Emissions Trading

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Outline

- What is Cap-and-Trade?
- Some History and Pictures
- Allocation, Allowance Value, and Electric Power Regulation

Two Types of Emissions Trading

Credit Trading, or Baseline-and-Credit

Credit for over-control of some specified standard usable to excuse under-control elsewhere

Trading in differences from pre-existing standard

Allowance Trading, or Cap-and-Trade

Trading in <u>limited</u> "rights" from the "bottom up"

No prescribed standard for individual sources

Sources respond to the "new price" by reducing emissions where internal cost < market price

Evolution of Emissions Trading

- Credit Trading has evolved out of conventional regulation to provide flexibility
  - Pre-existing standard (baseline) already in place
  - High transaction costs have limited use
  - Now, more project, off-system reductions
- Allowance Trading is radically different
  - Decentralized, self-contained property rights system
  - Emerged in the U.S. out of political stalemate
  - Far more successful than expected

A Closer Look at the Cap-and-Trade Mechanism

- An absolute limit is decided for the environmental problem
- Emitters issued tradable permits = “cap” < previous emissions
- A fundamentally different “command” to the firm
  - Measure and report emissions and
  - Surrender allowances = emissions
  - No prescribed practice, technology, reduction, etc.
- Tradability enables market and single price to coordinate efficient abatement actions (equal marginal cost)

Three Unique Features

- Rights to emit must be created and allocated
  - Unique in being explicit and transparent
  - Free allocation to auctioning to “cap-and-dividend”
- Emissions must be measured and reported
  - Radical innovation in environmental regulation
- Maintenance of Registry or Tracking System
  - Analogous to a check-clearing system

Consequences and Reactions

Efficient, Decentralized Property Rights System,

But “Rights to Pollute”?

Transformed Regulator…Bank-like clerk

But Removes Administrative Discretion

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