

# **ISSUES FOR AN EMERGING GLOBAL CARBON MARKET**

**STRATEGIC ASPECTS OF THE  
2006 EU ETS REVIEW**  
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# The Iddri

*Institute for sustainable development and international relations*

- Founded in 2001 as a research consortium, IDDRI became a non-profit, nongovernmental think-tank in 2003
- Iddri provides forums and networks creating common culture on sustainability issues among stakeholders, following 4 objectives:
  - Contribute to building up a more equitable and effective global governance
  - Reduce controversies by initiating dialogues among stakeholders
  - Promote scientific research and multidisciplinary expertise on sustainability
  - Gathering timely information and knowledge to improve decisions-making
- Focal areas are those requiring collective international action (Climate change, Biodiversity, Agriculture and forests)
- Cross-cutting issues :  
(Environmental and social responsibility, International trade, Global governance, Uncertainty and precaution)
- Led by Laurence Tubiana

# EU-ETS enlargement

## *Issues and concerns*

- Theoretical premise : trading in a wider market increases efficiency
  - ✓ Minimize total costs of given abatement targets
  - ✓ Prevent distortion in international competition
  - ✓ Increases liquidity
- But EU-ETS efficiency is already at stake
  - ✓ Affordable price versus appropriate signal
  - ✓ CO2 abatement from leakages

# Emerging Carbon Markets

*Actual responses to C price are quite different from what the Economic Theory describes*

- **From a theoretical standpoint**
  - Ranking of options based on MAC and efficient selection
- **In the real-world**
  - Price is not always an efficient signal
  - Reversible responses are of less value than structural investment



**Acknowledging the existence of different carbon commodities is key for designing efficient carbon markets**

# Emerging Carbon Markets

*“Common responsibilities but differentiated capabilities”*

- **electrical power: high inertia, high sensitivity to carbon prices, low International Competition exposure**
- **carbon intensive industry: high inertia, sensitivity to carbon prices, low-medium IC exposure,**
- **other industry: low inertia and sensitivity to carbon prices, medium-high IC exposure**
- **residential sector: mix of high and low inertia and sensitivity to carbon prices, no IC exposure**
- **transportation: very high inertia, low sensitivity to carbon prices, no IC exposure**

# Emerging Carbon Markets

## *The case for a more cautious approach*

- Conventional economic wisdom is right: a single carbon price should emerge from a trading system encompassing all sources of all GHGs
- But this relies on a set of pre-conditions:
  - all prices should reflect long term social costs of all activities pre-existing taxes should be harmonized
  - Pre-existing taxes should be harmonized
  - quota allocation has to prevent undue 'windfall profits'
  - long term price signals are predictable enough to be internalized by sectors with low turnover of capital stocks
  - exposed industry have to be protected against competitive disadvantages from asymmetric carbon constraints
- In the transition period, efficiency will not always benefit from a wider market

# Emerging Carbon Markets

*The forward agenda of linking of schemes*

- Linking can be crucial for competitiveness
- Lessons from literature
  - Technical harmonization needed, but “easy”
  - Winner/loser trade off on both sides (redistributive effect of markets)
  - Divergent designs would end up in huge transaction costs
  - Allocation (and primarily global cap) is fundamental
- Models assess the linking impacts against pre-existing perfect markets

# Emerging Carbon Markets

## *The issue of the global cap*

- In most trading schemes, cap deduced from environmental objectives
- In emerging C markets, (quantity, price) is a political and strategic compromise
  - International exposure and competitiveness
  - ST/LT availability of technology
  - “predictability” of stringency
  - Sector specificities / economic agents behavior
- ETS : regulated subsidiarity

# Implications for the emergence of Global Carbon Markets

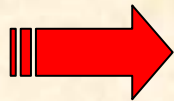
## Possible, opposite strategies for EU-ETS

Answer#1: "the larger, the better": transportation added + other gases& corresponding sectors

- Several CO2 commodities mixed up (domestic efficiency?)
- Increase barriers to linkage (how to build a level playing field for industry?)
- Major risks of transfer if linkage

Answer#2: The EU seek for an industrial market agreement enlarged to the main world-wide players

- Leaving apart an internal electricity C market (domestic strategy)
- Would gather participants trading similar carbon commodities
- Will probably prove to be environmentally and economically more efficient



Does not preclude to have carbon trade flows between the differentiated carbon markets