

Creating A Cleaner Energy Future For the Commonwealth



**AESP-NECC
Conference
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DOER Mission

Creating a Cleaner Energy Future for the Commonwealth

- The Massachusetts Department of Energy Resources (DOER) develops and implements policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply within the context of creating a cleaner energy future. To that end, DOER strives to:
 - **Ensure deployment of all cost-effective energy efficiency**
 - Maximize development of clean energy resources
 - **Create and implement energy strategies to assure reliable supplies and improve the cost of clean energy relative to fossil-fuel based generation**
 - Support Massachusetts' clean energy companies and spur Massachusetts' clean energy employment

Exciting Time in Massachusetts

- ACEEE: #1 State for Energy Efficiency
- MassCEC Jobs Report
- Seventy-four Green Communities
- 100 Stretch Code Communities
- Building labeling pilots
- Nearly \$70 million in clean energy funding directed and leveraged by DOER
- 61 MW of solar PV installed
- 40 MW of wind generation installed
- EV charging stations

ACEEE Ranking

- Massachusetts takes #1 ranking
- ACEEE clearly credits implementation of Green Communities Act of 2008
 - “Central to Massachusetts’ success is the continued implementation of the 2008 Green Communities Act, which laid the foundation for greater investment in energy efficiency programs.” (ACEEE)
 - “Massachusetts earned its number one ranking this year by excelling in every aspect of energy efficiency. It has some of the most advanced building codes and land use policies in the country and it has policies in place that will make its utilities sector one of the most advanced in the country in saving energy.” (Michael Sciortino, ACEEE)



Energy Efficiency

MA's 1st Fuel

- RANKED #1 BY ACEEE FOR 2011
- Most ambitious EE program in the country;
 - 3 X California/capita;
- Doubling of employment in EE services since 2007
- \$2 Billion Investment = \$6 Billion Savings



ACEEE
American Council for an Energy-Efficient Economy



DER

Massachusetts Department
of Energy Resources

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Commonwealth

Funding Sources for Energy Efficiency

- Energy Efficiency Reconciliation Factor (EERF)
 - rate payer funds in proportion to the costs of programs directed at their sector (46%)
- Systems Benefit Charge (SBC)
 - 2.5 mills (0.25 cents) per kilowatt hour for all electric consumers, except those served by a municipal lighting plant (27% of funding)
- Regional Greenhouse Gas Initiative (RGGI) (11%)
- Forward Capacity Market (FCM) from ISO-NE (3%)
- Alternative funding sources through PAs
- Customer investments

Regional Greenhouse Gas Initiative (RGGI)

- States sell nearly all allowances through auctions and invest proceeds in consumer benefits: EE, RE, and other clean energy technology. The results: environmental gains, consumer savings and economic benefits.
 - According to a February 2011 report, RGGI Participating States are investing 80 percent of CO₂ allowance proceeds (\$900.5 million) in strategic energy programs (source: RGGI.org)
 - Evaluations of several energy efficiency and renewable energy programs in the RGGI Participating States show \$3–\$4 in benefits for every \$1 invested. (source: RGGI.org)
- Program review will take place in 2012 to address potential changes in program structure
- Stakeholder sessions www.rggi.org

Regional Greenhouse Gas Initiative (RGGI)

- RGGI is the first mandatory, market-based CO₂ emissions reduction program in the United States.
 - Thirteen quarterly auctions to date
- Ten Northeastern and Mid-Atlantic states have capped emissions at 188 million tons for first compliance period (2009–2011)
 - Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont
- Applies to fossil fuel-fired electric power generators with a capacity of 25 MW or greater

RGGI Proceeds in Massachusetts

- September 2008 – September 2011
 - Proceeds of \$142,505,072
 - Energy efficiency programs (80%) – \$101.3M
 - Green Communities and other initiatives (~20%)
 - GC grants & technical assistance
 - Energy Audit Program project funding
 - MassEnergyInsight
 - Heating assistance for low income customers
 - Job training, etc.

Energy Efficiency Results

- Pursue all cost-effective energy efficiency

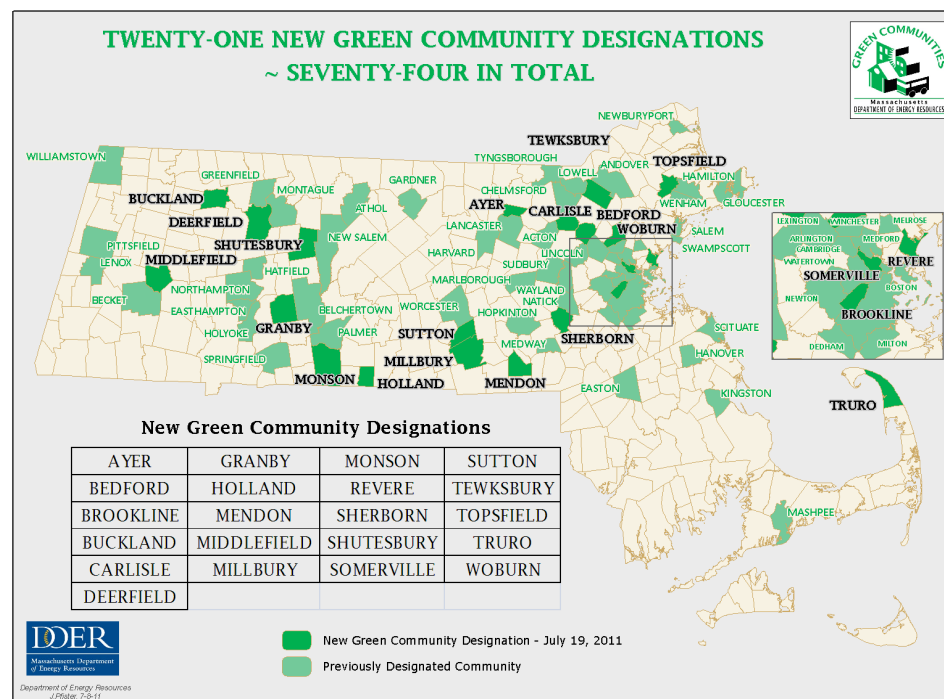
THREE-YEAR PLAN GOALS	2010	2011	2012	Total
Total Benefits (million \$)	1,409	2,022	2,536	5,967
Annual Electric Savings (GWh)	625	907	1,104	2,636
Annual Gas Savings (million therms)	14	18	26	58
Annual GHG Reductions (metric tons)	376,000	538,000	677,000	1,591,000

- Two billion dollar investment to deliver energy benefits of \$6 billion
- First year findings (2010)
 - Savings increased by participant compared to 2008
 - Capacity savings increased by participant compared to 2008
 - Costs did not increase as much as savings
 - Saved enough energy to power 85,000 households and heat 14,000 households annually. The greenhouse gas emission reductions are equal to the annual output of over 74,000 cars.

Green Communities Act

Establish Green Communities Division

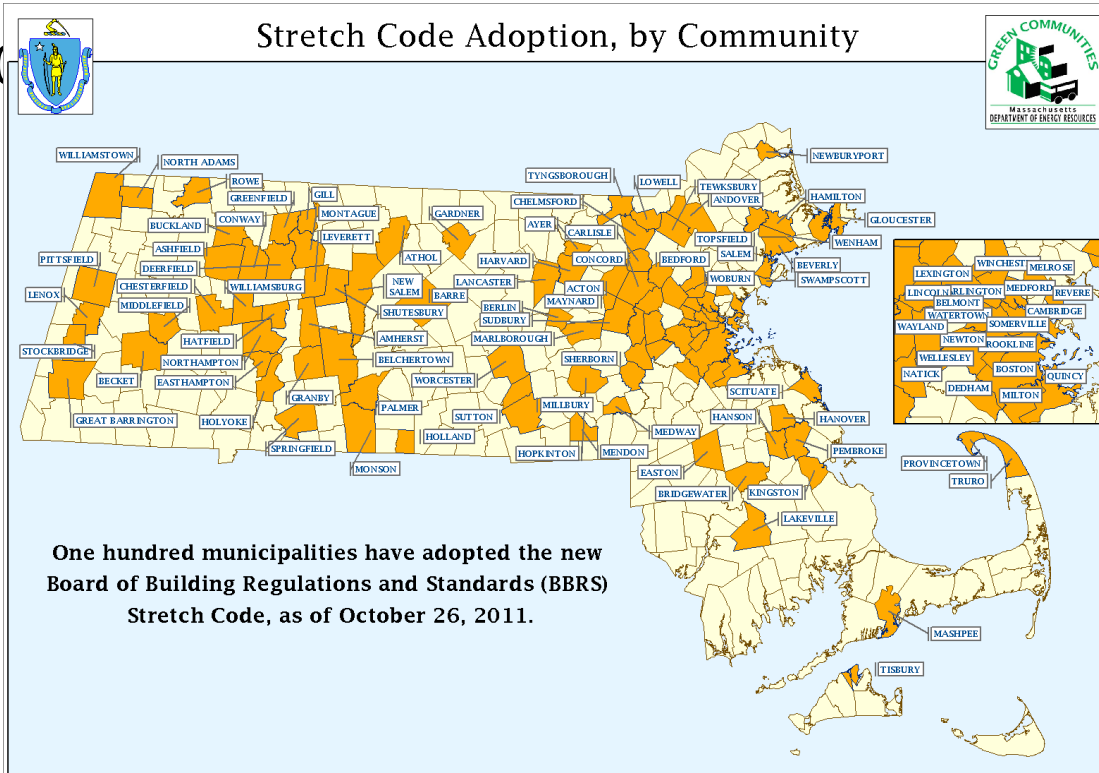
- 74 cities and towns designated Green Communities
- More than \$15.5 million invested to implement energy efficiency and renewable technologies
- Total reduction of 1,678,093 MMBTUs committed, equivalent to the annual energy consumption of approximately 12,978 New England



Green Communities Act

- Adopt most aggressive building energy codes

➤ 100



THE FUTURE

- Massachusetts
 - Engaged in the planning process for the next three year EE plans
 - Building Label Pilots (Res and Com)
 - Clean Energy & Climate Plan Implementation
 - 25% reduction in GHG by 2020
- Northeast and New England are Clean Energy Leaders
 - RGGI – Program Review / 2nd Compliance Term (2012–1014)
 - ACEEE top 10 include 6 RGGI states



Massachusetts Department
of Energy Resources