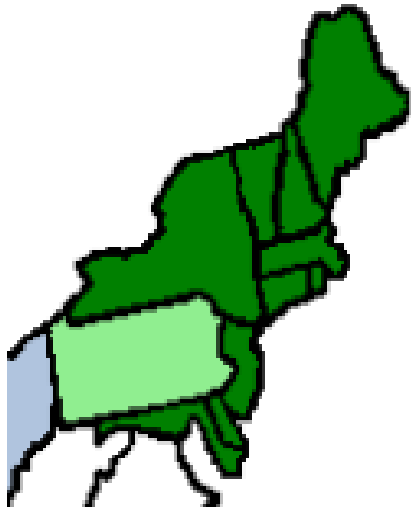


An update on Mass and Regional Climate Change Programs

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RGGI Basics



- First mandatory cap-and-trade program for CO₂
- More than 200 power plants in ten states
- First compliance period began Jan 1, 2009
- Stabilize, then reduce, emissions
- Allowance auctions
- Limited offsets

RGGI Goals

- Stabilize, then reduce, emissions
- Create a market for carbon
- Demonstrate a state-led regional program
- Provide a professional, predictable auction model
- Promote aggressive investment in energy efficiency and renewables
- Spur and inform federal action

RGGI Auction Experience

- 164 million allowances sold at six regional auctions
- Prices reflect broad market conditions
- “Fair” “transparent” “competitive” (Market Monitor)
- Active secondary market
- Waxman-Markey bill contains RGGI auction design elements

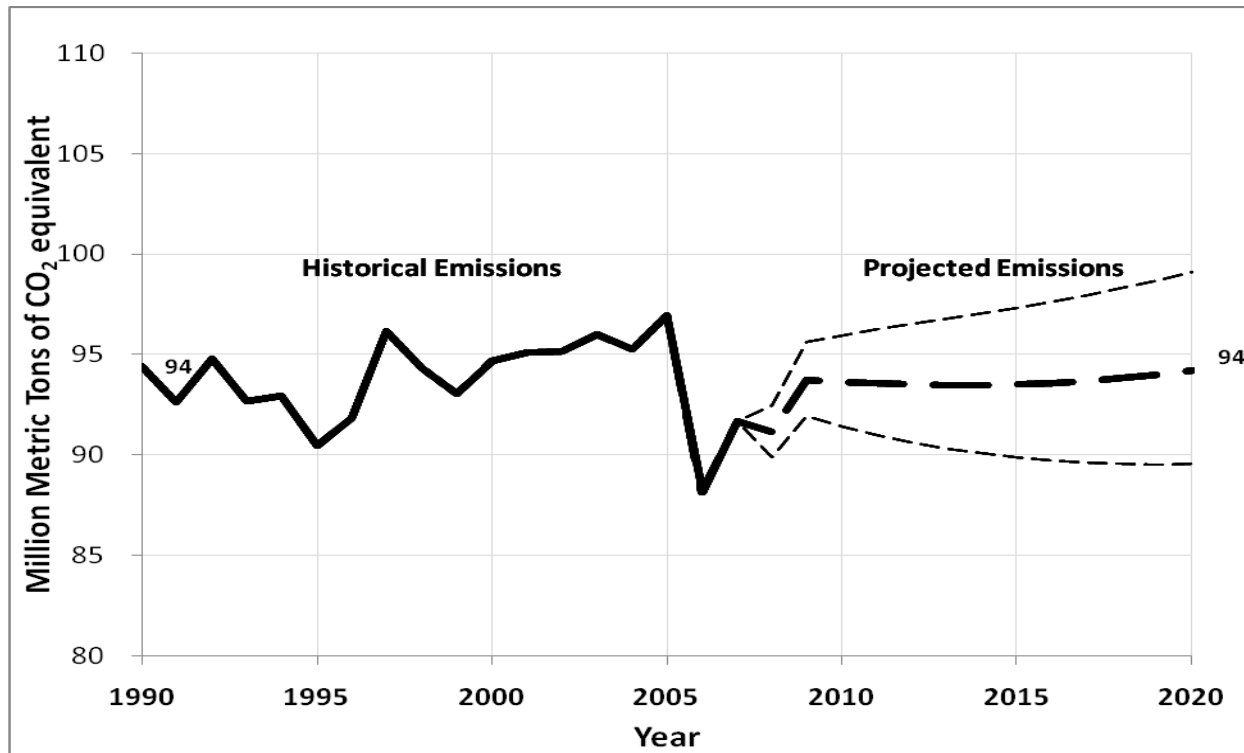
Where are the Auction Proceeds Going?

- Mostly: Energy efficiency upgrades and renewable energy investments
- Also: Consumer benefit programs
- Energy efficiency spending: energy audits, weatherization, air sealing, and improved equipment efficiency
- Result: lower long-term demand for energy and allowances, lower program costs

The Global Warming Solutions Act

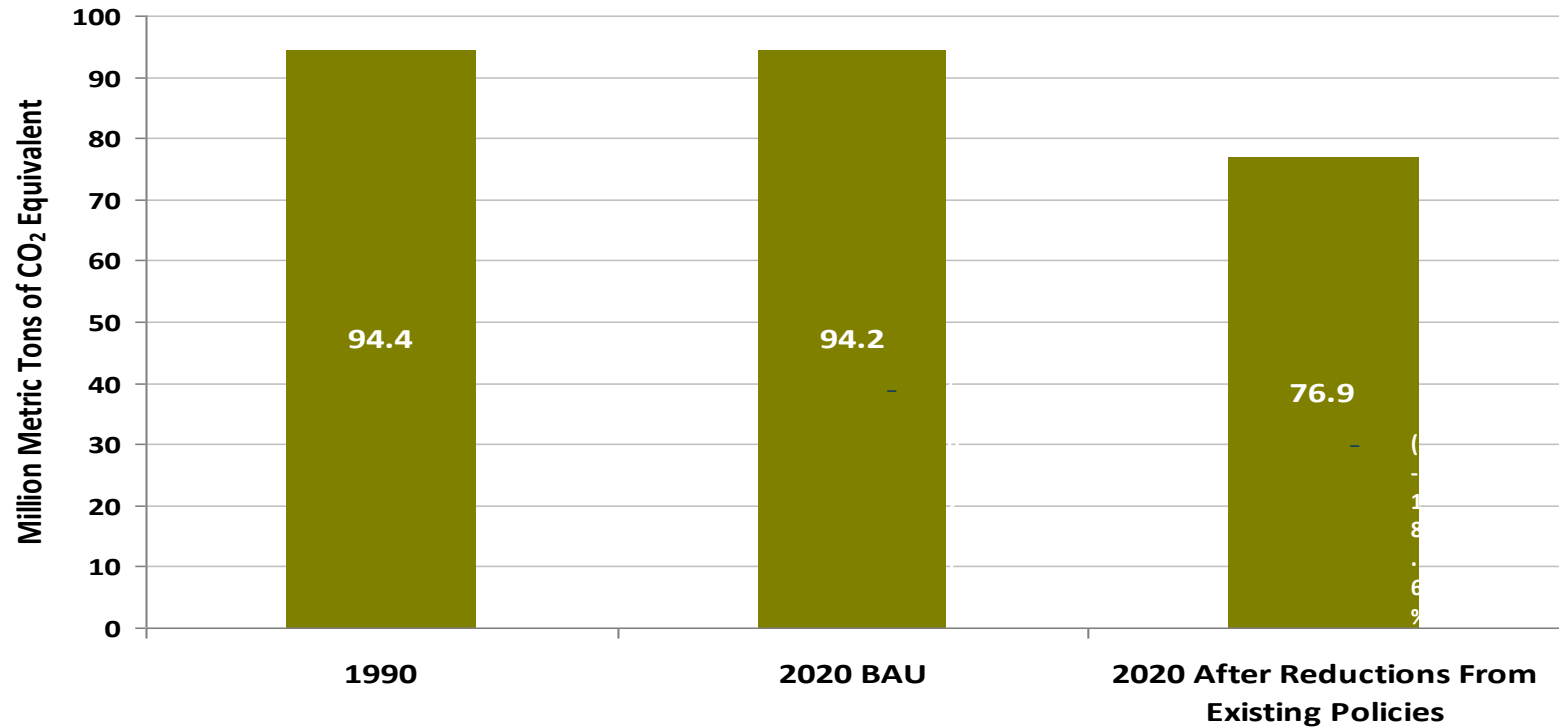
- Advisory Committees
 - Climate Change Adaptation
 - Climate Protection and Green Economy
- Mandatory Reporting of GHG Emissions
- 1990 Baseline and 2020 BAU Projection
- Statewide tri-annual GHG Emissions Inventory
- GHG Emissions Targets (2020, 2030, 2040) and Implementation Plans for these and....
- 2050 Emissions Limit - 80% below 1990 level

2020 Business As Usual Projection (MMTCO₂e)



Source: http://www.mass.gov/dep/air/climate/1990_2020_final.pdf

Estimated Reductions “Existing” Policies



ERG Draft – 2/5/2010

What is Ahead for GWSA

- Set 2020 Target (10-25% below '90 levels)
- Draft 2020 Reduction Plan
- Develop and Evaluate Policy Options to Obtain Additional GHG Reductions
 - By sector and integrated
 - Trajectories to 2050

Low Carbon Fuel Standard 101

- Transportation and climate change
- Fuels achieve declining carbon intensity target
- Low carbon fuels include advanced biofuels, electricity, natural gas, etc.
- Carbon intensity based on lifecycle emissions
- Sustainability concerns include indirect land use in lifecycle analysis.

Building on RGGI Success

- RGGI demonstrates regional capacity to innovate & provide national leadership
- LCFS includes RGGI + PA
- LCFS applies RGGI lessons of:
 - Regional collaboration
 - Energy – environment connection

Issues Unique to the Region

- ***Our region uses as much fuel for space heating as for transportation.***
 - Represents ~50% regional distillate demand
- ***Point of regulation***
 - Most transportation fuel imported to region as finished product
- ***Compliance & Enforcement***
 - 11 states = 11 enforcement authorities
 - Regional credit pool might be desirable
- ***Default Carbon Intensity Values***
 - Lookup table specific to region?
 - Include pathways not considered in CA?

Stakeholder involvement - 2009

- Ten individual meetings: Jan – August 2009
- Two Regional meetings: October 2009
- Input needed going forward
 - Economic analysis inputs
 - Sustainability concerns
 - Program framework

Current Status

- **Governors signed Memorandum of Understanding, December 2009**
 - Available online at <http://www.nescaum.org/topics/low-carbon-fuels>
 - Collaborate on program development
 - Perform economic analysis
- **Work to date:**
 - Preliminary analysis of program framework issues
 - Scope and data collection for economic analysis

Next Steps and Major Milestones

- 2010:
 - Q1: Develop economic analysis inputs, stakeholder input
 - Q2: Economic analysis, develop framework elements
 - Q3: Review economic modeling; framework and sustainability options
 - Q4: Draft and refine reports and recommendations with stakeholder input
- Early 2011: Agree to program framework
- 2011: Model rule, state rulemaking

Questions, Comments?

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