

# Border Carbon Adjustments: an excuse for Murky Protection?

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# Basic problem

- Countries have some reason for concern about *free riders* wrt carbon charges -non signing & non compliance
- Concerns are for competitiveness as well as the environment
- Border measures to establish equivalence *may* be WTO legal. (Tax adjustments, ETS for imports, A-D, CVD?)
- But scope for conflict is immense; information requirements complex: what is the true marginal emissions cost?
- Carbon footprints hard to pin down, (direct indirect; marginal average etc). Cement 2:1 range. Cars 6:1.
- Consumption (destination) based charges address competitiveness but require 2 border adjustments
- Production (origin) based charges simple but require ***trust.***

# Many LDC exports low carbon but..

- Minerals
- “Food Miles”: estimates highly misleading but accurate figures costly and even *eco labelling* could be a trade barrier
- A very poor developing country makes Aluminium with hydro-electric power but it is linked to its neighbour’s grid - which is mostly coal powered
  - Producing Al with hydro increases coal use in its neighbour!

# Production vs Consumption charges

- Consumption based tax applied on all use of product at same rate for all goods sold in your territory plus rebate for exports - fits carbon taxes
- Gives maximum reassurance against leakage
- But all traded goods would be subject to 2 border adjustments
- tax would not reflect emissions in production
- Production/Energy tax means no need for border adjustment;
- plants taxed, not products
- fewer tax points
- fits better with ETS
- reflects actual costs - polluter pays directly & passes on to final consumer
- BUT requires trust: international agreement and “Mutual Recognition” to avoid BCAs
- How to get this?

# EU ETS Phase III (Directive 2003/87/EC) vs. Waxman-Markey bill (H.R.2454)

- European Commission hopes **free allocation** can prevent need for BCAs but 2009 Directive (Article 10b.1(b)) has the option of possible “inclusion of importers” in the ETS.
- **By 30th June 2010:** Community-wide, absolute allocations for 2013 to be published. Plus a regulation adopted on timing, administration and other aspects of auctioning allowances. Plus the publication of an **analytical report** assessing the situation for exposed (sub)sectors, in the light of international negotiations
- Short run: Use of conditional **free allocation (“rebates”)** – based on output-based allocation. Long run: option of **border adjustment (2020 – see below)**
- **By June 30th 2011:** list of sectors eligible for rebates (updated in 2013 and every 4 years thereafter)
- **By Jan 1st 2018:** If a suitable MEA has not been achieved, importers of energy-intensive, trade-exposed, goods may, from **2020** onwards, be required to **submit allowances** (international reserve allowances)
- LDCs exempt (Sec. 768)
- Bill s.t. change – Senate bill pending

# WTO rules

- Rules are ambiguous
- Recent case law means countries can apply measures against polluting imports while claiming good faith
- Border tax adjustments, anti-dumping, anti-subsidy rules could potentially be used as basis for illegitimate as well as legitimate cases
- Threat is as much risk of systematic uncertainty as of the size of likely border measures

# Scale of leakage problem modest?

“It should be noted, however, that studies to date find generally that the cost of compliance with an emission trading scheme is a relatively minor component of a firm’s overall costs, which include exchange-rate fluctuations, transportation costs, energy prices and differences across countries in the cost of labour.”

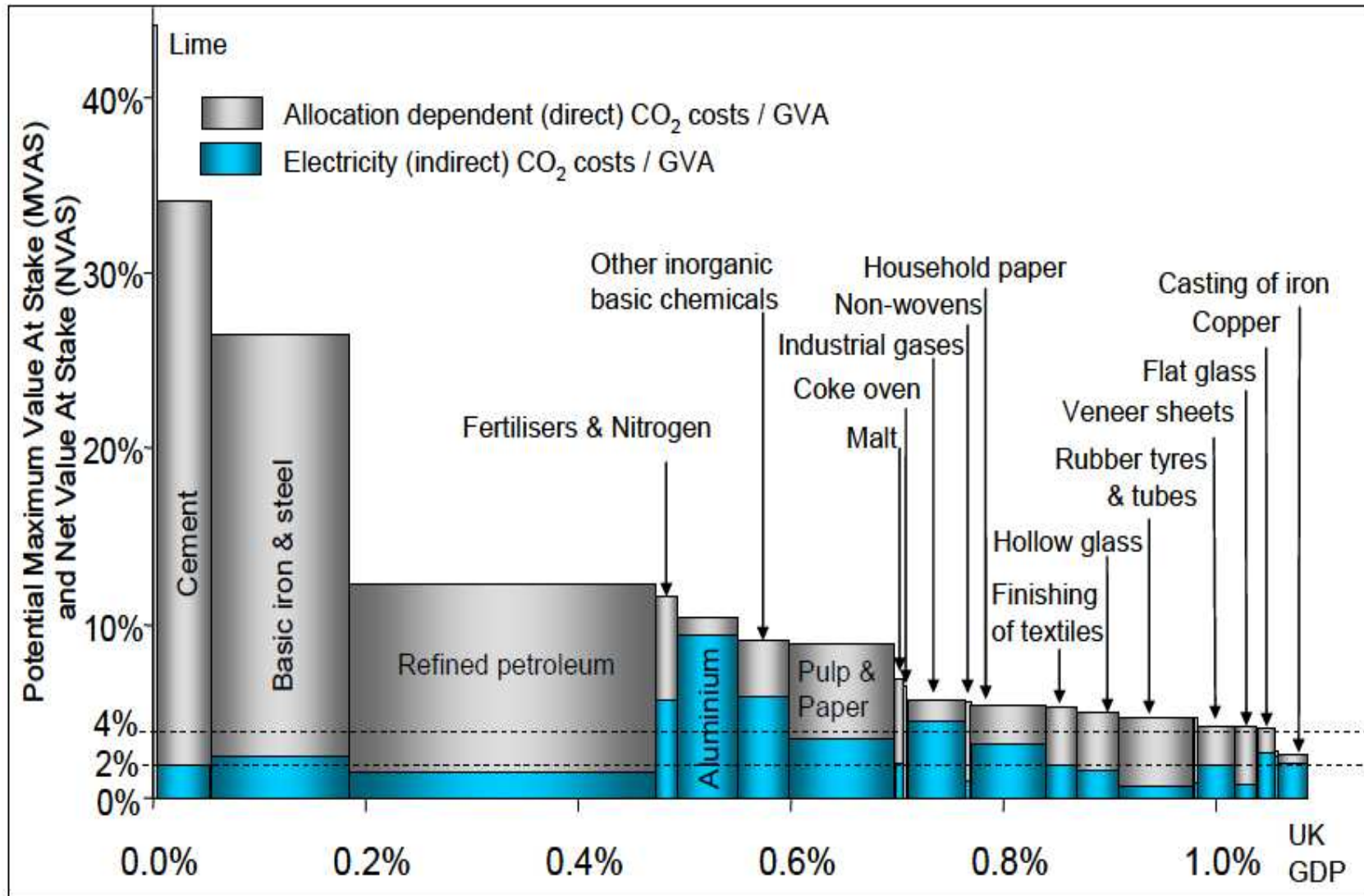
Eg for a car 2-6 tonnes range of estimates

BUT:

“Of course, the carbon constraint in future emission trading schemes (for example, in Phase III of the EU-ETS) is expected to be more stringent, with a lower capped limit and fewer free allowances. This may therefore increase the potential impact of carbon costs on the competitiveness of a number of industrial sectors.”

# The most CO<sub>2</sub>-intensive subsectors (with cumulative GVA shown as a % of UK GDP)

Graph assumes a price of EUR20/tCO<sub>2</sub> and extra price of electricity of EUR10/MWh  
(Source Hourcade et al, 2007:6)



# BCAs are not *a priori* ruled out

“The general approach under WTO rules has been to acknowledge that some degree of trade restriction may be necessary to achieve certain policy objectives, as long as a number of carefully crafted conditions are respected. WTO case law has confirmed that WTO rules do not trump environmental requirements. If, for instance, a border measure related to climate change was found to be inconsistent with one of the core provisions of the GATT, justification might nonetheless be sought under the general exceptions to the GATT (i.e. Article XX), provided that two key conditions are met.”

- A clear link between the exception sought and the policy aim
- No arbitrary discrimination or disguised restrictions to trade

WTO UNEP “Trade and Climate Change” p. xix  
[http://www.wto.org/english/news\\_e/pres09\\_e/pr559\\_e.htm](http://www.wto.org/english/news_e/pres09_e/pr559_e.htm)

# Challenges for BCAs

“There are two main challenges in implementing border measures: providing a clear rationale for border measures (i.e. accurately assessing carbon leakage and competitiveness losses); and determining a “fair” price to be imposed on imported products to bring their prices into line with the domestic cost of compliance with an emission trading scheme.”

WTO UNEP “Trade and Climate Change” p. xviii

[http://www.wto.org/english/news\\_e/pres09\\_e/pr559\\_e.htm](http://www.wto.org/english/news_e/pres09_e/pr559_e.htm)

# Cement: Range of border adjustments

(per t Portland cement - 0.95 clinker:cement ratio; €20/t CO<sub>2</sub>)

<b>Emission source</b>	<b>BTA cost attributable to each source</b>
Process emissions	€10
Combustion emissions	€3.10 - €12.60
<b>Direct emissions range</b>	<b>€13.10 - €22.60</b>
Indirect emissions	€0.80 - €2.20
<b>Total range</b>	<b>€13.90 - €24.80</b>
<b>Price of cement (2008)</b>	<b>€70/tonne</b>

# Cars: Measuring emissions

- Direct emissions depend on use of new vs scrap steel (but does this matter?)
- Complex global supply chain
- Location specific – individual producers and products. Estimates range from <math><1\text{tCO}\_2</math> per car to 6t
- Even if 10t CO<sub>2</sub> emission per car €20/t CO<sub>2</sub>, would add only 2% of the price of a €10,000 car.

# Consumption based Carbon charges

- WTO members agree to impose Vat style taxes on goods sold in their territory
- Exporters receive tax rebate
- Importer coefficient simpler but in principle it should be marginal carbon cost in exporter
- Eliminates fear of “competitiveness” effects but may but not be environmentally ideal if based on *average coefficients in importer economy*
- Every traded good suffers 2 BCAs – export rebate and import tax

# Production based charges

- Worldwide agreement on an energy tax (ETS) that would reflect carbon impact
- Paid at location of production based on carbon emissions there and passed on to ultimate user/consumer (preferably linked to marginal emissions costs)
- No need for any border adjustments if universally agreed rates applied

# Applying ETS schemes to imports?

- EU Directive would (over-?) compensate “at risk” industries with *free allocations*. But 2010 review.
- Imports would have to show they had paid ETS charges or purchase EU ETS
- Could work if universal ETS but many points of conflict possible to estimate true total marginal impact
- What product coverage? Most Chinese emissions not in Carbon-intensive sectors

# Anti-dumping

- Ready made methodology for adjusting exporter costs to what they “should” be
- Ukraine fertilizer case exemplified use of estimating new costings using higher fuel prices
- But harder to apply when carbon costs are indirect and where disputes can arise over carbon footprint of physical inputs – eg virgin vs scrap steel; direct and indirect costs
- WTO compatibility uncertain

# CVDs

- Explicit subsidies to energy intensive sectors clearly potentially actionable
- Lower taxes or biased allocation of ETS permits more likely to be seen as subsidy than overall absence of any carbon measures
- Legal debate whether inaction is actionable, eg failure to impose a carbon regime

# The risk of disputes

- Countries may not sign up to a deal
- Countries may sign up but not comply
- Countries may comply with letter and even substance of agreement but are alleged to be doing so in opportunistic way, eg thru pattern of free allocation of ETS permits
- A variety of prima facie legal ways to create BCAs

# Possible types of agreement

- Agree that carbon measures should be used on production (origin) basis to minimise BCAs
- Agree stringent rules for applying BCAs
  1. detailed climate agreement that could trigger authorisation for BCA if prime facie evidence that exporter not meeting globally agreed disciplines on export goods and services *or*
  2. agreement to use only WTO rules with DSB able to rule on whether exporter's carbon regime or importers' BCAs are consistent with a multilateral climate agreement and existing WTO rules

# Green protection?

- Pressures for BCAs will increase and WTO cannot prevent
- Calculations needed to implement BCAs fraught with scope for opportunism and scope for grandstanding.
- But border measures don't address domestic production.
- Origin measures seem to minimise chances of dispute *if they are based on consensus*