Emissions Trading Programs

Quick Overview and Issue Spotting

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Emissions Trading Programs – Potential Future Applications

- Remaining under-regulated large stationary sources (e.g., industrial boilers)
- Area and mobile source trading
  - Trading programs for "hard-to-regulate" source types or clusters (e.g., ports, airports)
  - Inter-sector trading to finance and accelerate investment in area and mobile source reductions

Types of Emissions Trading Programs

- Closed Markets (e.g., acid rain, NOx SIP Call, RECLAIM)
- Open Markets (e.g., lead in gasoline, product line averaging, facility bubbles, offsets)
  - Averaging within a single line
  - Averaging within facility
  - Averaging within source category
  - Inter-sector trading
- Hybrid credit/fee programs
  - RECLAIM
  - Goods Movement Sector Market
  - South Coast refinery pilot

Example – Ports

Maritime Goods Movement Coalition Proposal

- Single, integrated market for port-related goods movement sources
  - Possible joint powers authority
  - Open or closed market still under discussion
- Special trading rules for high impact zones
  - Risk-based threshold (e.g., 100 in million)
  - Credit generation, but not use, in high impact zones
- Safe harbor fund

Example – “Black Box” Commitments
South Coast Refinery Pilot

- South Coast shortfall
  - Traditional rules based on availability of cost-effective technology
  - Pilot will focus instead on sector’s “fair share” of required emission reductions, but permit wide range of options
- Refinery pilot
  - Refinery emissions relatively well controlled and quantified
  - Facility risk under 10/million
  - Recognized potential community health benefit for investments in other sources
- Approach
  - Facility emission reduction commitment (e.g, 10-year period) in exchange for comparable period of repose
  - Commitment can be reopened for changes in NAAQS, emission factors or basin carrying capacity
  - Menu of reduction opportunities (e.g., ocean-going vessel hoteling, accelerated replacement of 2-stroke recreational marine)

Potential Concerns re Cap and Trade Programs

- Risks related to allowances
  - Environmental risks of:
    - issuing too many allowances, causing trading of “paper credits”
    - Crediting “soft” or “uncertain” reductions (trading hard for soft controls)
  - Economic risks of:
    - Issuing too few allowances
    - Distributional impacts
    - Quantification costs too high
  - Conclusions:
    - Cap and trade works well where quantification practical and affordable and activity levels stable and predictable

Potential Trading Concerns – Local Impacts

- Risk of not delivering local benefits:
  - Potential Problem:
    - Trading could result in a deferral or avoidance of emission reductions at locations where risk reductions are most needed.
  - Proposed Remedy (e.g., MGM Coalition proposal):
    - Design the market program to ensure local benefits as follows:
      - Identify zones of higher risk due to sector emissions ("target zones");
      - Prohibit deferral of controls by sources that drive risk within target zones (i.e., one-way trading in target zones);
      - Pre-certify credits for emission reductions in target zones so as to attract and accelerate investment there;
      - Provide annual accounting to track emissions and risk reduction in target zones

Concerns re Credit/Fee Programs - "Pay to Pollute"

- Risk that participants will pay the "safe harbor" fee rather than reduce emissions.
  - Potential Problem:
    - a source could just pay a fee in lieu of reducing emissions.
  - Potential Solution:
    - The fee ensures that sources that cannot reasonably reduce emissions or obtain credits can still operate. The fee is used to obtain offsetting emission reductions. Example: single visit vessels.
    - Setting the "safe harbor" fee at a price higher than the current credit price in the market ensures that the program will create a continuous incentive for efficiency and for reducing emissions, as sources will seek ways to avoid paying the fee.

Other Possible Trading Ideas

- Inter-basin trading
- Inter-pollutant trading
  - PM offsets
- Reactivity trading
- Risk-based trading