
Regional Greenhouse Gas Initiative (RGGI; “Reggie”)

Will Space

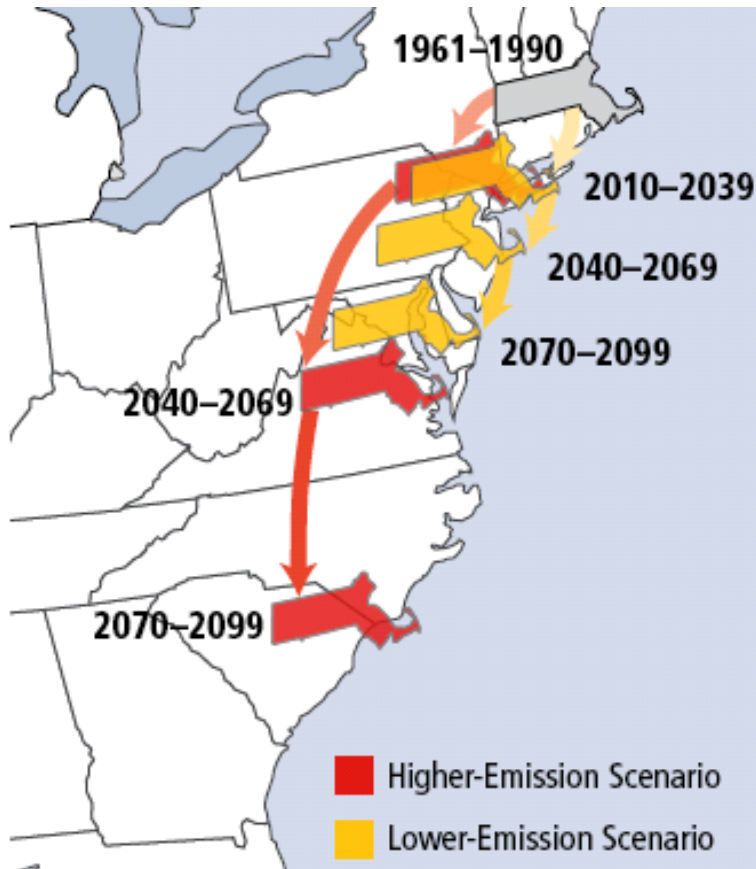
Massachusetts Department of Environmental Protection

Rio de Janeiro

August 27, 2013



Climate Change: Massachusetts Impacts

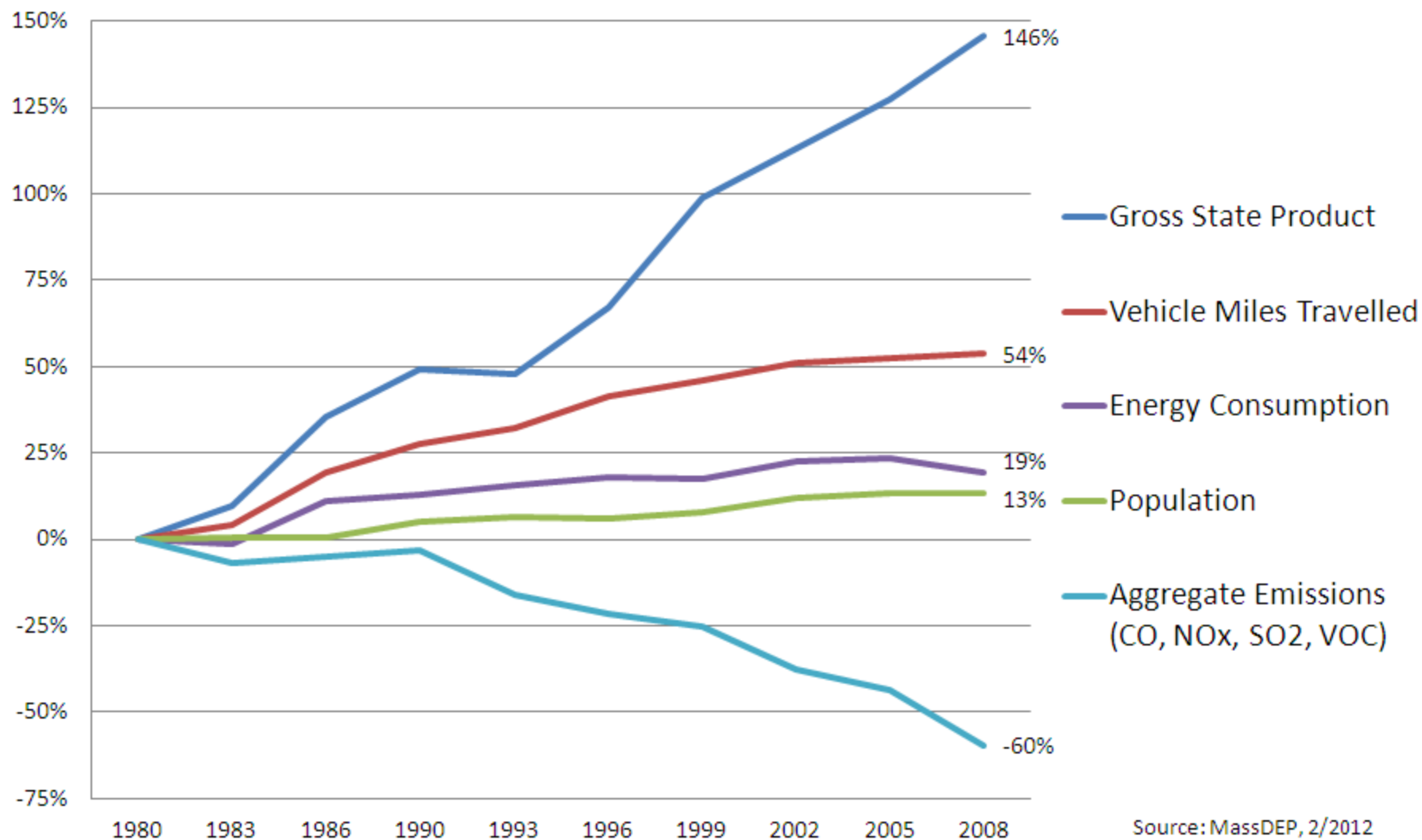


- Rising Sea Levels → Coastal Erosion
- Warmer Water → Degraded Habitats
- Hotter Summers → Health Impacts
More Droughts
- Warmer Winters → Less Maple Syrup
Less Snow/ Skiing

Source: UCS, 2007

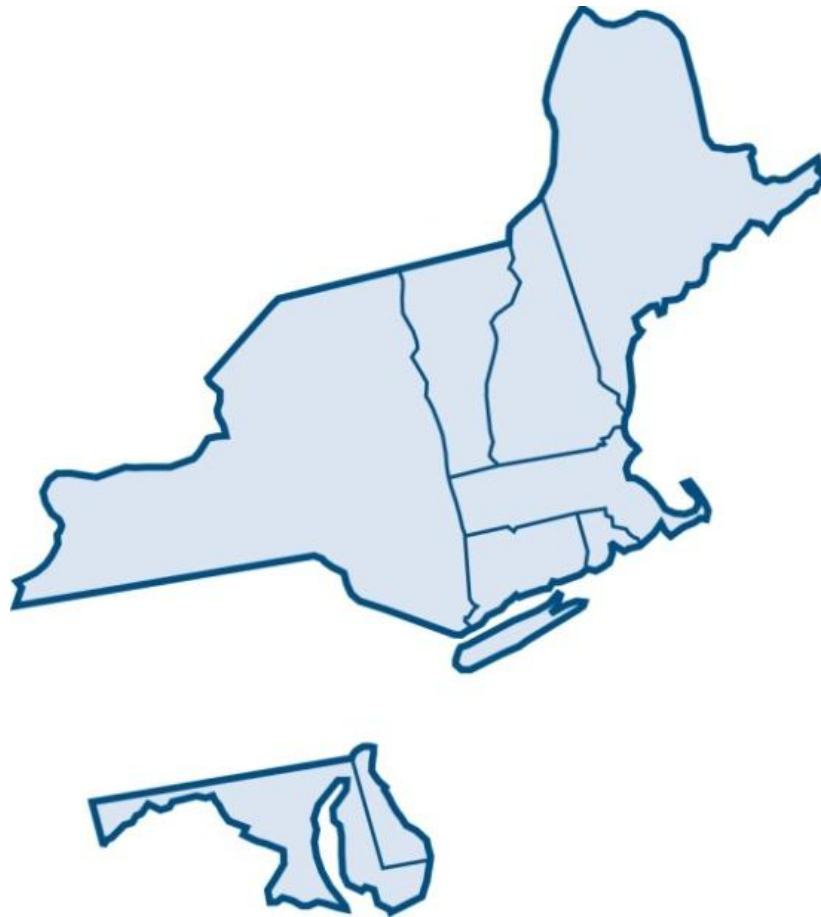


Massachusetts: Cleaner Air and a Growing Economy



Source: MassDEP, 2/2012

Regional Greenhouse Gas Initiative



- Cap and trade for carbon dioxide emissions from power plants in nine US states
- Cap will fall by 2.5% per year 2015 - 2020

RGGI: History and Timeline

- 2005: States agree on RGGI design features
 - Stakeholder consultations, economic modeling
- 2006 – 2007: Model rule development
- 2008: State rulemaking processes
- 2009 – 2011: First compliance period
- 2012 – 2014: Second compliance period
- 2012: Program review
 - Stakeholder consultations, economic modeling
- 2014: Program changes implemented



RGGI: Key Program Features

- Linked state programs
- Covers power plants 25 MW+
- Allowance auctions, targeted investments
- Three year compliance periods
- Unlimited allowance banking by facilities
- Five offset categories
- RGGI, Inc., provides administrative support



RGGI: Program Review

- Comprehensive program review in 2012 (complete).
- Changes to be implemented in 2014:
 - Cap lowered to 91 million tons (for nine states)
 - Cost containment reserve
 - New forestry offset protocol, based on California
 - Adjustment for banked 2009 – 2013 allowances
- Next review in 2016
 - Establish post-2020 caps
 - Address electricity imports (leakage)?



RGGI: Caps, Emissions, Prices

Year	States	Cap*	CCR*	Emissions*	Prices**
2005	10			184	
2009	10	188		124	\$2 – \$3
2010	10	188		138	\$2
2011	10	188		124	\$2
2012	9	165		92	\$2
2013	9	165			\$3***
2014	9	91	5 @ \$4		
2015	9	89	10 @ \$6		
2016	9	86.5	10 @ \$8		
2020	9	78	10 @ \$11		

*in millions of short (not metric) tons

**\$2 is minimum auction price

***after announcement of 2014 cap



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RGGI Allowance Auctions: (“Cap and Invest”)

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RGGI: Allocations

- State allowance budgets based on emissions
- States determine allocations
- Nearly all allowances sold at auction
 - Provides revenue for energy efficiency, clean energy, direct bill assistance, climate mitigation and adaptation, program administration, and other uses
 - Avoids windfall profits for generators
- Small percentage in set-aside accounts
 - Long-term contracts
 - Voluntary renewable energy purchases



RGGI: Auction Mechanics

- Sealed bid, single clearing price
- Open to all market participants, including banks, NGOs, etc.
 - Submit Qualification and Intent to Bid applications
 - Meet financial security requirements
 - Bid limit of 25% (including affiliated bidders)
- Minimum reserve price (\approx \$2 per allowance)
- Administrator: World Energy (under contract)
- Market Monitor (Potomac Economics)



RGGI: Auction Experience

- Clearing prices: \$1.86 – \$3.51 per short ton
- Over 500 million allowances sold \approx \$1.2 billion
 - 170 million unsold allowances 2010 – 2012
- Most (84% - 98%) bought by regulated facilities
 - Most others re-sold to regulated facilities
- No anti-competitive behavior observed
- Two thirds of revenue used for energy efficiency



Massachusetts RGGI Investments by Category

Cumulative-to-Date



TOTAL INVESTED: \$150,383,182

* Massachusetts received \$150,391,182 in auction proceeds through December, 2011. An additional \$8,000 of future auction proceeds is committed to 2012 and future programs.

Massachusetts ranked #1 in the U.S. in the *American Council for an Energy Efficient Economy's* 2011 Scorecard.

The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States

*Review of the Use of RGGI Auction Proceeds from the First
Three-Year Compliance Period*

Paul J. Hibbard
Susan F. Tierney
Andrea M. Okie
Pavel G. Darling

November 15, 2011

1.3)
BILLION

in energy bill
savings across
the region¹

1.6)
BILLION

in net economic
benefit to region¹

16)
THOUSAND
job-years created¹

RGGI Allowance Auctions: “Cap and Invest”

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RGGI: Additional Information

- RGGI web page: <http://www.rggi.org/>
- Massachusetts RGGI implementation: <http://www.mass.gov/dep/air/climate/rggi.htm>
- Contact: william.space@state.ma.us



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