on the determination of a cost of CO_2 for emitters could lead to the transfer of some production and emissions to other regions of the world (so-called "risk of carbon leakage") in the absence of comparable efforts put forth in these countries. The result on climate change mitigation would be neutral or negative, cancelling out the benefits of the measures enacted by the European Union.

Until now, that concern has been addressed within the framework of the European Union Emission Trading Scheme (EU ETS) directive, which provides free allocation of allowances to sectors exposed to a risk of carbon leakage.

However, the directive also enables the possibility of introducing a carbon inclusion mechanism (CIM)¹, based on the principle of including importers into the EU ETS, so that they surrender a volume of allowances equivalent to that which a European manufacturer would have had to acquire on the market for the same quantity of product. The aim of this mechanism is to prevent the risk of carbon leakage by ensuring that installations located within the European Union remain on equal footing with those in third countries, thereby preserving the environmental integrity of the efforts put forth in the European Union. Nonetheless, this mechanism has not been implemented so far.

Yet, a carbon inclusion mechanism can have benefits that complement free allocation. It is economically more efficient and more focused (less arbitrary). It is better suited to address the objective of eliminating competitiveness loss due to the carbon price and in the framework of a progressive allocation through auctioning it prevents windfall profits due to imperfections in the free allocation scheme. In the long term, it circumvents the difficult debate about benchmarks definition (the benchmark eventually becoming the fact of international competition).

Politically, the CIM brings multiple benefits:

- The development of carbon inclusion mechanisms will alleviate the pressure on the demand of free allocation in the framework of the share between free allocation and auctions as proposed by the Commission;
- If carbon inclusion mechanisms develop enough, it would even be possible to progressively reduce the
 volume of free allocation and increase the volume of auctions. This could improve the Member States'
 revenues (drawn from auctions) and make it easier to finance climate policies without lowering the
 GHG mitigation ambition.

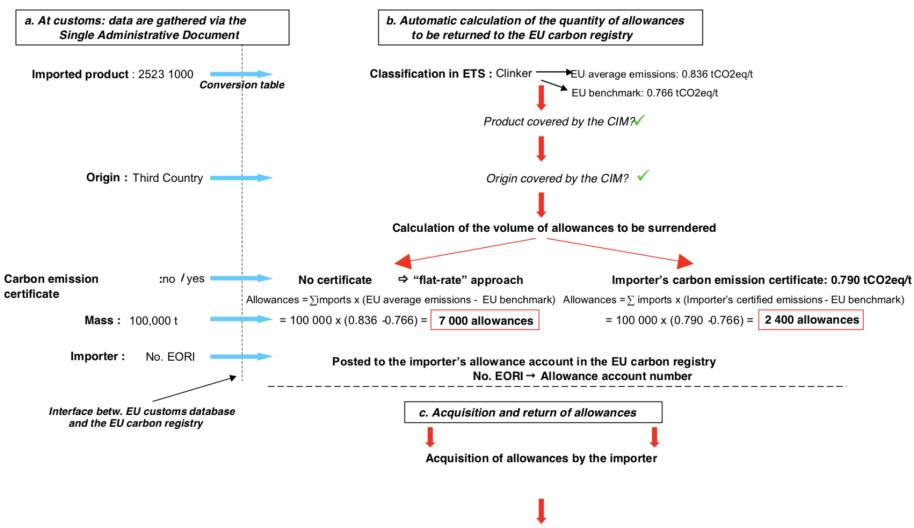


¹ Article 10b para 1(b) of directive 2003/87 (b): "Inclusion in the Community scheme of importers of products which are produced by the sectors or subsectors determined in accordance with Article 10a" et

Rectal 25 of directive 2009/29/EC: "an effective carbon equalisation system could be introduced with a view to putting installations from the Community which are at significant risk of carbon leakage and those from third countries on a comparable footing. Such a system could apply requirements to importers that would be no less favourable than those applicable to installations within the Community, for example by requirements to importers that would be no less favourable than those applicable to installations within the Community, for example by requiring the surrender of allowances. Any action taken would need to be in conformity with the principles of the UNECCC, in particular the principle of common but differentiated responsibilities and respective capabilities, toking into account the particular situation of least developed countries (DCS). It would also need to be in conformity with the international obligations of the Community, including the obligations under the WTO agreement."

Carbon Inclusion Mechanism for Cement (2016)

Illustration of the data gathering process, calculation of the volume of allowances to be surrendered, purchase and surrender of allowances by an importer





Surrendering of allowances by the importer

Some Takeaways

- 1. Implementation through EU ETS rather than tax
- 2. Will only apply to imports
- 3. Is likely to replace, not complement free allocation
- 4. Will start with basic products with high energy intensity, but possibly low trade intensity
- 5. Process will be slow; helpful for WTO compliance



Further Reading

'Beat Protectionism and Emissions at a Stroke.' Michael Mehling, Harro van Asselt, Kasturi Das & Susanne Dröge.

Nature, Vol. 559 (16 July 2018): 321-324. https://go.nature.com/2Lq0uMv

'Designing Border Carbon Adjustments for Enhanced Climate Action.'
Michael Mehling, Harro van Asselt, Kasturi Das, Susanne Droege & Cleo Verkuijl.

American Journal of International Law, Vol. 113, No. 3 (July 2019), pp. 433-481.

https://bit.ly/2nWB9Do

'What a European 'Carbon Border Tax' Might Look Like.' Michael Mehling, Harro van Asselt, Kasturi Das, Susanne Dröge.

VoxEU, 10 December 2019. https://voxeu.org/article/what-european-carbon-border-tax-might-look



Thank you for your attention!

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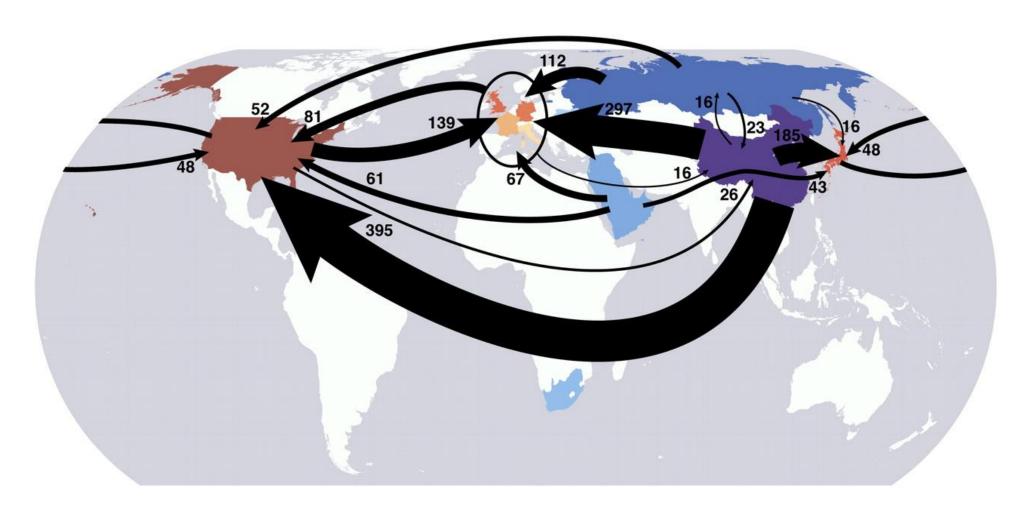
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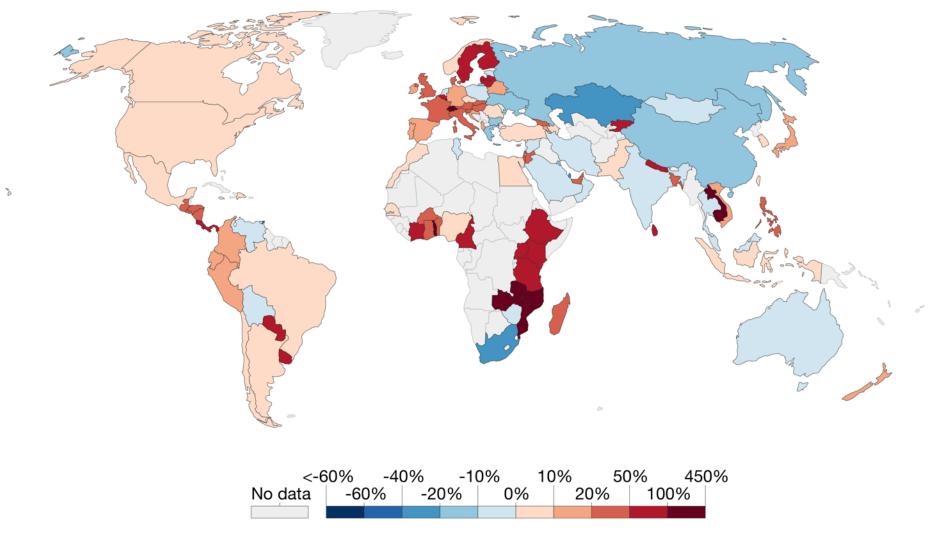
Why Trade Matters for the Climate (1)



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