

Differentiation of EU ETS competitiveness impact

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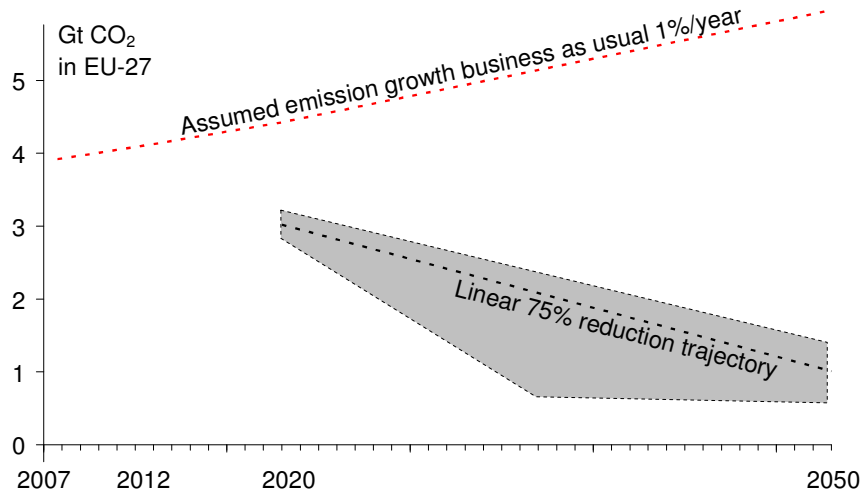
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Outline

- The challenge for low-carbon policies
- Provide for the needs of different investors
- Leakage concerns
- Instruments to address leakage

The challenge for emission reductions

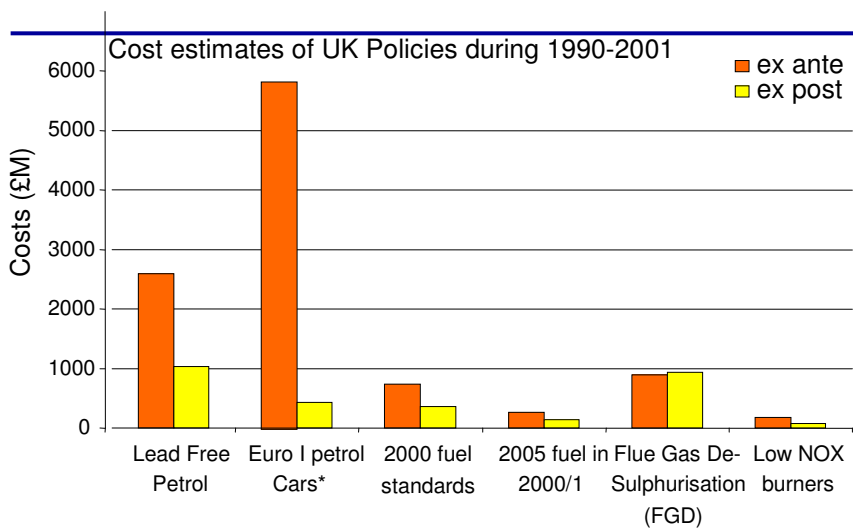
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Upward bias of ex-ante estimates (bottom up)

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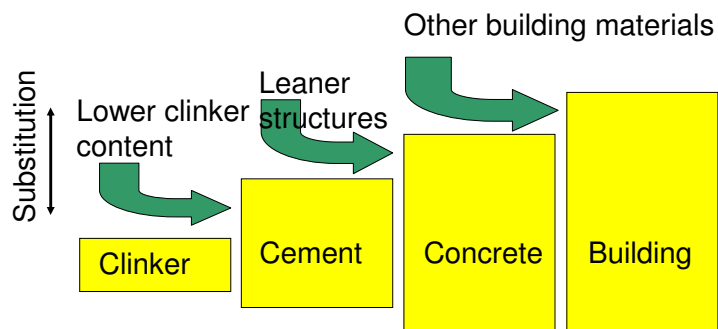


* Upper estimate >£8000 million.

Source: AEA Technology Environment, 2005, An Evaluation of the Air Quality Strategy, Report to DEFRA, available at: <http://www.defra.gov.uk/>

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Allow the carbon price to find low cost options

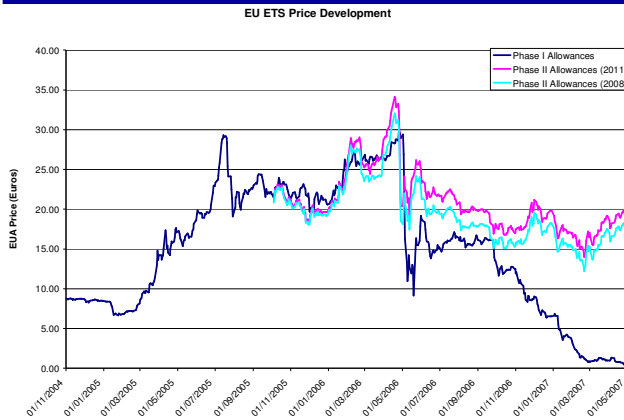


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Allowance prices – important for project investment

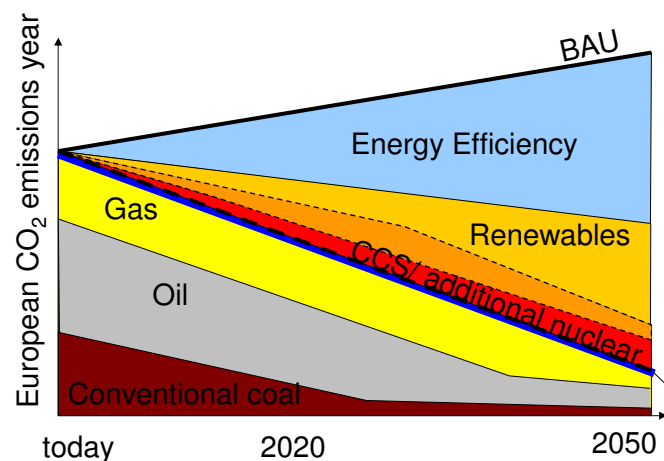
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- Risk of very low carbon prices hampers investment
- Use reserve price in government auctions to create price floor

Future carbon targets – determine strategic choices

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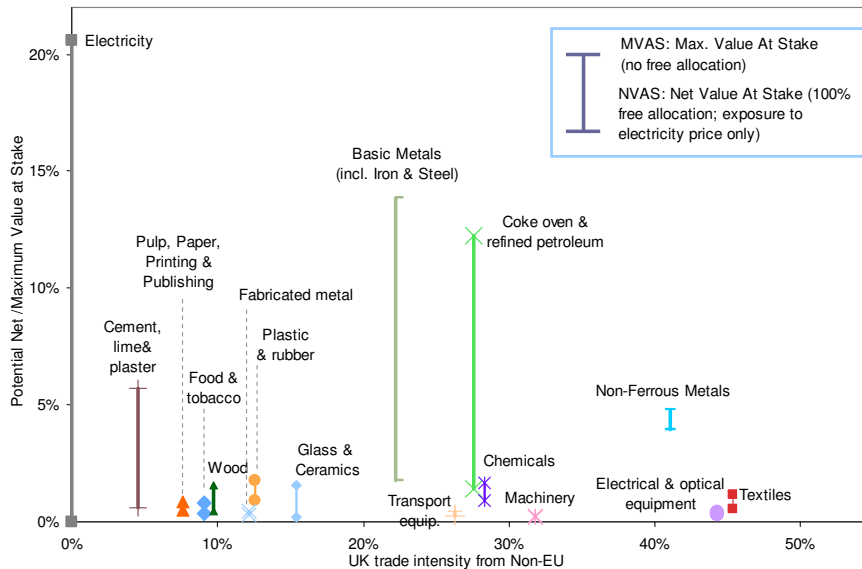


Illustrative

Differentiation of EU ETS competitiveness impact

- The challenge for low-carbon policies
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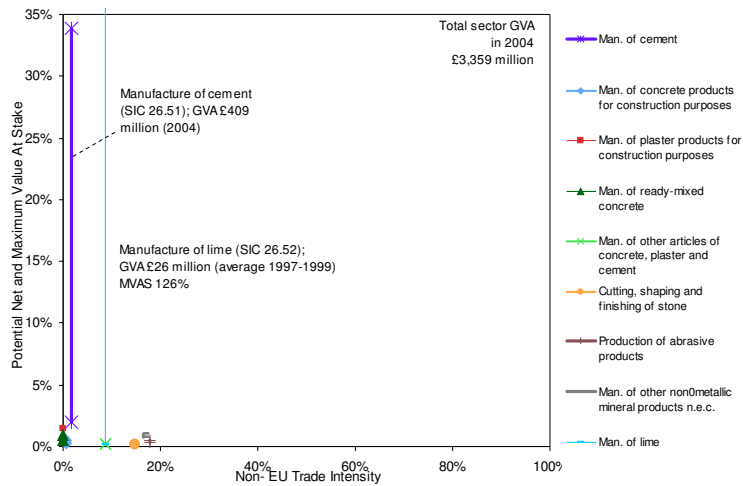
Competitiveness is a sector/product issue



Assumptions: CO₂ price = €20/tCO₂; Pass through in electricity = €10/MWh

'Construction' sector: cement production dominates emissions, highest MVAS, relatively low NVAS accounts for c.10% of aggregate sector value-added

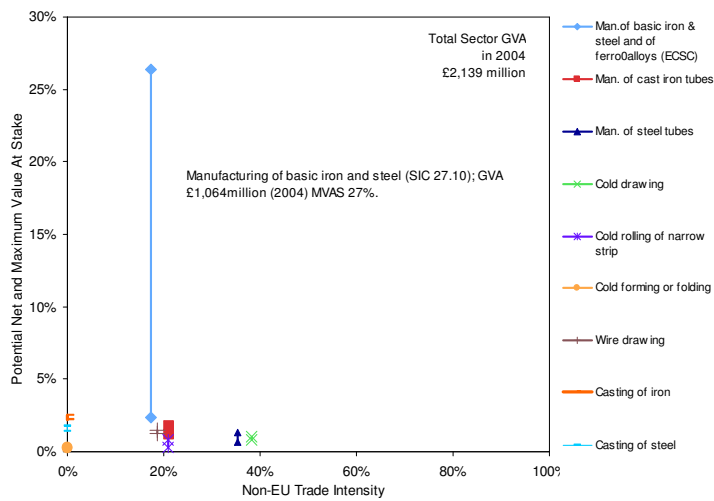
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Assumptions: CO2 price=€20/tCO2; Pass through in electricity = €10/MWh

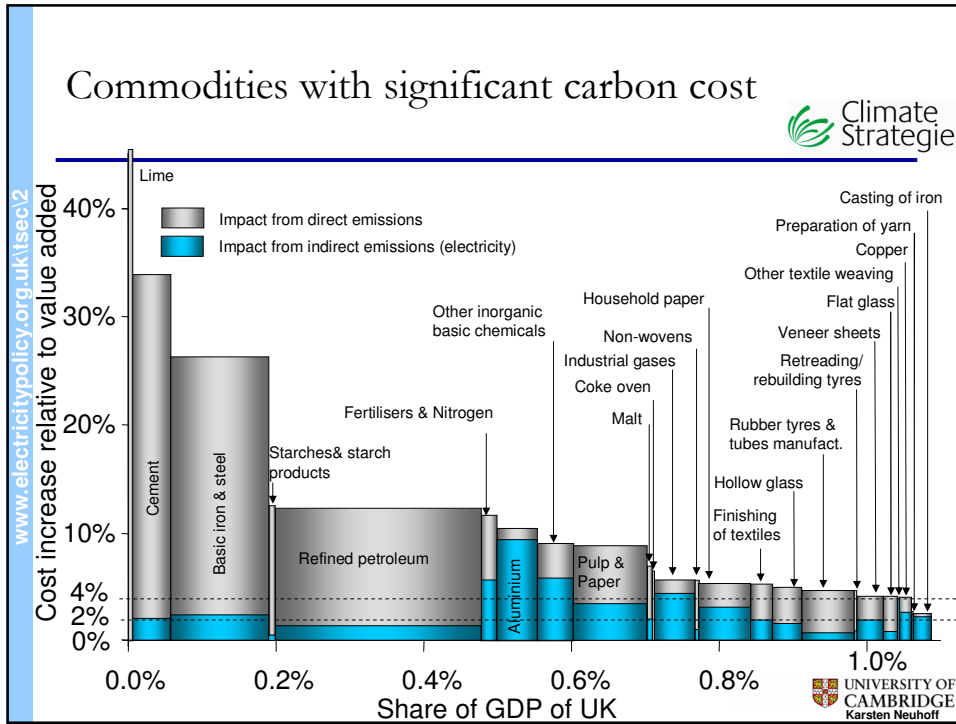
Iron and Steel: Basic Iron & Steel production dominates emissions, MVAS c.25%, c.10xNVAS, accounts for half sector value-added

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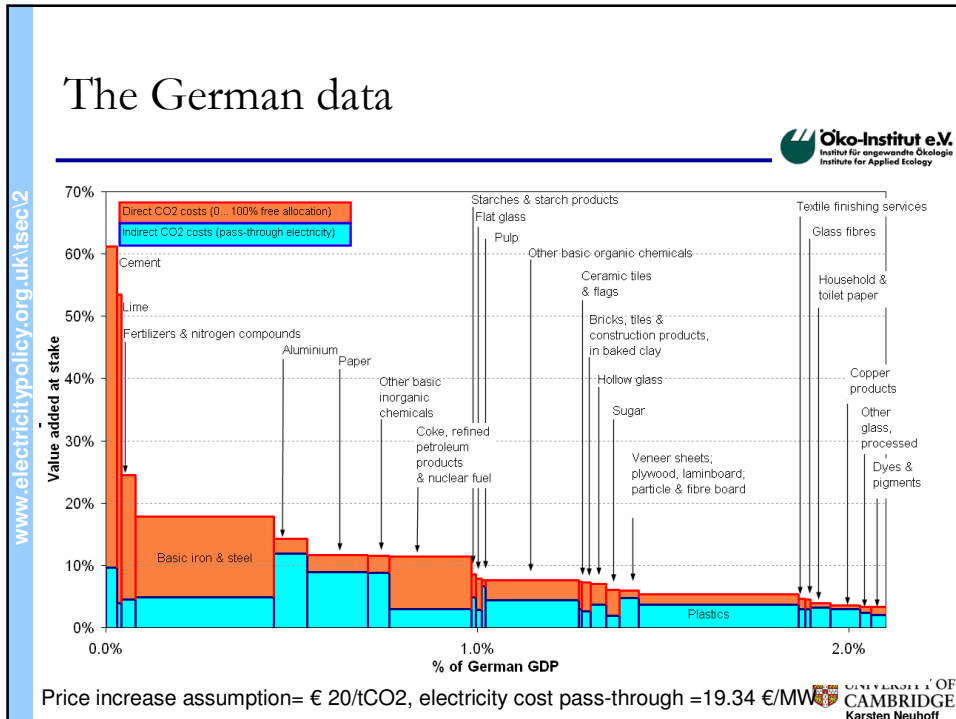


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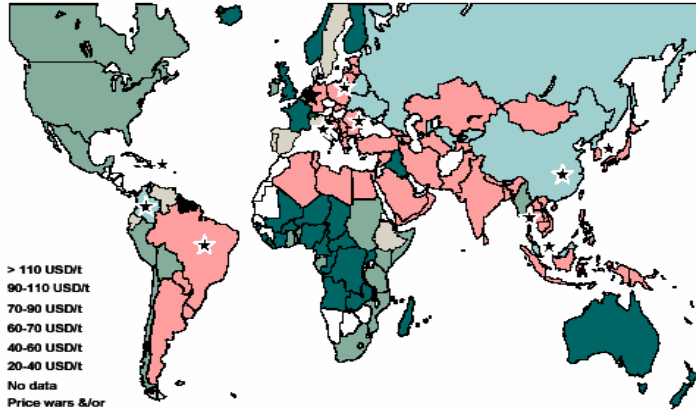
Commodities with significant carbon cost



The German data



Cement already faces widely divergent domestic prices

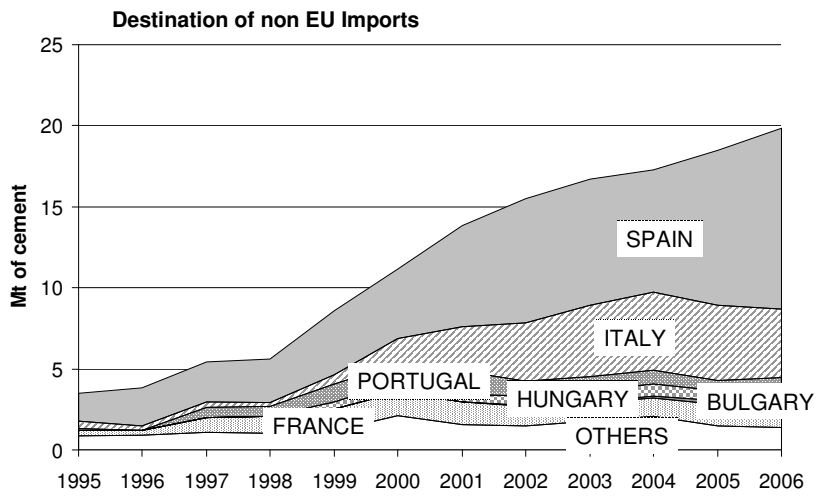


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Climate Strategies – IDDRI Meeting
13th September 2007

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Is the picture changing? « The rise in non EU imports »



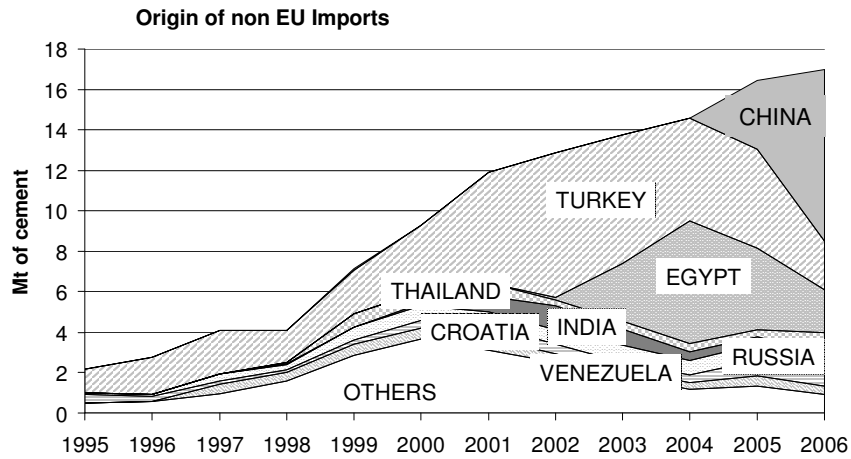
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the picture changing?

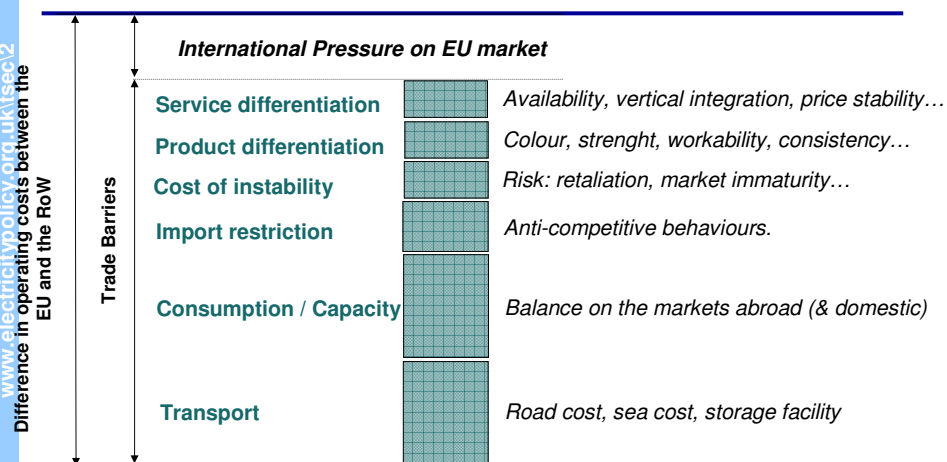
« *The recent surge in Chinese imports* »

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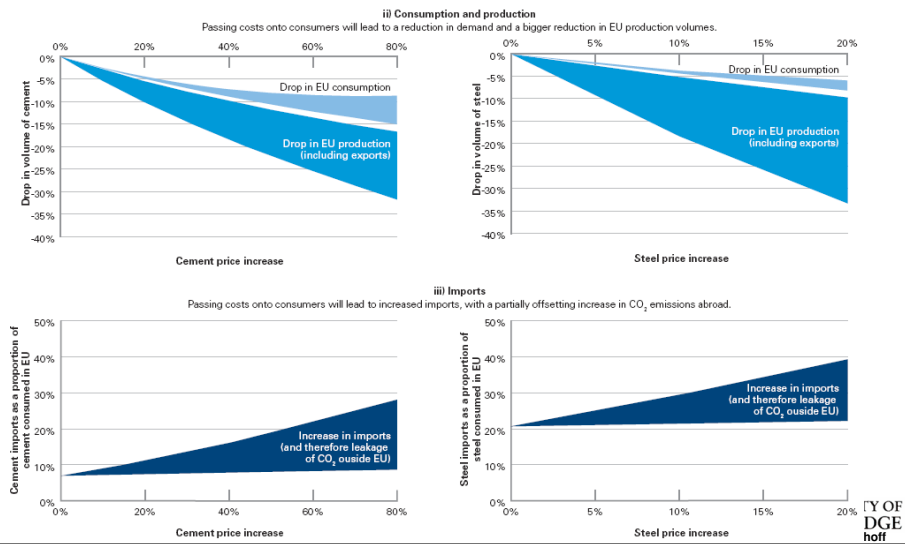
Trade barriers

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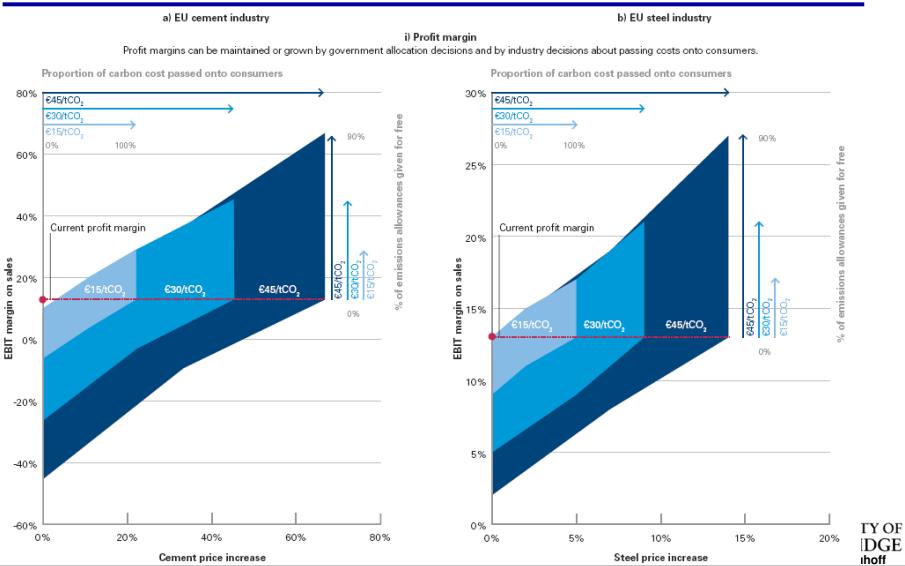


NB: Barriers are lower for EU transnational firms

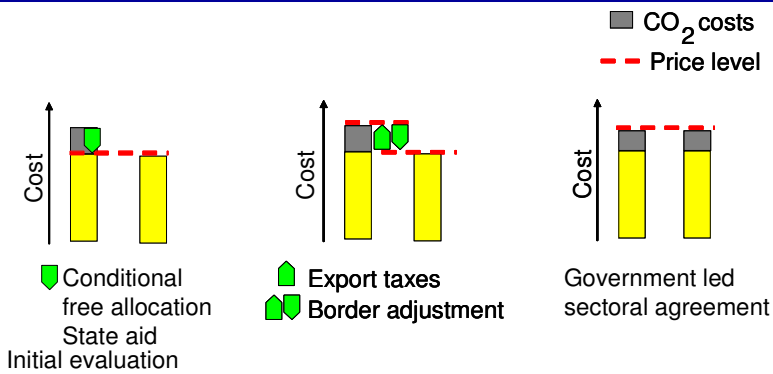
Impact of cost pass-through on imports and overall production



Impact on profits and demand for the EU cement and steel industries of different carbon prices, allocation and cost pass-through decisions



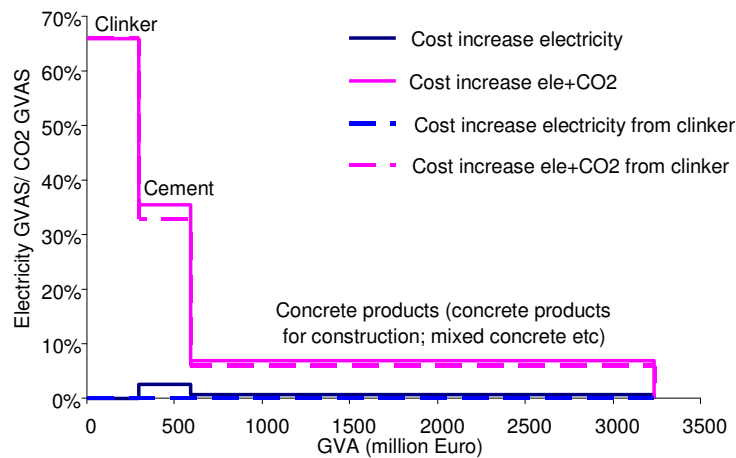
Three approaches address leakage for exposed sectors



- Little substitution to low carbon products/services
- Distorts investment
- Bureaucratic constraints for innovation
- Risk of lock-in
- Has to be aligned with international climate engagement
- Requires at least informal international cooperation
- Requires strong policies of developing countries
- Risk of low common denominator

Cement sector

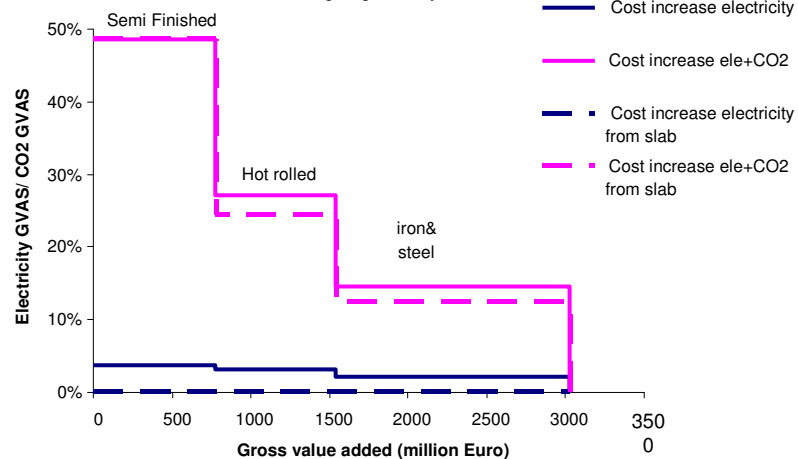
Illustrative for UK - but numbers can still change significantly



Most leakage concerns from clinker – easily transportable

Steel sector

Illustrative for UK - but numbers can still change significantly



- Most exposure from BOF (and possible coke oven)
- Steel can be transported at semi-finished stage

Summary leakage

- Potential issue only for 1-2% of economic activity
 - Materiality to be assessed on sub-sector level
 - Relevance only if there will no strong global deal 2009
- Instruments exist to avoid leakage – sub-sector by sub-sector
 - State aid, free allocation, border adjustment
 - Side effects: lower efficiency / international complications
- Decide on instrument in 2010/2011
 - Focus first on international deal
 - Cooperate in parallel internationally on instruments to address leakage
 - Ensure transparent approach – no special provisions in Directive
- This creates maximum investment security
 - Industry & environment interest coincide -> we will avoid leakage
 - Investments that would be viable under global deal remain viable