

Lessons learned and implications for NAP Phase2 and beyond

Jos Sijm

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Aspects of the 2006 EU ETS Review”

Purpose and Focus of Presentation

- Purpose:
 - Comment on ECP paper, based on:
 - ECN project 'CO2 Price Dynamics'
 - 'EU ETS allocation Phase 2' project (Cambridge, ICF, Oeko, ECN, Climate Strategies, Carbon Trust)
- Focus:
 - Impact free allocation on power sector
 - Prices, profits
 - Investments/new entrants
 - Arguments pro/contra free allocation
 - Implications less free allocation
 - Policy implications:
 - alleviation, compensation, allocation, institution

Impact of free allocation on power sector (main ECN findings)

- CO2 cost pass through: 40-80%
- Power price increases: 3-18 Euro/MWh
- Windfall profits
 - 2 categories/causes (not: distortions/lack of competition)
 - Short/medium/long term
- Investments/new entrants:
 - More investments: prices/profits down
 - Fuel specific grandfathering:
 - perverse incentive
 - More CO2 emissions; higher CO2 prices
 - Policy dilemmas

New entrants allocation

- Arguments for ‘buying allowances’:
 - Optimal incentive for ‘good’ investments
 - No ‘sunk costs’ (‘windfall losses’)
- Arguments for ‘free allocation’:
 - Free allocation to incumbents
 - Current closures rules
 - Capital market imperfections
 - Fairness
 - Limit power price rises/windfall profits

Implications of less free allowances

- Example: NUON's Magnum project:
 - 1200 MW Integrated Coal Gasification plant
 - Production: 6000 GWh
 - Emissions: 4.2 MtCO₂
 - Power revenues: 360 mln Euro
 - Fuel costs: 180 mln Euro
 - Spread: 180 mln Euro
 - CO₂ costs: 80 mln Euro
- Case 1: EU harmonisation:
 - Small impact (other factors, CO₂ uncertainty, temporary delay)
- Case 2: 'Dutch only':
 - Small impact (transmission costs, other constraints, CO₂ uncertainty)

Policy implications (1): Alleviation measures

- See pp. 17-18 of ECP report
- Add: liberalising gas markets
- Auctioning:
 - no alleviation
 - Addresses windfall profits, but not power price increases (NB: no additional increases either)
- Maximum CO2 price ('Safety valve')
- Power price regulation:
 - ineffective/adverse effects

Policy implications (2): Compensation measures

- Why? (intended effects; double compensation)
- Who? (non-EU ETS participants)
- How?
 - Lenient/indirect allocation:
 - Targeting problem
 - Non-participants
 - Internal market problem (state aid)
 - No impact on operational performance
 - Recycling auction revenues:
 - Pro: all affected consumers; simple general mechanism
 - Contra: 'undercompensating' major power consumers; benefits non-affected parties
 - Border tax adjustment
 - Global regime

Policy Implications (3): allocation measures

- Long term: Phase out free allocation
 - Particularly for power sector
 - Notably for new entrants
 - Above all: abolish fuel-specific allocation
 - Do not distort incentive structure between incumbents, new entrants and closures
- Short term (phase 2):
 - Reduce free allocation to incumbents (70%), including maximum auctioning (10%)
 - Limit free allocation to power entrants (50-60%), including auctioning
 - No fuel specific free allocation to new entrants
 - Appropriate closure rules

Policy Implications (4): Institutional measures

- Create independent NAP institutions to:
 - Design NAPs
 - Implement free allocation to break even
 - Auction remaining allowances
 - Recycle revenues:
 - Targeted lump-sum compensation
 - Tax reductions: targeted/general
 - Implement border tax adjustments