

The EU Emissions Trading System: Comments from abroad

A. Denny Ellerman
Center for Energy and Environmental Policy Research
Massachusetts Institute of Technology

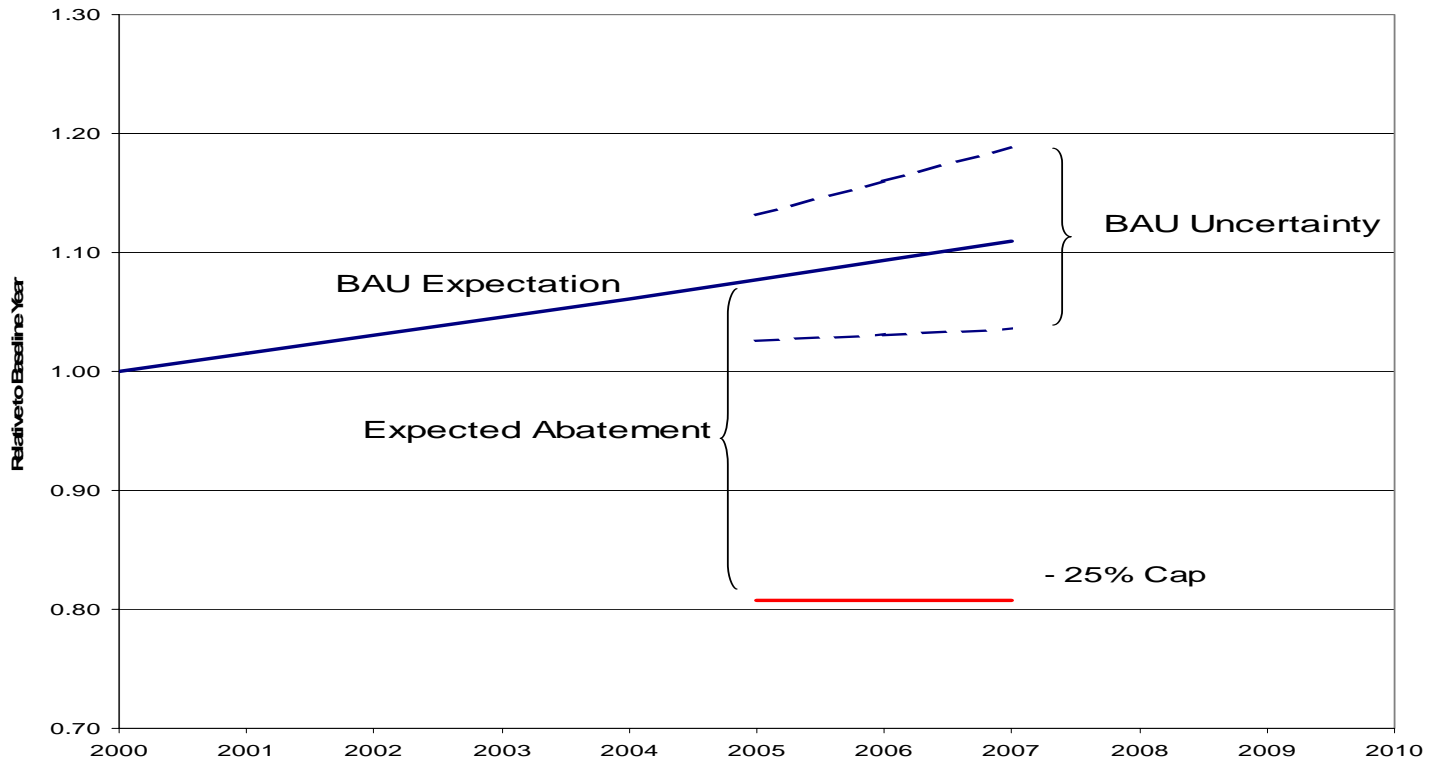
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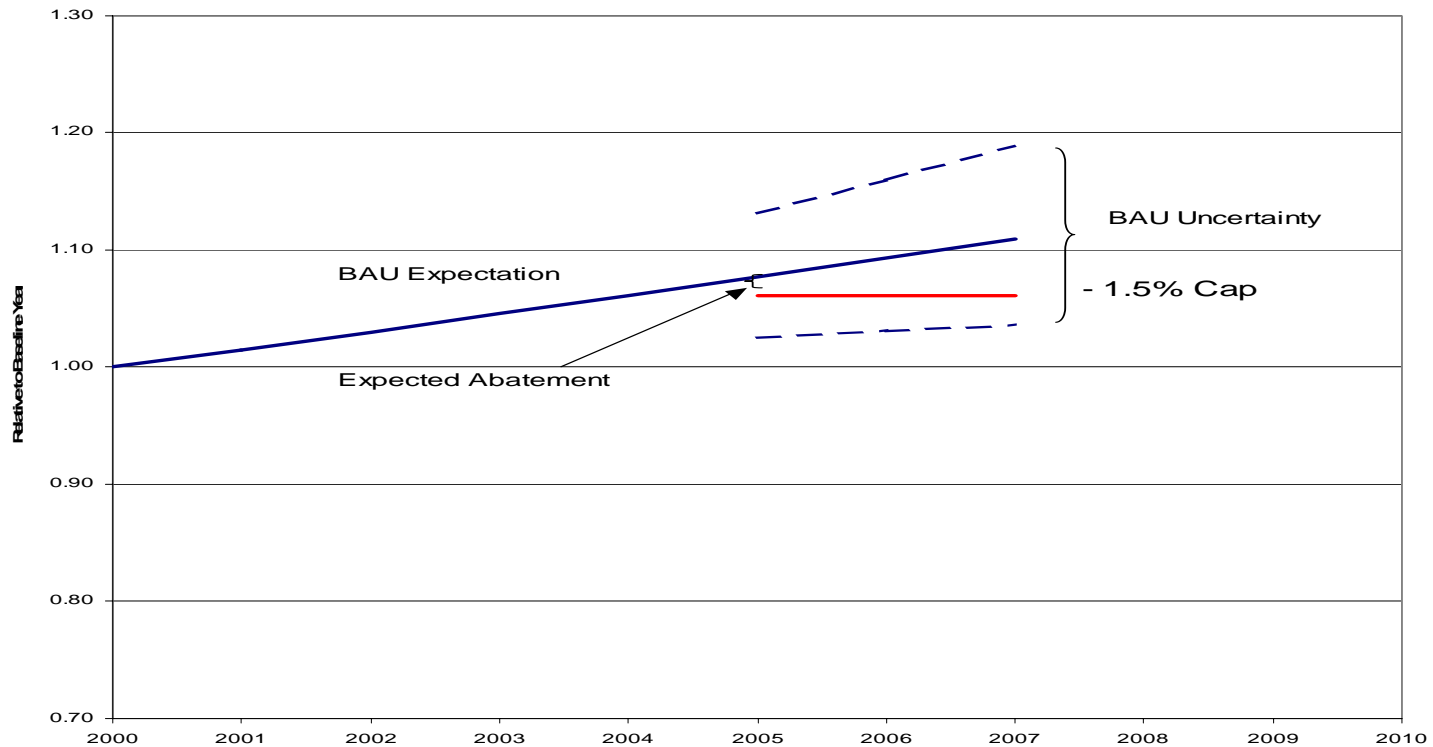
Topics

- BAU Uncertainty and Prices
- Banking and Prices
- The Allocation Process

BAU Uncertainty & Abatement: (A Typical Illustrative Case)



BAU Uncertainty & Abatement (with a slightly constraining cap)



BAU Uncertainty and EUA Prices

- Conventional Pollutant caps
 - Significantly below BAU expected levels
 - Uncertainty affects price, but always a positive price
- Carbon and GHG caps
 - Slightly constraining caps are all that is possible initially
 - BAU uncertainty implies non-negligible probability of a zero price



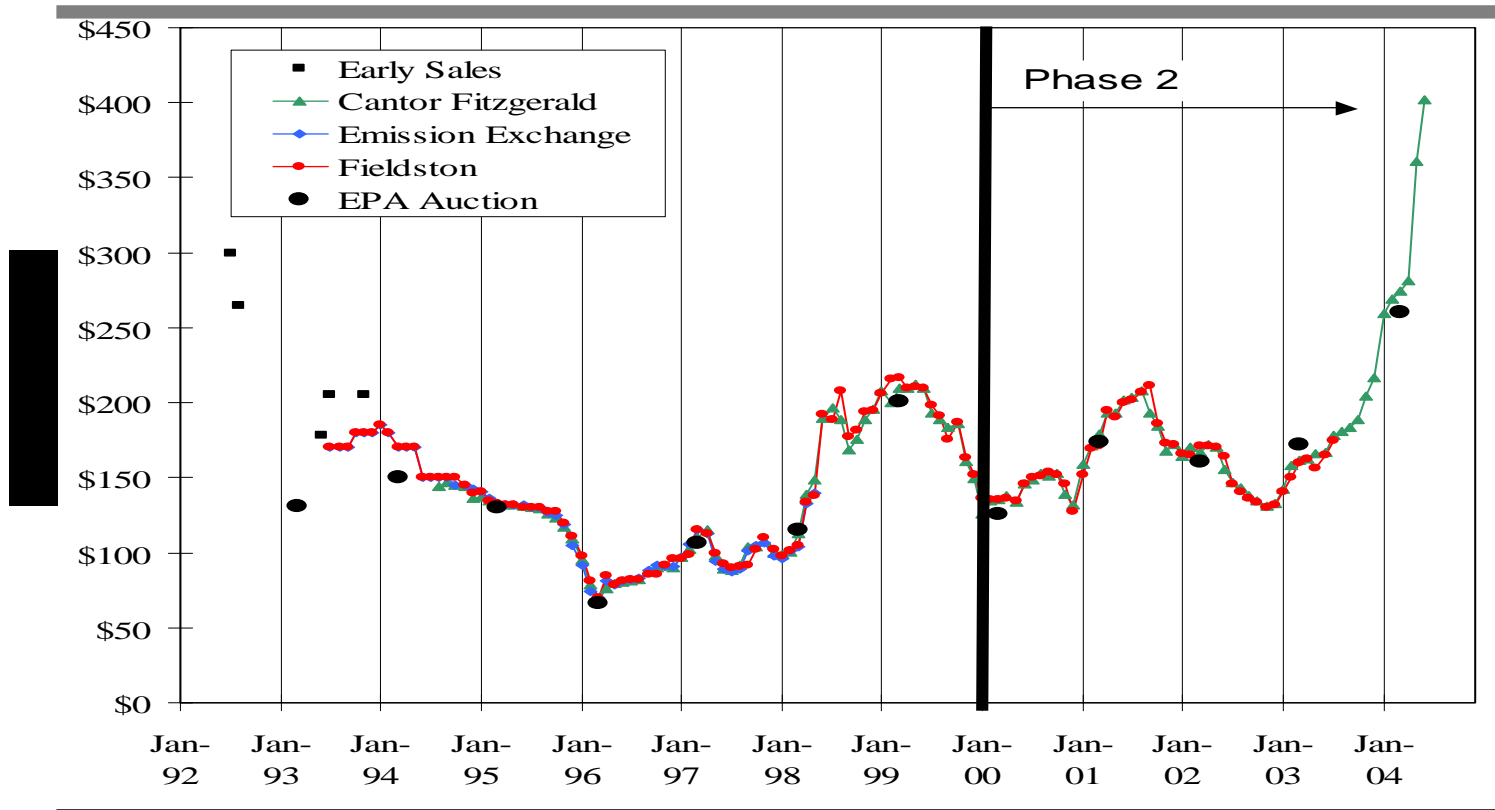
Positive Prices with a Non-binding Cap?

- Micro-behavior depends on uncertainty at the firm level
 - Stochastic variability in emissions causes some to be long, others short.
 - This makes the market
 - Even if the aggregate cap is non-binding, some are likely to be short and thereby seeking allowances
 - Positive price would result reflecting transaction costs and imperfect information
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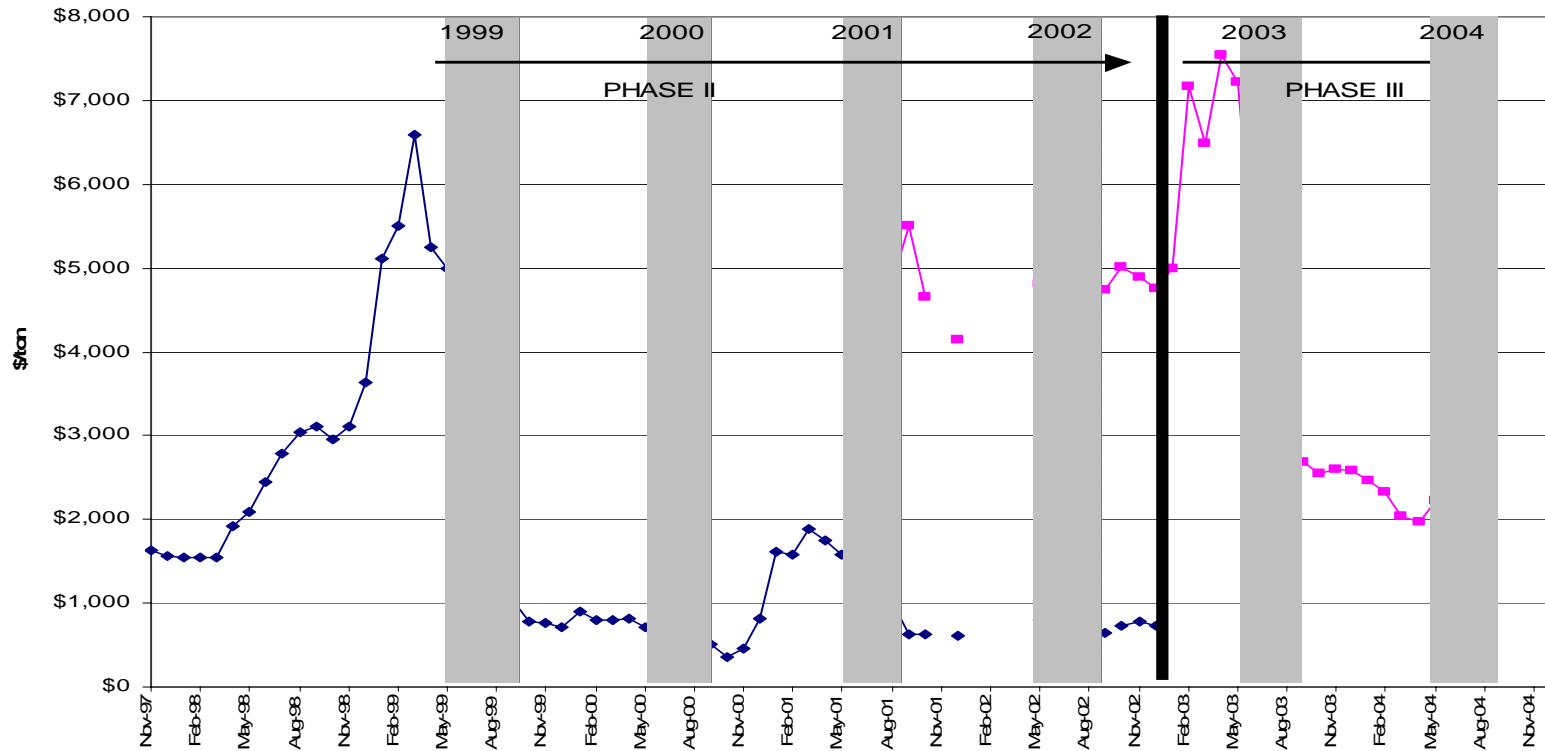
The Role of Banking

- When allowed in phased-in programs, banking behavior is readily observed
 - Effect is to raise first period prices
- EU ETS is a phased-in program with lower 2008-12 caps
 - Yet, banking is not allowed
 - Thus, no influence on 2005-07 price
- But, an interaction with (bankable) CDM/JI credits

Allowance Prices with Banking: The SO₂ Allowance Trading Program



Allowance Prices without Banking: The Northeastern NO_x Budget Program



Observations on EU Allocation

- Much ado about nothing (as concerns program performance)
 - The usual rent scrap
- Two empirical regularities confirmed
 - Allowances will be freely allocated
 - Allocation and level of cap are interdependent
- The new feature in Europe: Aggregate cap depends on sum of 15-25 decisions