

Regional Greenhouse Gas Initiative

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50th Anniversary of the Global Carbon Dioxide
Record Symposium

Joanne O. Morin

NH Department of Environmental Services

271-5552 or jmorin@des.state.nh.us



Regional Greenhouse Gas Initiative

- 2003 former NY Gov. Pataki invitation
- 2005 CT, DE, ME, NH, NJ, NY & VT sign MOU
- 2007 MA, RI, & MD sign on
- 2009 Program start

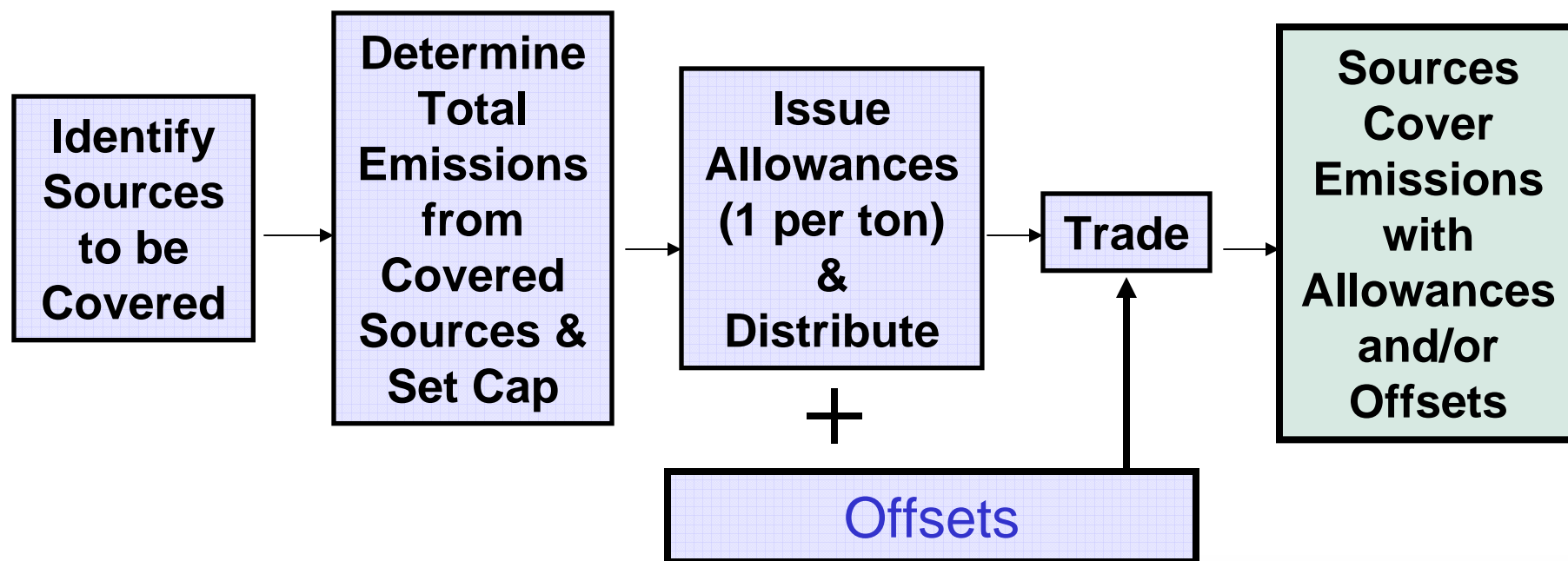


Definitions

- Allowance: The right to emit one unit (e.g., one ton) of a pollutant, generally distributed by the governing authority for a cap-and-trade program.
- Credit or emissions-reduction credit: A surplus reduction of one ton beyond that which is required by regulations.



Designing RGGI: A Cap-and-Trade Program



Why Emissions Trading

- Command and control – regulator dictates solution
- Cap and trade – market leads to most cost-effective solution
- Acid Rain program a proven success



Acid Rain Program Reductions

Original SO₂ Emissions
9.40M tons, 1980 Acid Rain Units
Phase I

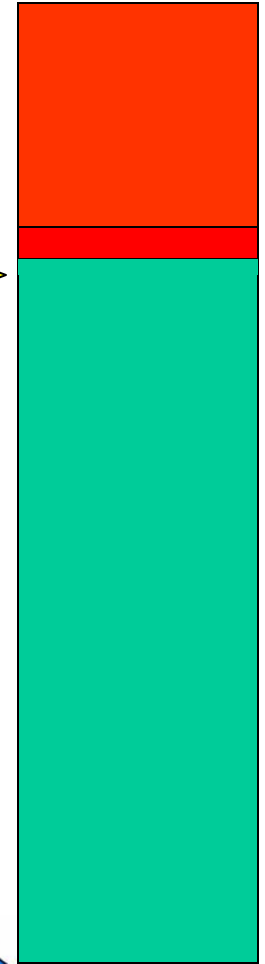
With
Trading

Actual Emissions –
4.35M tons (54% less)



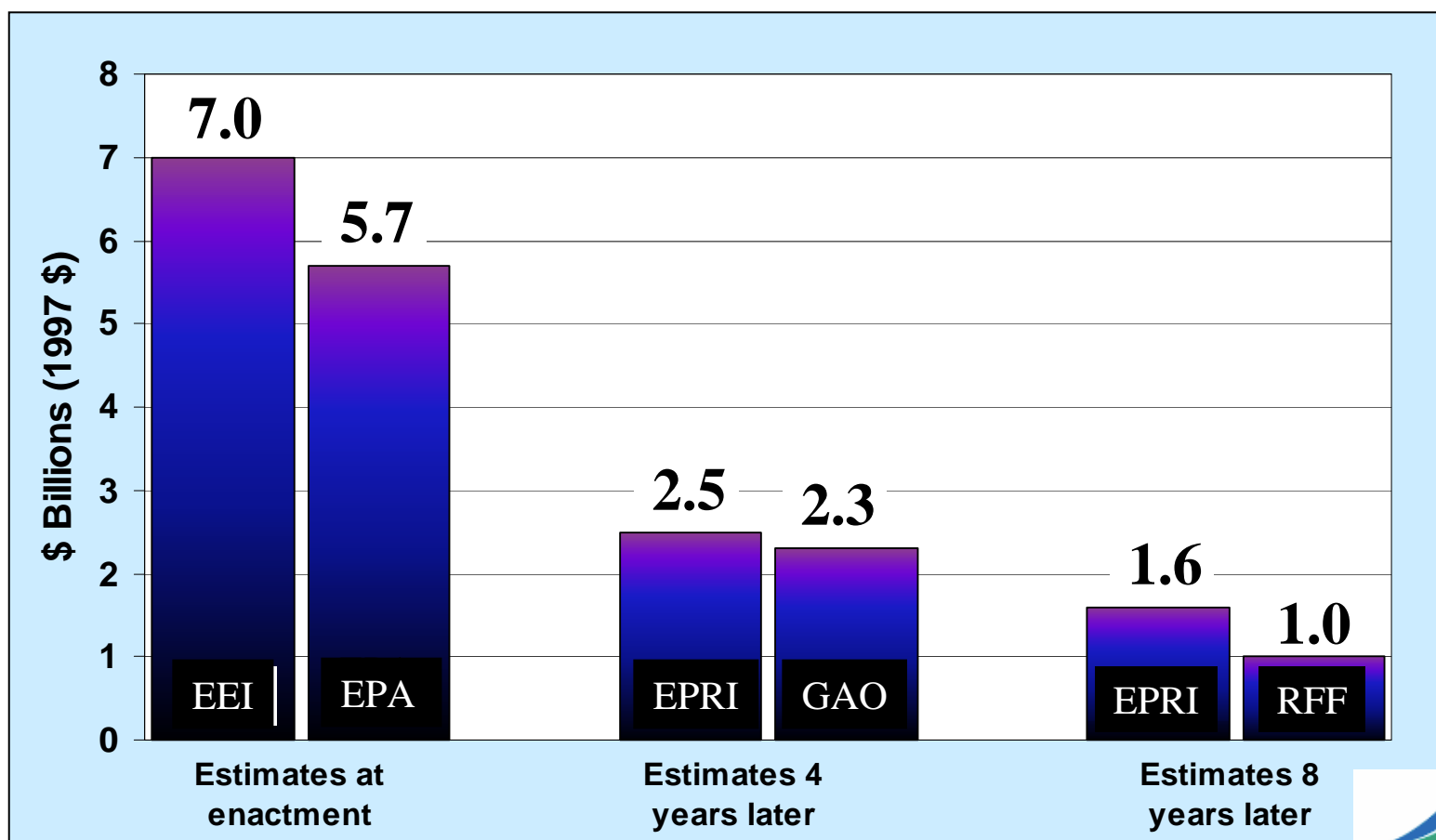
Without
Trading

Actual Emissions
– 6.61M tons
(only 30% less)



Annual Costs of the Acid Rain Program When Fully Implemented

80% Lower than 1990 Projections



DEPARTMENT OF



Regional Greenhouse Gas Initiative (www.rggi.org)

- Clean Power Act
 - Cap on PSNH fossil fuel units (Merrimack, Portsmouth, Newington)
 - 5,425,866 tons
- RGGI – 10 state MOU
 - PSNH (Merrimack, Portsmouth, Newington)
 - Granite Ridge (Londonderry)
 - Newington Energy (affiliated with ConEd)
 - 8,620,460 tons



RGGI Cap Levels

- 2-Phase CO₂ Caps (gradual, keeps cost low)
 - stabilization 2009 – 2014 (no absolute reductions, but reductions from business-as-usual)
 - Phase I Regional Cap = 188,076,976 tons
 - Phase I NH Budget = 8,620,460 tons
 - 10% reduction 2015 - 2018
 - (2.5% per year for 4 years)
- Built-in Review of Program in 2012



Mechanisms to meet RGGI Cap

- Stabilize/Reduce Emissions
 - Energy efficiency
 - Fuel switching
 - Changes in dispatch
 - Emerging control technologies
 - GreenFuel Emissions-to-Biofuels system
 - CO₂ capture & underground injection
- Buy allowances or offsets



Types of RGGI Allowances

- Budgeted allowances purchased at auction
- Early Reduction: Emission reductions made prior to the start of a program.
- CO₂ Offsets: A reduction from an activity (sector) outside or different than the activity (sector) being regulated.



RGGI Offsets

- 1st set – methane capture, SF₆, afforestation, end-use efficiency
- 2nd set – forest management
- Limited to **3.3%** of each source's emissions
- Offsets may come from RGGI region or from another US state at 1:1
- Safety valves built in to increase use of offsets for economic relief if necessary



Compliance Flexibility Mechanisms

- 3-Year Compliance Period
- Banking (with typical tracking, monitoring, recordkeeping, and reporting requirements)
- Early Reduction Credits



Compliance

- Power plants must have enough allowances to equal their emissions over a three year period
- Can buy allowances (regional auction) or offset allowances
- Limit on use of offset allowances
- Unlimited banking
- Requirements will be incorporated into air permits



Limit on use of offset allowances

- Allowance price <\$7.00 (2005 dollars) – 3.3%
- Allowance price >\$7.00 but <\$10.00 – 5%
- Allowance price >\$10.00 – can use for 10% of their compliance obligation
 - compliance period extended to four years
 - can use international offset allowances



Measurement

- CEMs – emissions and allowance tracking system (EATs)
- Climate Registry (voluntary GHG registry)
 - Same software platform
 - Designed to support voluntary reporting, mandatory reporting and eventually regulatory programs

