

# **Environmental Policy and Investment Location Decisions: The Risk of Carbon Leakage in the EU-ETS**

Discussion by Estelle Cantillon (ULB and TSE)

12<sup>th</sup> Conference on the Economics of Energy and  
Climate

# Carbon leakage is a key issue

- Result of production-based carbon pricing and free trade
- Creates a tension between climate policies and employment
- Annihilates benefit of carbon pricing since carbon is a global pollutant

# The EU-ETS has provisions for carbon leakage

- Identifies industries (NACE-4) subject to carbon leakage (cost sensitivity to carbon price, trade openness)
- Starting from Phase III auction is the default allocation method for allowances
- In practice, about 50% of allowances still allocated for free
- Sectors subject to carbon leakage receive allowances for free (based on a benchmark)
  - List adapted over time

# Economics of free allocation

Free allocation do not change incentives at the margin, only profits

$$\pi = (p - c)q - \tau(e - e^*) = (p - c)q - \tau e + A$$

Designed to ensure domestic firms remain sufficiently profitable and do not shift production to outside of EU

Free allocation affects bottom line so natural to study impact on long-term decisions

# Filipo's paper

- Focus on greenfield investment
- EU-ETS data combined with FDI dataset : very nice !

## **Suggestions:**

- Would be good to better position the issue of greenfield investment within the « carbon leakage » issue, both conceptually and in the data
- Tell us how your model deals with economics of the question:
  - Treatment of market proximity
  - Changes in carbon leakage list
- Think about what you want to achieve