

A Critical Review of Measures to Address Carbon Leakage from the EU ETS

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Preventing Carbon Leakage

Levelling the different carbon prices among world regions

- Mid- to Long-term options:

- a global allowance market through integration
- a global climate deal on carbon reduction/pricing
- A set of sectoral agreements

- Short-term:

Cost equalisation for actors contributing to the leakage phenomenon

- Within the ETS allocation design: **free allocation**
- Revenue recycling from auctions or other sources: **subsidies/state aid**
- At the border: **taxes, allowance rules**

- What drives decisions? Leakage or competitiveness concerns?

SWP

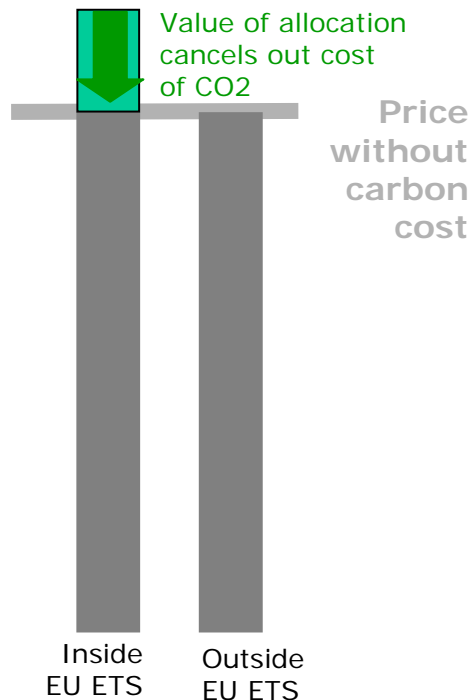
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Summary: Options for tackling leakage

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Free Allocation and State Aid: Level the Carbon Price **Downwards**

Levelise at
non-carbon costs
**Conditional allocation/
revenue recycling**



Critical Issues

- Little substitution to low carbon products/services
- Distorts investment
- May constrain innovation
- Risk of lock-in

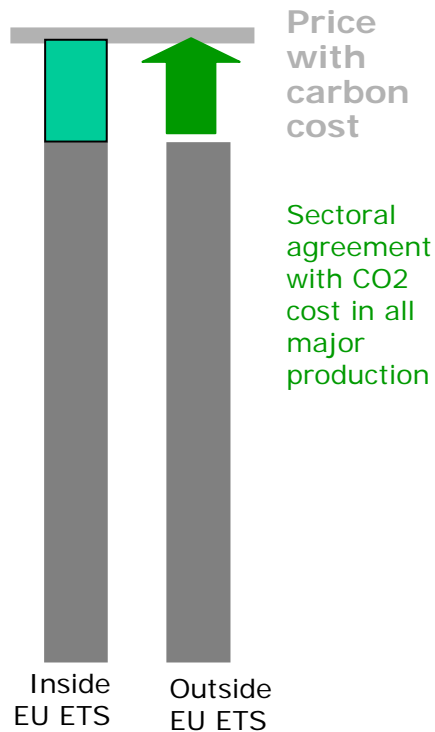
→ free allocation or revenue recycling
can prevent leakage **only** if conditional
on the activity that the system is **trying**
to deter



→ ... **third** best

Sectoral Agreements: Level the Carbon Price **Upwards**

Globalise
carbon costs
**Full-cost sectoral
agreements**



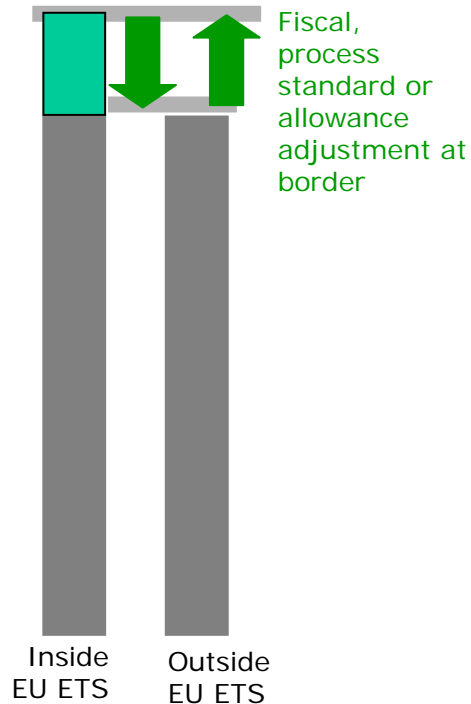
Critical Issues

- Requires strong policies of developing countries
- Risk of lowest common denominator
- Not credible for most governments to make, implement and enforce such long-term binding commitment

→ ... **first** best

Border Adjustments: Level the Carbon Price **Flexibly**

Support consistent
differential
Border adjustments



Critical Issues

- Potential problems with WTO
- Perceived as a threat in international trade negotiations
- Requires at least informal international cooperation if not multilateral agreement
- Common technological standards needed

→ ... **second** best

Cost Adjustment Measures for Trade Exposed EEI

Policy Instrument	Trade Policy Aspects	Climate Policy Aspects
I: Taxes/Tariffs		
On carbon-intensive imports	Levelling of carbon costs vis-a-vis third parties	A stick for engaging free riders (?)
Rebates for carbon-taxed exports	Similar to VAT destination principle; Revenues remain with importer	No carbon price effect for consumers abroad
Export taxes	Levelling, Revenues remain with exporter	Way to address financial needs of major exporters from emerging and developing countries
II: Allowances		
Importers to the ETS need to buy and surrender allowances	Mandatory rule, extraterritorial application of national/regional climate policy	Which allowances are eligible? International offsets, Allowances from other ETS?
Exporters from EU ETS are exempt from surrendering allowances		Relates to free allocation (III)
III: Other Cost Adjustments for Exports		
Exporters receive reimbursement for allowances	Subsidy?	Revenue recycling at national/regional level
Free allocation for trade-exposed exporters	No trade distortion (?)	Undermines incentives for internalisation of carbon costs

Border Adjustments: Technicalities and Important Ingredients

■ Technicalities:

- **Where to apply border adjustment:** products, benchmarks, how far down in the production chain?
- **Level of adjustment:** Who determines it, symmetric / asymmetric, also electricity price increases?
- **Compensation** financial / physical terms: Tax or certificates
- Compensation of **trade** with every other country, Non Annex 1 countries, countries with/out climate policy?

■ Important Ingredients:

- Focus on **specific sector characteristics**, not generalised protection of a 'carbon pricing' zone
- **Recognise** the debate in other regions – notably the US
- Pursue in a **multilateral** setting, not a unilateral protection of EU (or US, other) industry: link to sectoral negotiations
- Engage the **trade community** from the outset and not burden the WTO

Portfolio of measures needed

- What type of leakage (production, investment)? Combine tools?
- Synergies with competitiveness concerns?
- Prepare for international agreements (keep it flexible)

The EU ETS after 2012

- Current debate: **downward** adjustments
 - Grandfathering
 - Revenue recycling
 - Output-based allocation

- In the light of international negotiations: **upward and flexible adjustments?**
 - sectoral agreements on cement, steel, others?
 - Agreement on limiting the use of border adjustments?

Thanks for your attention!

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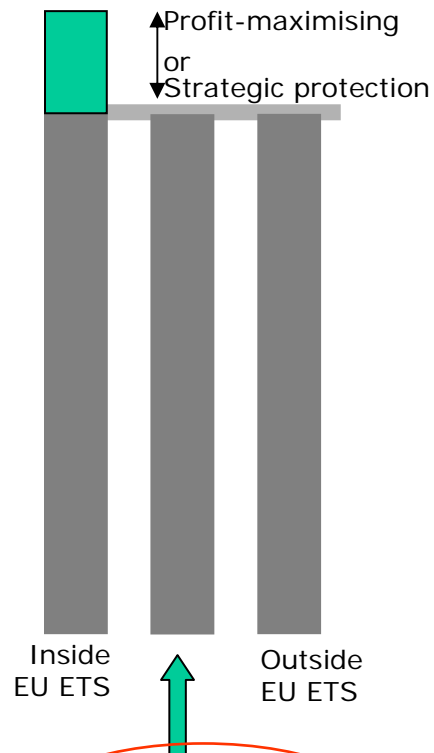
Backups



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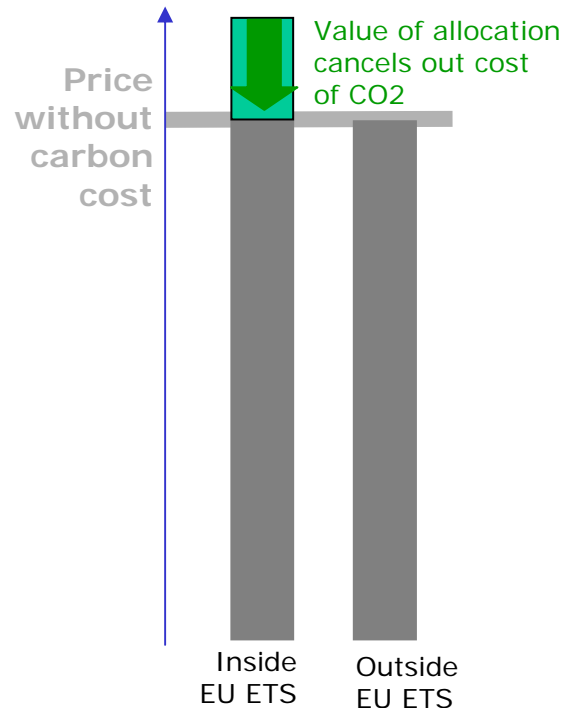
Summary: Options for tackling leakage

No mechanism (fixed free allocation)



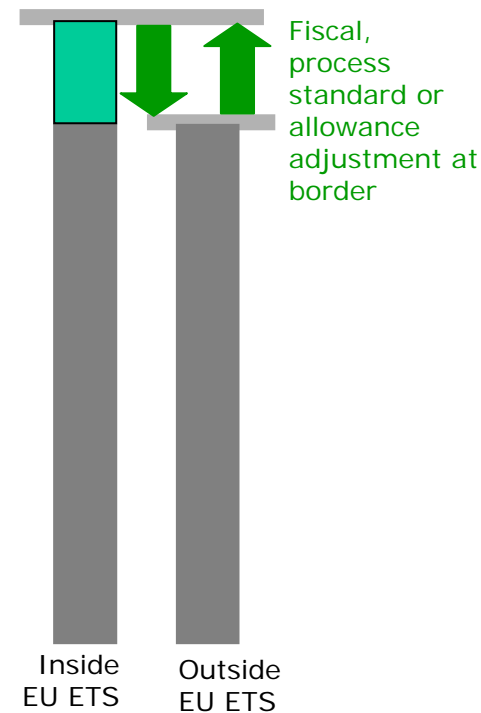
Uncertain trade-off
between profits
and leakage

Levelise at non-carbon costs Conditional allocation/ revenue recycling



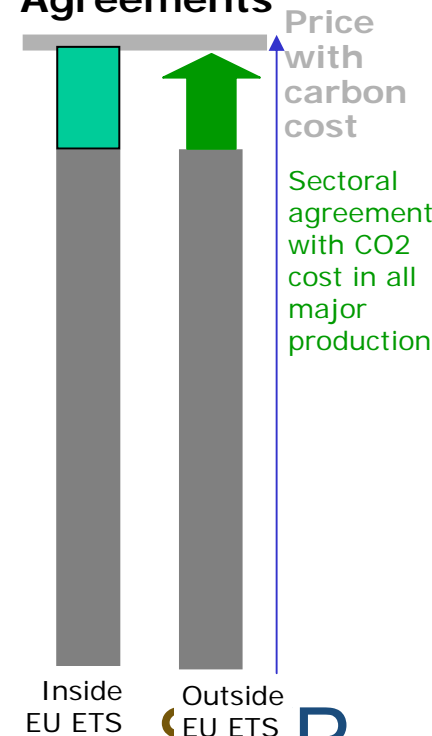
Little substitution to low carbon products/services
Distorts investment
May constrain innovation
Risk of lock-in

Support consistent differential Border adjustments



Potential problems with WTO/trade relations
Requires at least informal international cooperation

Globalise carbon costs Full-cost sectoral Agreements



Requires strong policies of developing countries
Risk of CO₂ price set by lowest common denominator

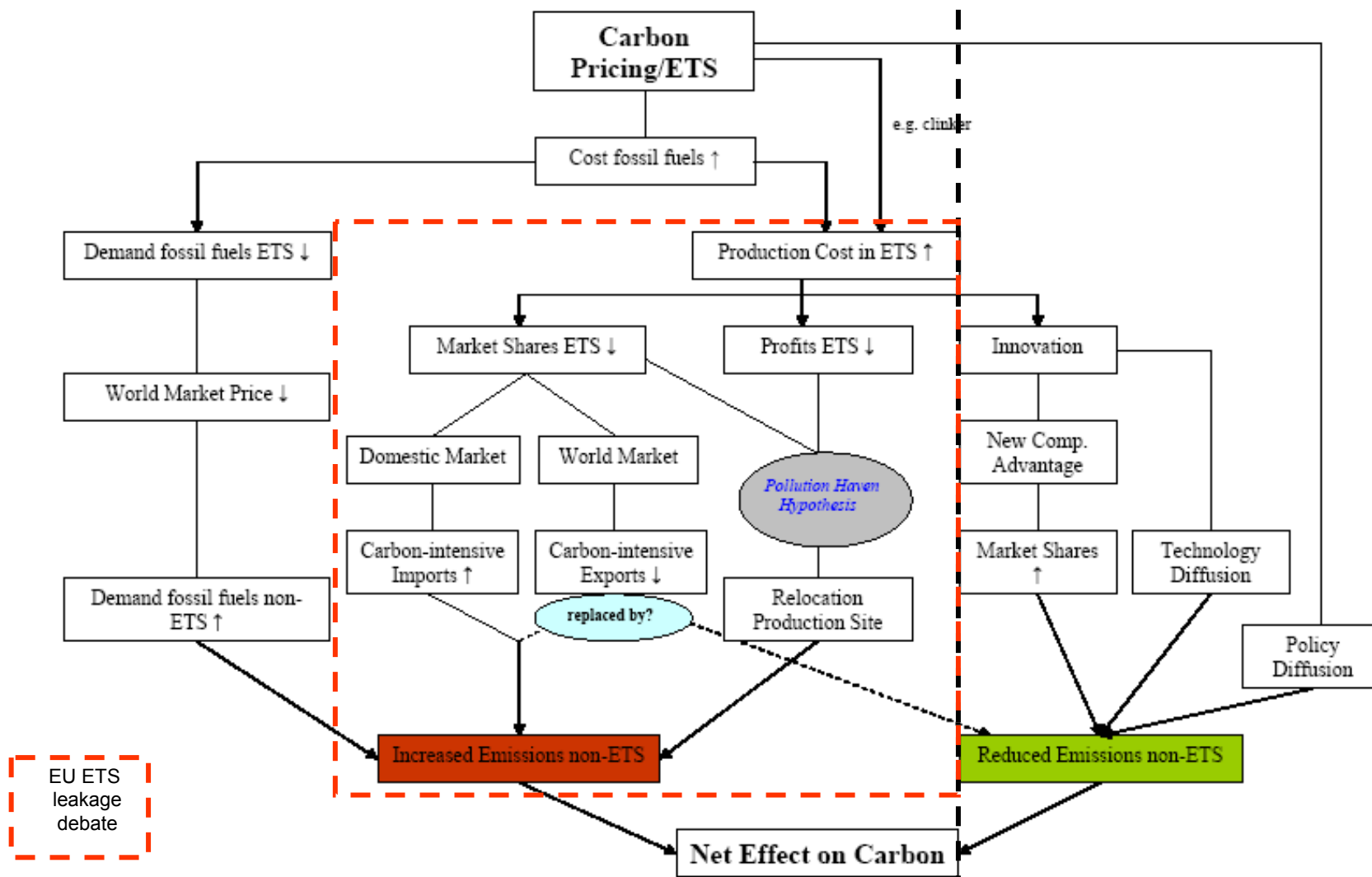
From Competitiveness to Carbon Leakage

- Competitiveness effects determined by **profits** and **market shares** of producers
- Translate into **investment and production** decisions under carbon pricing

Leakage determined by:

- A) **Relocation** potential of carbon-intensive producers
- B) **Substitution** of production through imports
- C) **Other channels**. Could be of significance (energy markets, substitution elasticities) → feedback loops

Overview of Leakage Channels Induced by Unilateral Carbon Pricing

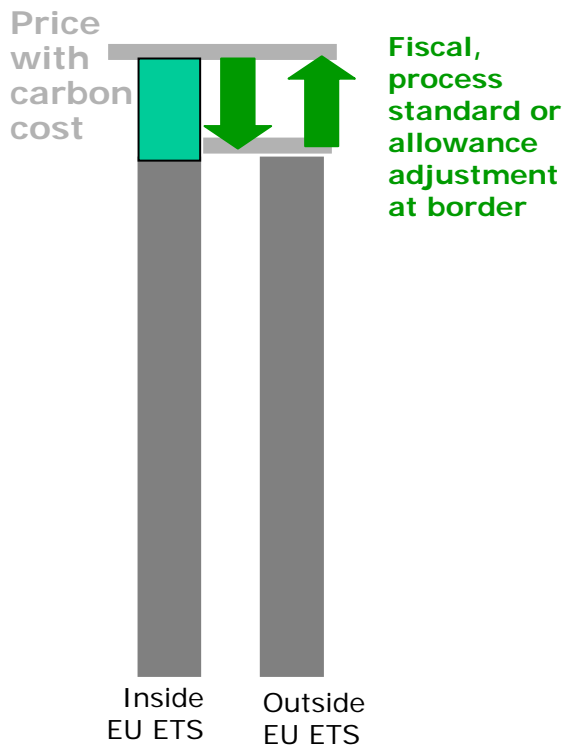


Institutional Framing of Trade and Climate Issues

- Unilateral measures: conflict with spirit of WTO and UNFCCC
- WTO: countries assumed as homogeneous in rights and obligations
- UNFCCC: common but differentiated responsibilities
- Sectoral agreements: own trade-related aspects
- Major trade partners: regional agreements and WTO

The Trade Dimension of the Debate

- From small scale sectoral relevance to large scale international trade policy
- At center of political debate: border adjustment mechanisms



Border Measures and WTO Rules

- **Technicalities** of a BTA: what benchmark for the technology used? Best available technology (BAT)? What allowance price? Average?
- **Legality** relates to the characteristics of the emission as such: not incorporated in the traded goods; discrimination of **like products**!?
- **Justification** under WTO law seems likely, however, a case would be needed to have a final ruling on environmental BTA.
- **Art XX GATT**: careful design needed for an exception (criteria: necessary, least trade restrictive)
 - Multilateral negotiations of the issue
 - Others not forced to apply a similar method
 - Different development levels taken into account

Border Measures (cont.)

- **Quotas** for imports: not as easy to justify as the tax version of border adjustments (v.Asselt/Biermann 2005) Art XIII prohibits discriminatory quantitative restrictions
- **Technical regulations and standards**, e.g. for energy use of goods (fall under the GATT TBT agreement): mandatory vs. voluntary matters and legality of non-product-related measures is not clear. Again, non-discrimination, transparency and environmental objective have to apply