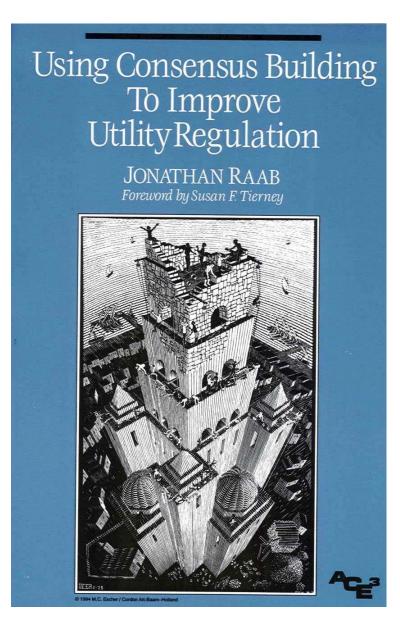
Using Consensus Building to Improve Energy and Environmental Policy

> Dr. Jonathan Raab Raab Associates, Ltd. (and MIT) November 16, 2009

> > www.RaabAssociates.org

ACEEE: Behavior, Energy & Climate Change Conference





Consensus Building: Why Bother?

May save process related time and money

- More importantly
 - Can improve the practicality of policies, programs, and laws
 - While enhancing their legitimacy

8 Principles for Consensus Building (in Electric Utility Regulation)-- From Raab (ACEEE Book)

- 1. Initiate consensus-building as early as possible.
- 2. Include all stakeholders.
- 3. Secure direct involvement of the PUC whenever possible.
- 4. Provide adequate resources.
- 5. Do not exclude contentious or sensitive issues from consensus-building efforts.
- 6. Consider assisted negotiation.
- Structure consensus-building processes to supplement traditional adjudicatory and rulemaking procedures.
- 8. Modify traditional procedures to better accommodate consensus-building opportunities.



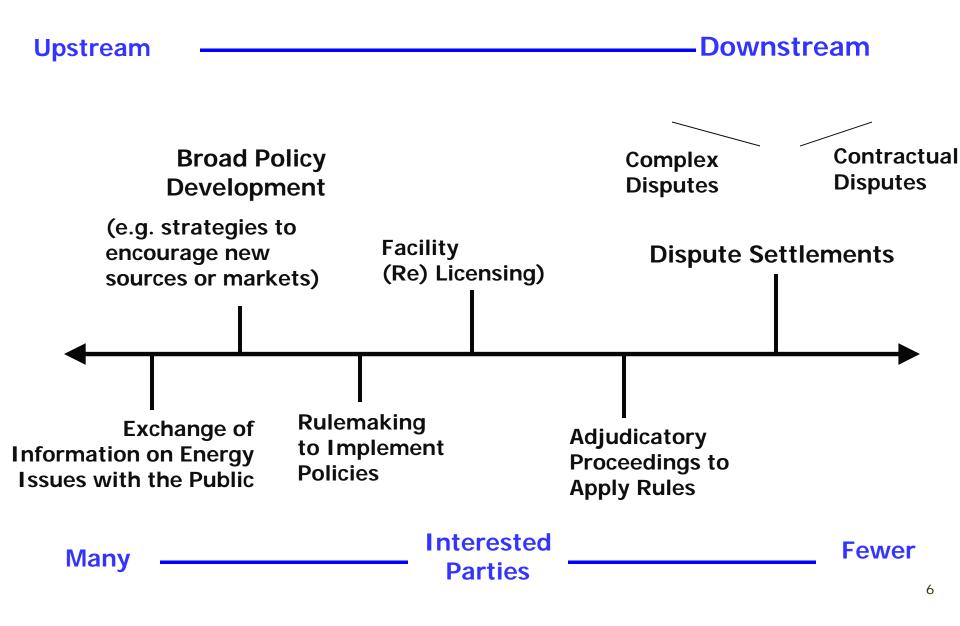
USING ADR TO RESOLVE ENERGY INDUSTRY DISPUTES:

THE BETTER WAY

REPORT OF THE ENERGY ADR FORUM

OCTOBER 2006

Spectrum of ADR Energy Applications



Dispute Resolution Spectrum

Parties Control Substantive Outcome and Process	Third-Party Assisted ADR				Court or Tribunal Controls Substance & Process		
Unassisted Negotiations		Mediation (incl. Reg-Neg)	Med-ARB	Third-Party Advice (incl. ENE, mini-trial)	Binding Arb	oitration	Litigation
Non- Directive	Parties lose (Neutral gains) control of process then substance Directive						
	← Best	Best Opportunity to Preserve/Improve Long Term Relationships					
	Best Opportunity for Win-Win Solutions						
Third Party Role	Listening ↔ 0	Clarifying ↔	Assisting	\leftrightarrow Advising	↔ Cont	rolling	↔ Deciding

Major Northeast Electricity Related Matters Using 3rd Party Neutrals: (2000-2009)

	NEDRI	PJM Contract Disputes	
CONSENSUS SEEKING	RI & Boston GHG Processes		MEDIATION
	RGGI (9 States)		
CONSENSUS BUILDING	RGGI (Regional Stakeholders)	Cape Wind	FACILITATION
	Restructuring Roundtable		
	UPSTREAM Forming Policies & Laws	DOWNSTREAM Applying Policies & Laws	8

NE Electricity Restructuring Roundtable

- Substance
 - Unique forum to discuss "current" restructuring issues in New England.
- Process
 - 113 Roundtables held so far! Have been meeting 6-10 times a year for 15 years in Boston.
 - Roundtable averages over 150 participants per session, with listserv of over 2,000 New England stakeholders.
 - Sponsored by 25 organizations, run by Raab Associates hosted at Foley Hoag offices
 - 2/13/09 Roundtable on "Integrating Electric Vehicles into a Smarter Electric Grid" drew 175 people and panel included FERC Commissioner, Better Place, Northeast Utilities, Xcel Energy, UofDE Prof—Blogged on NY Times Energy Page
 - 10/30/09 Roundtable on EE and bidding demand response into energy markets w/FERC Chair Wellinghoff drew over 200
 - http://www.raabassociates.org/main/roundtable.asp



Cape Wind

- Substance
 - Proposal to build largest offshore wind project in the world in MA—130 windmills, 400 MW.
 - Developed stakeholder process NOT to seek consensus but to better prepare organizations to participate in formal environmental impact statement process run by Corps of Engineers.
 - Explored substantive issues and stakeholder perspectives.
- Process
 - Hosted by MA Technology Collaborative, facilitation team led by Raab Associates.
 - Stakeholder group of 24, plus resource group of 25 state/federal agencies, academics, and others.
 - 7 full day meetings: October 2002 to June 2004
 - http://wind.raabassociates.org/

PJM Contract Disputes (Mediation/Arbitration)

• Substance

- Disputes between members and PJM, or among members on a wide rang of contractual, tariff, and other business disputes.
- Process
 - Time-constrained mediation required for all disputes.
 - If mediation does not successfully resolve dispute, binding arbitration is required for disputes valued at less than \$1 million.
 - PJM maintains a list of qualified mediators and arbitrators. Raab Associates has mediated four cases for PJM and its members.

New England Demand Response Initiative (NEDRI)

• Substance

- Developed 38 major recommendations for incorporating demand response into retail and wholesale markets in New England.
- Covered short-term price-responsive load, retail pricing and metering strategies, reliability-driven DR, and longer-term energy efficiency investments.
- Process
 - Included representative from 45 state and federal agencies, suppliers, consumers, and environmental organizations.
 - Met for 19 days in plenary session in 2002 and the first half of 2003
 - Joint project with the Regulatory Assistance Project, which managed the technical consulting effort and Raab Associates, which managed the stakeholder process.
 - Funded by US EPA, US DOE, ISO-New England, the New York ISO, and the Energy Foundation
 - http://nedri.raabassociates.org/index.asp

Regional Greenhouse Gas Initiative-(RGGI)

- Substance
 - Developed a greenhouse gas cap and trade system for electricity sector in 10 Northeast and Mid-Atlantic states
 - Reduces GHG emissions by 10% by 2020, allows for offsets, and establishes a public benefits fund.
 - RGGI allowance auctions have raised \$433 million to date--used mainly for energy efficiency
- Process
 - Raab Associates designed and ran 24-member regional stakeholder group to provide "advice" and act as "sounding board" for states.
 - Meanwhile, states negotiated MOU in separate, parallel process, signed in December 2005 by seven states (NY, NJ, VT, NH, CT, DE, and ME) and later joined by MD, RI, and MA.

www.rggi.org

Rhode Island Greenhouse Gas Stakeholder Process

2001-2007

R. I. Greenhouse Gas Process

Sponsors/Hosts

RI Department of Environmental Management

RI State Energy Office

Facilitators/Mediators

Raab Associates, Ltd.

Consultants/Modelers

Tellus Institute

Other Independent Consultants

Funders

U.S. EPA (convening \$) IECR (early plan/implementation \$) RI Department of Environmental Management and State Energy Office RI Foundation (small education grant)

Original Stakeholders

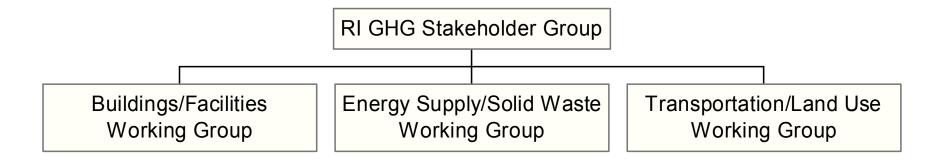
Apeiron Institute for Environmental Living Associated Builders and Contractors Audubon Society of Rhode Island Brown University **Business Roundtable** Conservation Law Foundation Department of Administration Narragansett Electric Nat. Fed'n of Independent Businesses New England Gas Company Northern RI Chamber of Commerce **Oil Heat Institute** Providence Chamber of Commerce **RI Builder's Association** RI Dept. of Environmental Management RI Dept. of Transportation RI Economic Development Corp. RI League of Cities and Towns **RI** Petroleum Institute

RI Public Interest Research Group RI Public Transit Authority RI Division of Public Utilities and Carriers RI Society of Environmental Professionals RI State Energy Office RI Statewide Planning Save The Bay Sierra Club Sustainability Coalition The Energy Council of Rhode Island

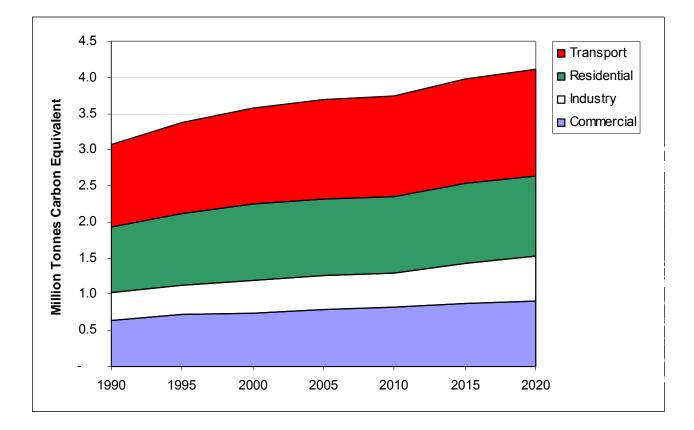
Ex-Officio

Governor's Policy Office RI House, Policy Office RI Senate, Policy Office US EPA US DOE

RI GHG Original Structure



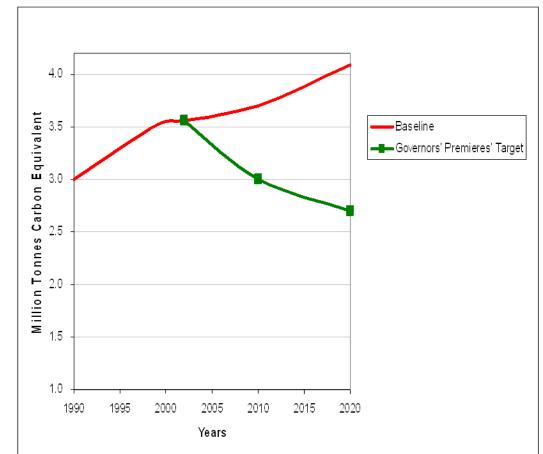
Projecting a Baseline by Sector



Selecting Targets

 Selected NE Governors'/ Eastern Canadian Premiers' Targets for now.

 2020 Levels must be ~ 1/3 below 1990 levels.



Developing Options

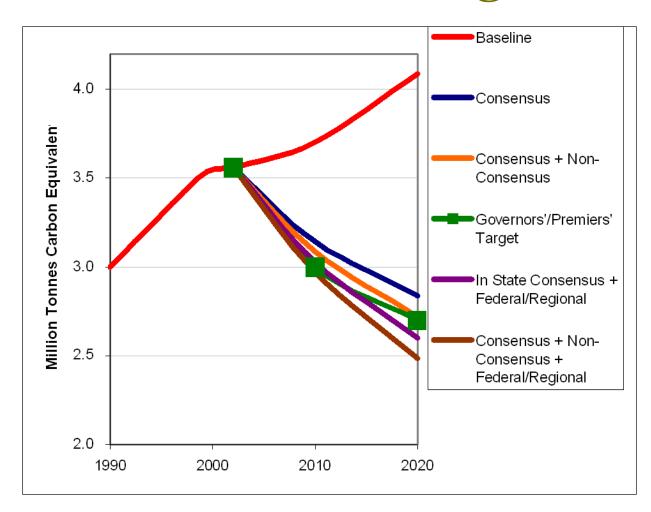
52 Options Generated

49 Consensus

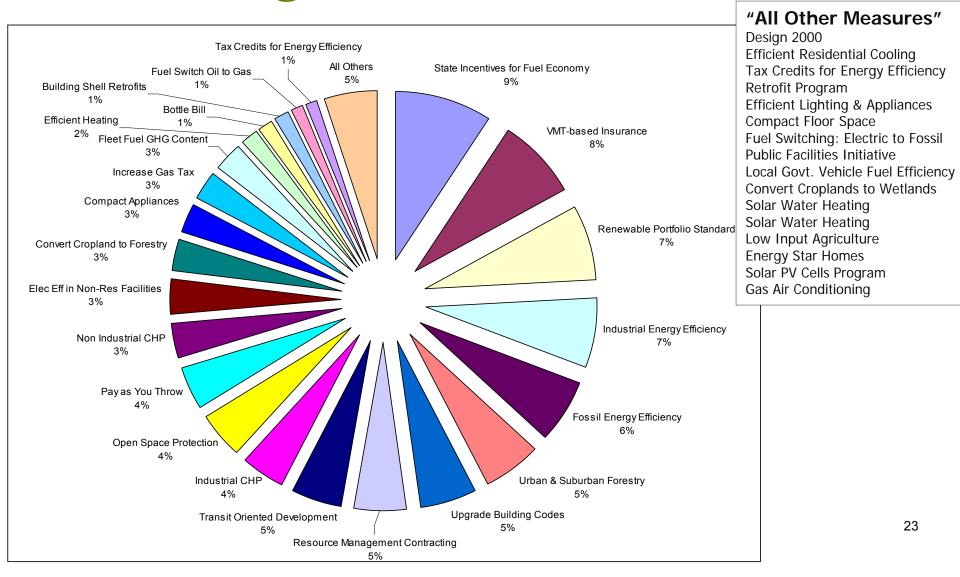
3 Non-consensus

All options include estimated Carbon Saved, Cost of Saved Carbon, and Co-benefits

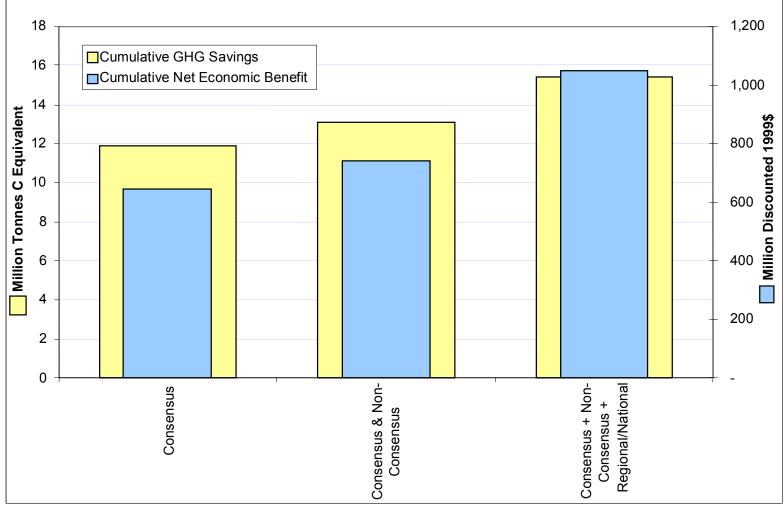
Comparing Options to Baselines and Targets



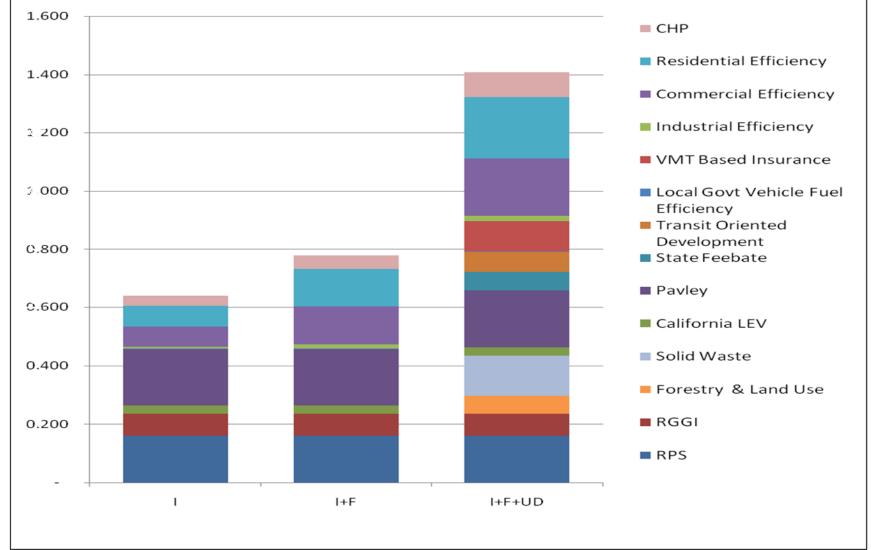
Contribution of Options to GHG Savings vs. Baseline in 2020



Net Economic Benefits and GHG Savings vs. Baseline



RI GHG Savings By Option in 2020 vs. Baseline



EPA Award

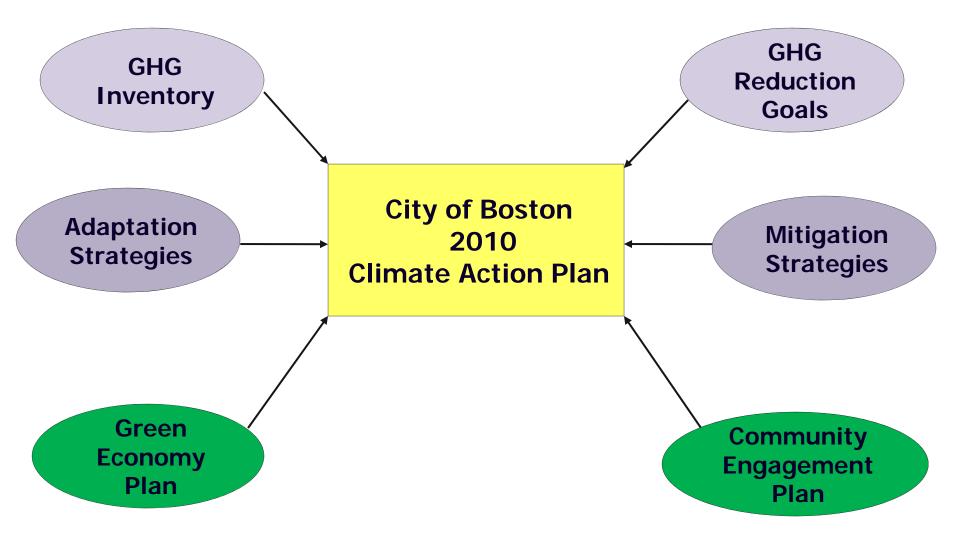
On May 4, 2005 the US EPA gave the RI GHG Stakeholder Group its "Outstanding Climate Protection Award" in a ceremony in Washington D.C.

Boston Climate Action Plan 2009-2010



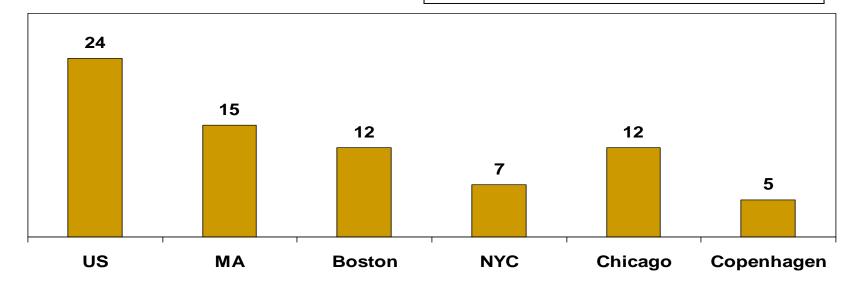
Facilitation/Coordination Team

City of Boston Climate Action Plan Update Process



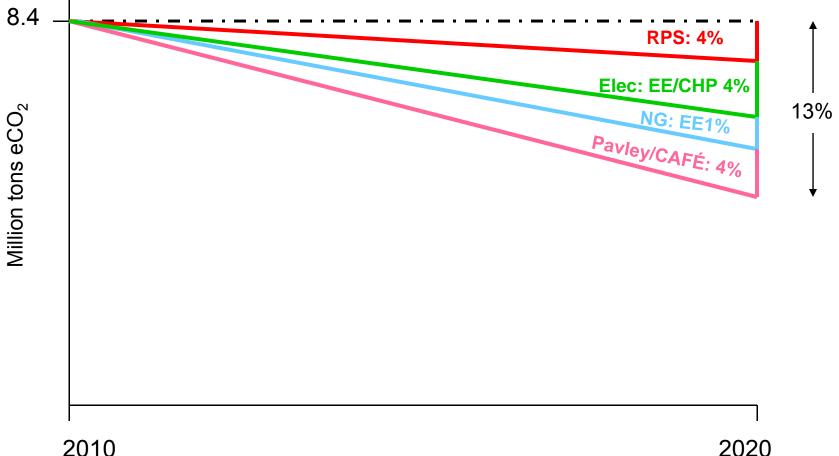
GHG Emissions per Capita Comparison

□ U.S	24	
	15	
Boston	12	
	7	
Chicago	12	
Copenhagen 5		



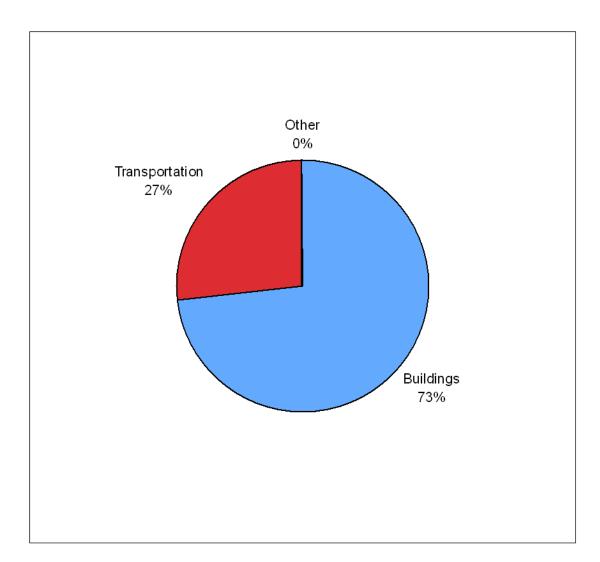
31

First Cut Reduction Potential of New Major Programs and Policies: RPS, EE/CHP, NG, Pavley/CAFÉ

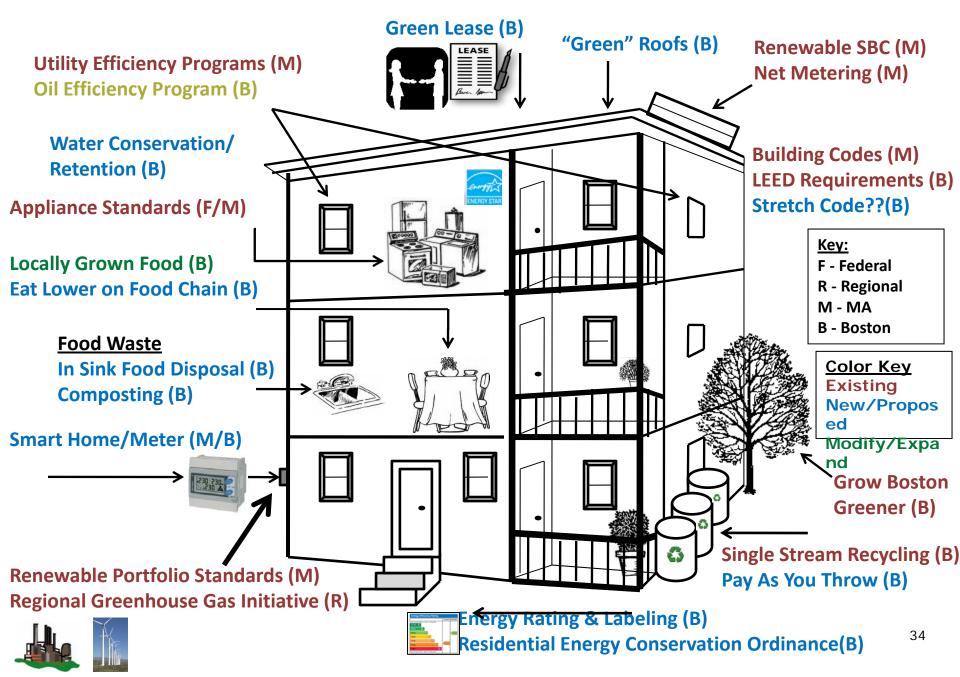


Boston 2007 GHG Emissions:

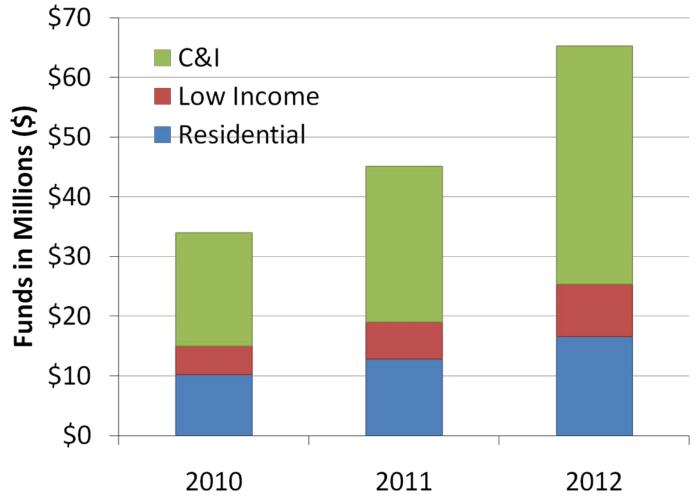
Buildings (Residential and C&I) relative to other sectors



Climate Mitigation Policies and Programs for Boston - Residential Buildings

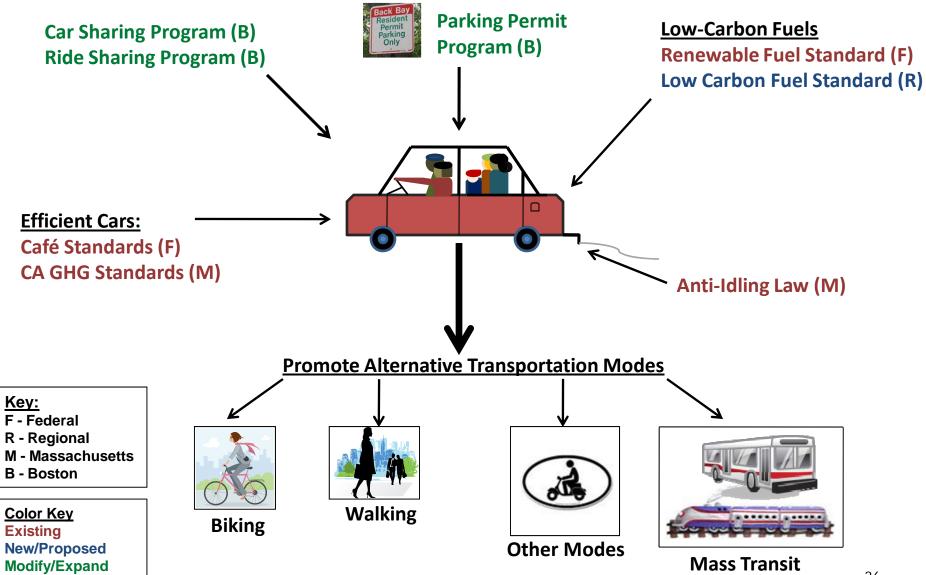


Funding for Utility Energy Efficiency Programs in Boston is Expanding

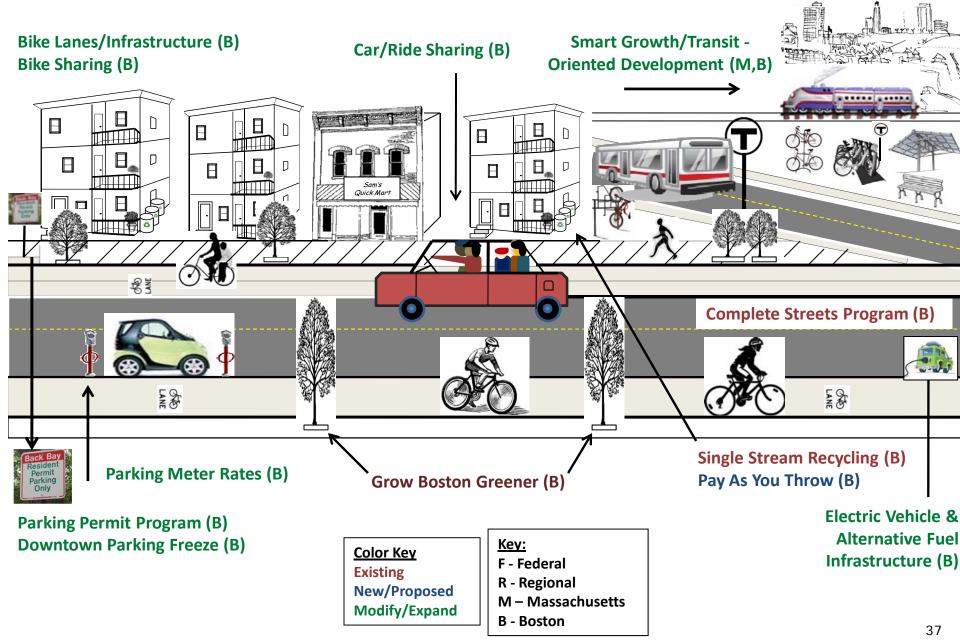


Peregrine Energy Estimate 11/12/2009

Climate Mitigation Policies and Programs for Boston - Personal Automobile



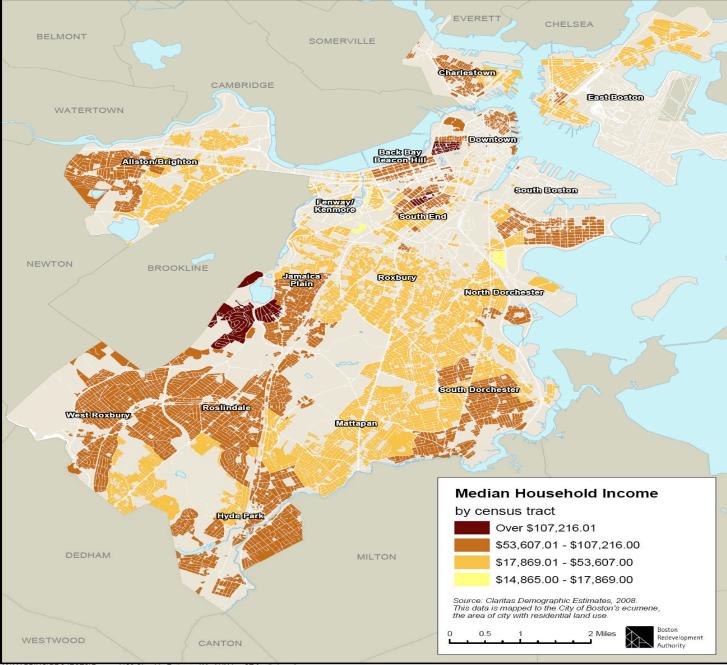
Climate Mitigation Policies and Programs for Boston – Residential Neighborhood Scale

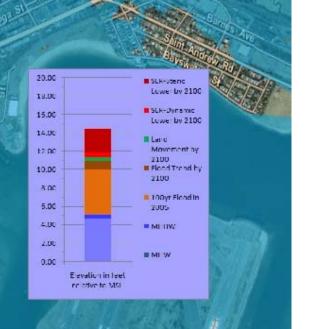


Community Advisory Committee

- 40 member CAC to advise LC and Mayor, and to develop short- and long-term citizen engagement strategies
- More than 70 nominations of more than 60 individuals from all over Boston
- Mix of neighborhoods, ethnic and racial groups, age/generations, expertise

Median Household Income for Census Tracts - Family of Four







Condor St

Figure 5 - 100-Year Flood Innundation in 2100 Lower Emissions Scenario East Boston, Massachusetts

Coastal Flooding and Environmental Justice: Developing Strategies for Adapting to Climate Change

MaryLAND

Citizen Engagement-Near Term

- 5 workshops—4 neighborhood-based, 1 for high school students
- **Goal 500-1,000 people**
- Structured feedback on
 - proposed mitigation and adaptation strategies
 - Iong-term citizen engagement strategies
 - social messaging
- Use presentations, small group facilitated discussions, and keypad polling

Vermont's Energy Future: Citizen Engagement Participant Demographic Comparisons

	Regional Workshops	Deliberative Polling
Number of Participants	652	146
Gender (Male/Female)	60% / 40%	54% / 46%
Average Age	52	54
College Graduate	82%	70%
Political Affiliation: Democrat	46%	23%
Republican	13%	10%
Other*	41%	66%

* Independent, Progressive, other, none



Vermont Regional Workshops

Which resource options do you think should be the highest or lowest priorities to meet Vermont's future electricity needs considering all factors (cost, environmental attributes, reliability, etc.)?

Resource	High %	Low %	Difference	Rank
Energy Efficiency	25%	1%	24%	1
Wind	22%	2%	20%	2
Hydro	15%	0%	15%	3
Solar	16%	2%	14%	4
Wood	8%	2%	6%	5
Methane from farms or landfill	7%	2%	5%	6
Natural gas	1%	8%	-6%	7
Nuclear	6%	24%	-19%	8
Oil	0%	27%	-27%	9
Coal	1%	32%	-32%	10

Raab Associates, Ltd.

Vermont Response Comparisons

Over the Next 10 Years, Would You Like to See Vermont Increase (1) Decrease (3)			
	Regional Workshops	Deliberative Polling	
Percentage of Electricity from Renewables	1.1	1.0	
Funding for Energy Efficiency Programs	1.2	1.2	



Vermont Response Comparisons

How Much Extra Are You Willing to Pay Per Month for Electricity that is,				
	Regional Workshops	Deliberative Polling		
		Deliberative Folling		
Entirely from Renewables	\$29			
Entirely from Non-Polluting Resources Producing no GHG or Nuclear Waste		\$29		
Entirely from Smaller Decentralized Plants	\$24	\$19		
Entirely from In-State Resources	\$20	\$18		

Figure 12: Continue to Buy from VT Yankee?

Vermont should continue to purchase electricity from the VT Yankee nuclear power plant

