EU carbon border adjustment: Policy design and industrial competitiveness

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EU Carbon Border Adjustment Mechanism

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This talk reflects my academic views not necessarily those of any organization

Agenda for this talk

① **EU import-CBAM: economic impacts**

② Industrial competitiveness: imports vs exports

③ Deep decarbonization: the case of steel

④ Wider policy design for EU carbon pricing

EU Carbon Border Adjustment Mechanism

EU Inception Impact Analysis (March 2020)

"Carbon leakage occurs when production is transferred from the EU to other countries with lower ambition for emission reduction, or when EU products are replaced by more carbon-intensive imports... a carbon border adjustment mechanism would ensure that the price of imports reflects more accurately their carbon content."

⇒ *EU policy shifting from free allocation to import-CBAM…*

Likely economic impacts of EU import-CBAM

ALL ELSE EQUAL

Competition

- Marginal cost of non-EU producers ↑
  ⇒ Competitiveness of EU producers improves

Markets

- Carbon cost pass-through: EU product prices ↑
- Carbon leakage to non-EU turns negative (?)

Policy

- Additional EU fiscal revenue (usage?)
- Extra incentive for non-EU to price carbon (?)

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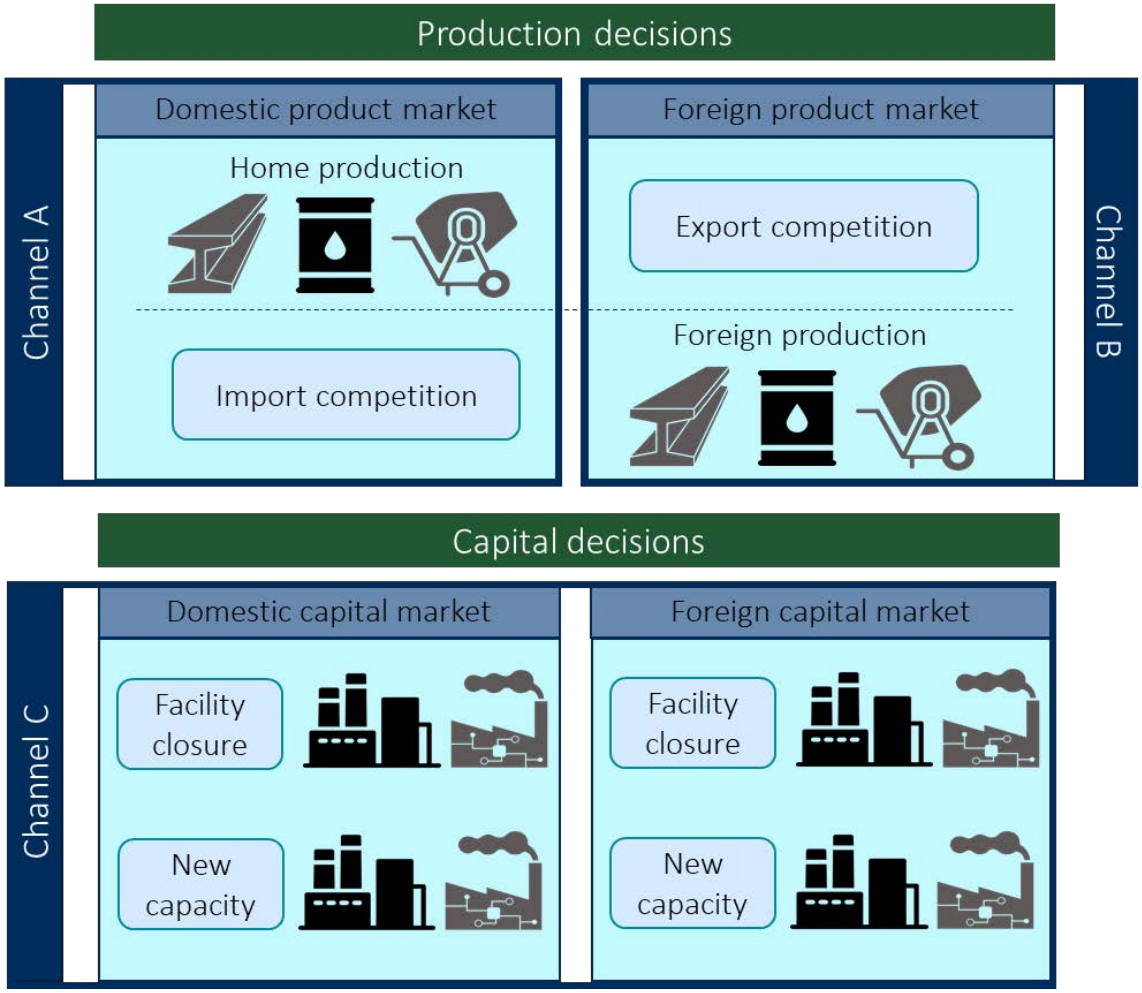
Competitiveness channels & free allocation

ABC FRAMEWORK



FREE ALLOCATION

Grandfathering
Channel C
(≃ Lump sum transfer)

Output-based
Channels ABC
(≃ Output subsidy)

EU ETS hybrid
Channels ABC
(GF + OBA + benchmarking to top companies)

Competitiveness support: Local vs global

Local perspective: Competition within EU markets

- Free allocation levels playing field by diluting EU carbon price
- Import-CBAM instead raises non-EU carbon price at border

  ⇒ Either policy instrument can address Channel A

Global perspective: Competition in markets outside EU

- Free allocation, in effect, provides subsidy to exports
- Import-only CBAM gives no such export support…

  ⇒ Free allocation can address Channel B but CBAM cannot

+ Short-run distortions affect long-run investment (Channel C)

⇒ *Free allocation can provide more holistic competitiveness support than import-only CBAM*

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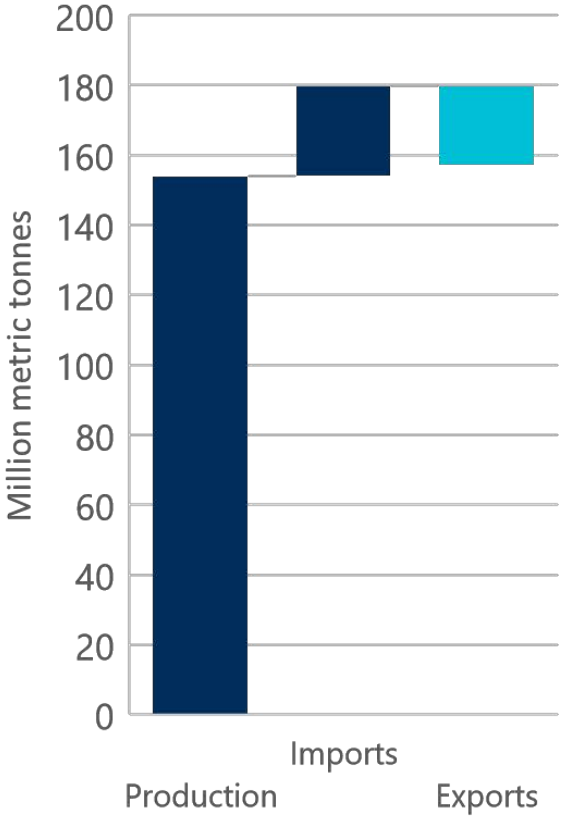
Carbon pricing & trade exposure in steel

EU steel trade



Top 10 export destinations

⇒ *Extent of trade exposure (Channel B) varies by EITE sector*

Note: Each flag represents 1% of EU exports to Top 10 receiving countries

Decarbonization pathways for steel companies

⇒ *Intensifying technology race with widely varying starting points*

Source: Illustrative pathways from CDP (2019)

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Questions for EU policy on carbon pricing

1. Import-only CBAM cannot support export competitiveness
⇒ ***Case for continued free allocation to EITE sectors?***

2. CBAM uses default carbon intensities for imported products
⇒ ***Case for adjustment based on actual carbon intensity?***

3. CBAM may enhance scope for wider EU ETS reform
⇒ ***Case for carbon price floor to support new investment?***

Selected research

Stuart Evans, Michael Mehling, Robert Ritz & Paul Sammon (2020). "Border carbon adjustments and industrial competitiveness in a European Green Deal". Cambridge EPRG Working Paper 2007, May 2020.

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