



COMMONWEALTH OF MASSACHUSETTS

*Deval L. Patrick, Governor
Timothy P. Murray, Lt. Governor
Richard K. Sullivan Jr., Secretary
Mark Sylvia, Commissioner*

*Mass Audubon – Oak Knoll
Sanctuary , Attleboro
Green Communities
Presentation*

May 5, 2011

**The Green Communities Division –
Partnering with Massachusetts
Cities and Towns**

*Seth Pickering
Southeast Regional Coordinator
Green Communities Division*

Massachusetts

Cleaner energy is part of our future

Priorities of the Patrick Administration

- **Green Communities Act**
- **Global Warming Solutions Act**
- **Green Jobs Act**

The landmark Green Communities Act provides a strong foundation focusing on energy efficiency, investment in renewables and the creation of the **Green Communities Division**.



Helping Massachusetts Municipalities Create A Greener Energy Future



Green Communities Division

Serves as the hub for all Massachusetts cities and towns on energy matters



Helping Massachusetts Municipalities Create A Greener Energy Future



GOING GREEN, WHAT DOES IT MEAN?

- Cities, towns and other local governmental bodies can reduce their energy costs by:
 - Establishing an Energy Committee / Designating an Energy Officer
 - Establishing an energy baseline for municipal buildings, streetlights and vehicles
 - Performing Energy Audits on municipal buildings
 - Implementing energy efficiency measures (e.g. town investments, utility rebates and incentives, grant programs and performance contracting)
 - Changing behaviors: (e.g. energy conservation policies)
 - Exploring renewable energy opportunities



Green Communities Division

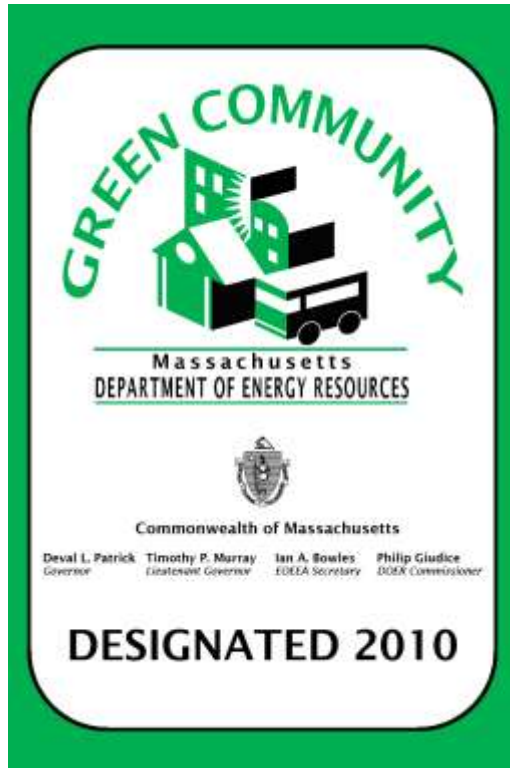
- Programs/Resources for Municipalities
 - MassEnergyInsight System
 - Green Communities Grant and Planning Assistance Program
 - Municipal Energy Efficiency Program
 - Energy Performance Contracting Technical Assistance
 - ARRA Stimulus Funding
 - Website / listserv
 - Regional Coordinators



Helping Massachusetts Municipalities Create A Greener Energy Future



GREEN COMMUNITIES GRANT PROGRAM



Provides grants to **qualifying** communities to fund energy efficiency initiatives, renewable energy, innovative projects

Qualification Criteria

1. Adopt as-of-right siting, in designated locations, for RE/AE generation, or RE/AE R&D, or RE/AE manufacturing
2. Adopt expedited (12 month) application/permitting process
3. Establish an energy use baseline with a plan to reduce baseline by 20% in 5 years
4. Purchase only fuel-efficient vehicles
5. Require all new residential construction > 3000 ft², and new commercial and industrial real estate construction to minimize life-cycle energy costs (**Adopt Stretch Code**)



Application available at: <http://tiny.cc/GreenCToolkit>

Helping Massachusetts Municipalities Create A Greener Energy Future



Green Communities Designation and Grant Flowchart

Step 1

- Review Green Communities Designation Criteria Guidance
- Contact your Green Communities Regional Coordinator

Step 2

- Discuss Green Communities Designation with Local Government
- Receive local approval to apply for Green Communities status

Step 3

- Meet the 5 Green Communities Criteria and submit a Designation Application
- Receive Green Community Designation from DOER
- Apply for Green Community Grants



Criteria 1 – As-Of-Right Siting

For at least one of the following:

1. Renewable or Alternative Energy Generating Facilities or;
2. Renewable or Alternative Energy Research and Development (R&D) Facilities or;
3. Renewable or Alternative Energy Manufacturing Facilities in designated locations.

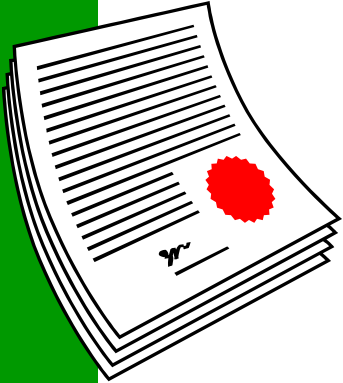


Criteria 1 – As-Of-Right Siting / Generation

1. On-Shore Wind – A turbine of a minimum 600 kW in size or above
2. Off-Shore Wind – A turbine of a minimum 2.5 MW or above
3. Solar Photovoltaic – A single ground-mounted system of a minimum of 250 kW or above
4. Biomass CHP - A minimum of 5 MW in a stand-alone building
5. Ocean, Wave or Tidal – no minimum threshold



Criteria 2 – Expedited Permitting



Documentation for Criteria #2:

1. A letter from legal counsel:
 - Affirm no preclusions for expedited permitting
 - Include language addressing approval procedures
 - Associated timing from any applicable bylaws/ordinances or regulations.
2. A copy of the applicable map(s) showing that the areas where the expedited permitting applies coincides with the as-of-right zoned areas for Criteria 1.
3. MGL c43D
 - A certified copy of their City Council or Town Meeting vote designating the as-of-right zoned parcel(s) as a Priority Development Site
 - A copy of the applicable map(s) showing the areas where the expedited permitting applies



Criteria 3 – Energy Baseline & 20% Energy Reduction Plan



Pittsfield Town Hall



Calculate an energy use baseline inventory that includes:

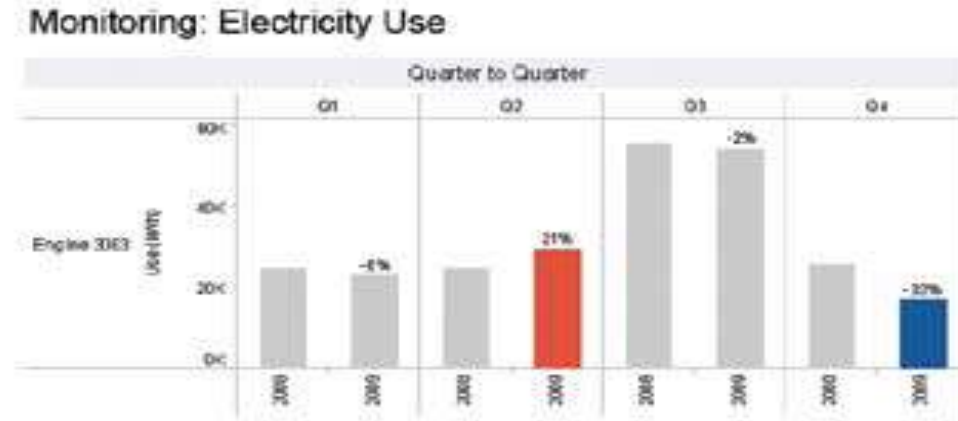
- Municipal buildings, including schools
- Vehicles
- Street and traffic lighting (if municipally-owned)



Greenfield High School



Criteria 3 – Energy Tracking Tools



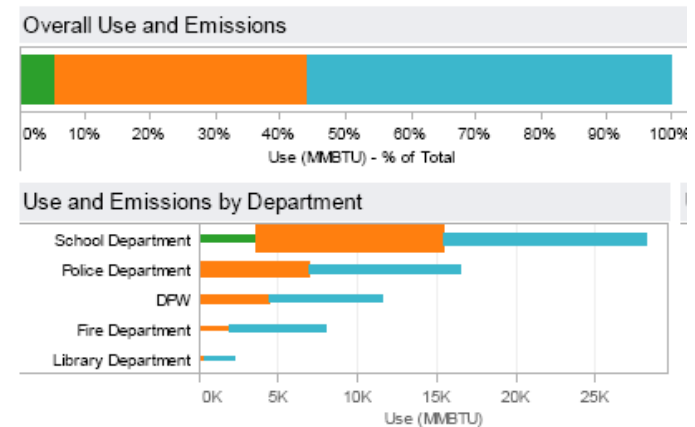
- DOER's MassEnergyInsight (www.massenergyinsight.net)
- EnergyStar Portfolio Manager
- ICLEI software
- Any other tools must be pre-approved by DOER



MassEnergyInsight

● ● ● ● ● POWERING EFFICIENCY

- **FREE** online tool for MA cities & towns
- 160 current users
- Electronic download of utility data
- All energy costs and accounts in one place
- Standard and custom reporting
- Identify your least efficient energy users
- Track your energy savings by fuel type
- Create GHG emissions reductions reports



www.massenergyinsight.net

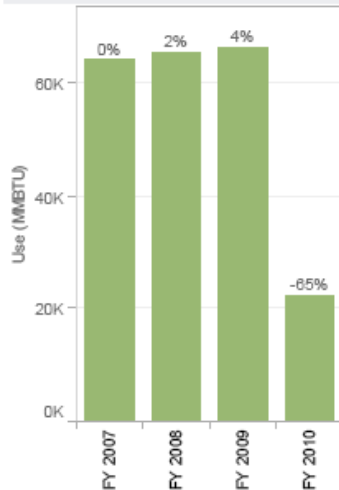
Helping Massachusetts Municipalities Create A Greener Energy Future



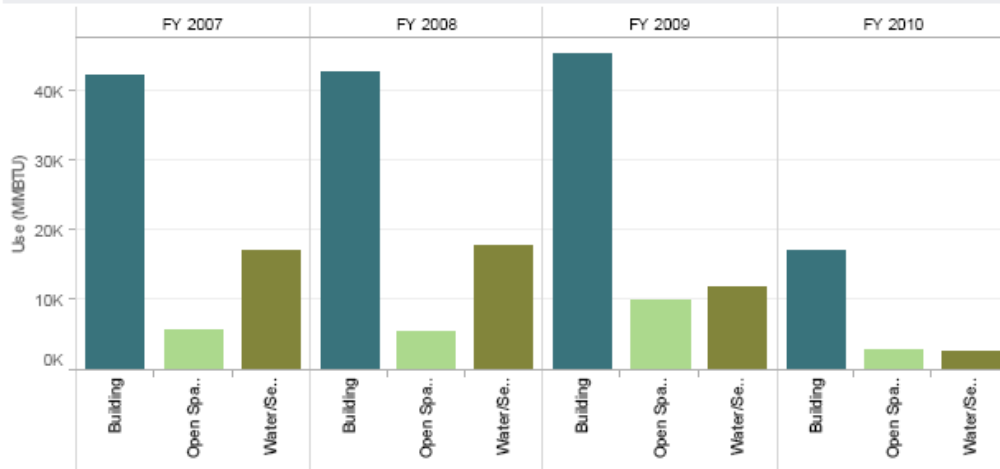
Criteria 3 – Energy Baseline & 20% Energy Reduction Plan

Create a comprehensive energy reduction plan designed to reduce energy use by 20 percent within 5 years of the baseline year.

Overall Use with % Difference from Baseline Year



Use by Facility Category



Values with a Facility Category of **Null** or **blank** indicate buildings that have not yet been assigned a category. Categories can be assigned from within the "Enter/Organize Data" section of www.massenergyinsight.net.



Criteria 3 – Energy Baseline & 20% Energy Reduction Plan

Documentation for Criteria #3:

1. Inventory tool
2. Baseline year
3. Energy use inventory
4. Specific energy conservation measures to be implemented with expected energy reductions and a timeline
5. Documentation that both the general government and local school district have adopted the energy reduction plan.
 - If a regional school district is included as part of the designation, documentation that the regional school district has adopted the plan must be included.



Criteria 4 – Fuel Efficient Vehicles

1. Purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.
2. Police cruisers are exempt until commercially available.
3. Heavy-duty vehicles > 8,500 pounds are exempt.



Criteria 4 – Fuel Efficient Vehicles

Documentation for Criteria #4:



1. Copy of the policy or other mechanism adopted for purchasing only fuel efficient vehicles
2. Inventory of non-exempt vehicles (model, year, estimated mpg) with plan for replacements with fuel efficient vehicles
3. Documentation that both the municipality and the local school district (not RSDs) have adopted the fuel efficient vehicle policy.



Criteria 5 – Minimize Life Cycle Costs



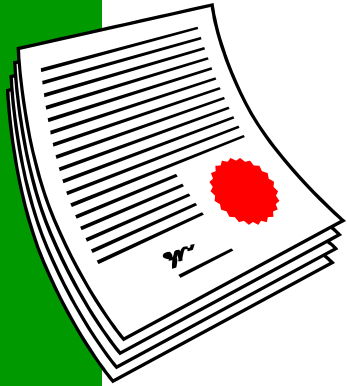
Require all new residential construction over 3,000 square feet and all new commercial and industrial real estate construction to minimize, to the extent feasible, the life-cycle cost of the facility by utilizing energy efficiency, water conservation and other renewable or alternative energy technologies.

The DOER recommended way for cities and towns to meet this requirement is by adopting the BBRs Stretch Code (780 CMR 115.AA) an appendix to the MA State Building Code.

- In a town, the Stretch Code must be adopted as a general bylaw by its Town Meeting.
- In a city, the Stretch Code must be adopted by the City Council, preferably by general ordinance.



Criteria 5 – Minimize Life Cycle Costs



Documentation for Criteria #5:

- **Stretch Energy Code**
 - Provide documentation of the city council or town meeting vote adopting 780 CMR 115.AA, MA Board of Building Regulations and Standards (BBRS) Stretch Energy Code.
- **Local Process**
 - Provide documentation of the standard adopted, the mechanism in place for requiring this criterion for new construction, and documentation of how this standard provides reduced life-cycle energy costs.



DESIGNATED GREEN COMMUNITIES



MUNICIPAL ENERGY EFFICIENCY

Municipal Energy Efficiency

A major focus of the Green Communities Division is collaborating with municipalities by coordinating energy assessments with utilities, identifying energy efficiency resources and opportunities and evaluating the benefits of implementing energy conservation measures.

Three Year Energy Efficiency Plans

1. Investor owned electric and gas utilities (IOU) are required to provide all available energy efficiency (EE) and demand reduction resources that cost less than new energy supply.
2. Utilities will provide more robust rebates, incentives and programs to meet their goals.
3. Plans – IOUs to invest \$2.2 billion in EE measures over 3 yrs.

For more information contact: Aimee Powelka
Aimee.Powelka@state.ma.us or (617) 626-7356

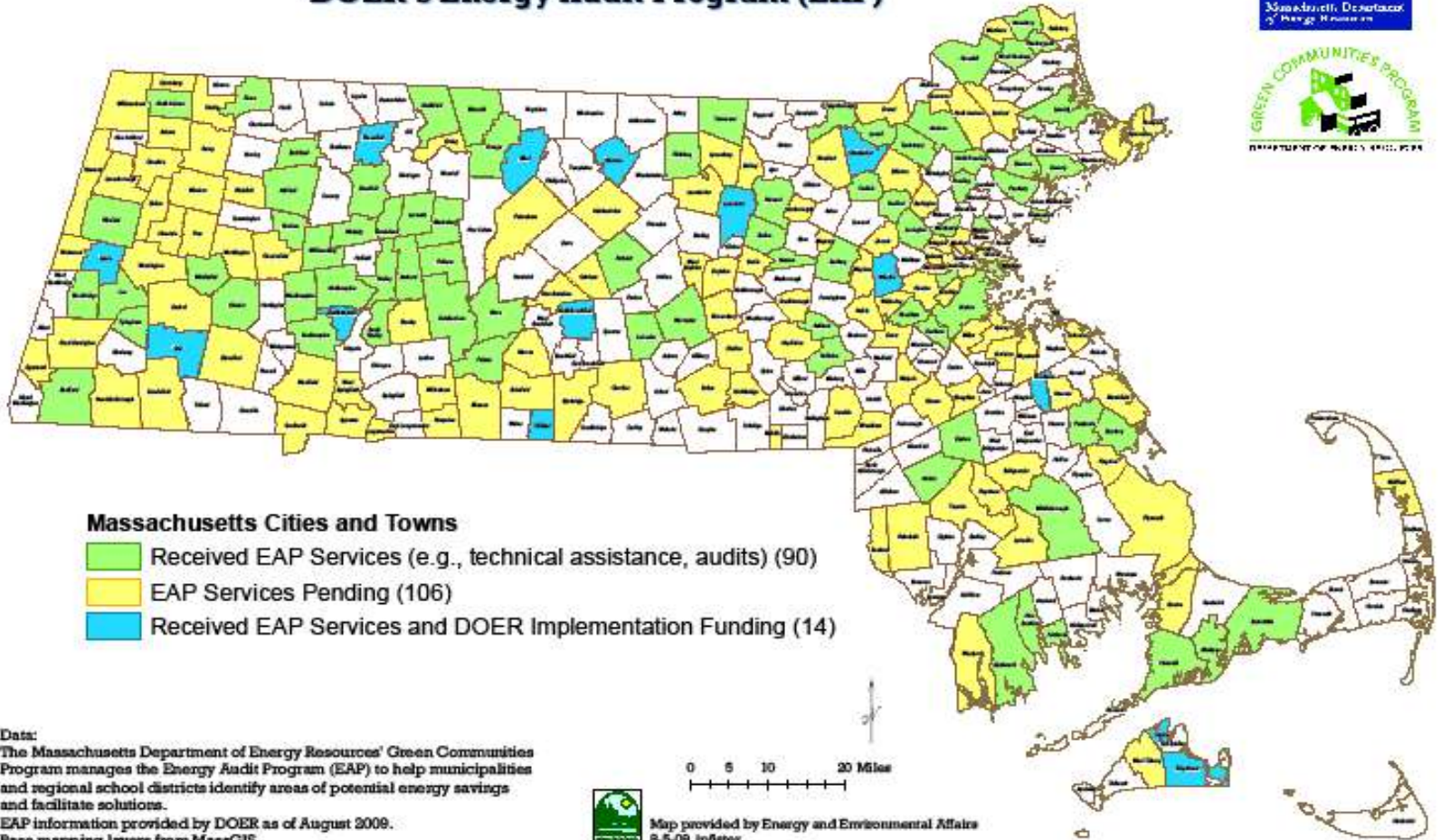


Helping Massachusetts Municipalities Create A Greener Energy Future



ENERGY AUDIT PROGRAM

Municipalities Working with DOER's Energy Audit Program (EAP)



Helping Massachusetts Municipalities Create A Greener Energy Future

Energy Performance Contracting Technical Assistance – MGL c25A sections 11C and 11i

- Provide a guide, model RFR/RFQ and model contract documents
 - Review bid documents
 - Educate and guide communities through the process
- Approximately 25 municipal performance contracts
 - Approximately 13 municipalities in process

Contact: Eileen McHugh at eileen.mchugh@state.ma.us,
617-626-7305



Helping Massachusetts Municipalities Create A Greener Energy Future



OUTREACH - REGIONAL COORDINATORS

- Website filled with tools & resources for municipalities: www.mass.gov/energy/greencommunities
- Email updates via **listserv** (~1000 subscribers) – Sign up today!
- Regional Coordinators act as direct liaisons with cities and towns on energy efficiency and renewable energy activities
- Located at each of the DEP Regional Offices:
 - SERO – LAKEVILLE: Seth Pickering
 - seth.pickering@state.ma.us
 - NERO – WILMINGTON: Joanne Bissetta:
 - joanne.bissetta@state.ma.us
 - CERO – WORCESTER: Kelly Brown
 - kelly.brown@state.ma.us
 - WERO – SPRINGFIELD: Jim Barry
 - Jim.barry@state.ma.us



Helping Massachusetts Municipalities Create A Greener Energy Future



Green Communities Contacts

Meg Lusardi – Deputy Director

meg.lusardi@state.ma.us (617) 626-7364

Seth Pickering – Regional Coordinator

seth.pickering@state.ma.us (508) 946-2838

- Websites:

www.mass.gov/energy/greencommunities

<http://tiny.cc/GreenCToolkit>



Other Resources

- Department of Energy Resources: www.mass.gov/doer
 - Energy Efficiency Division
 - Renewables Division
 - Energy Markets Division
 - Green Communities Division
- Three Year Efficiency Plans: www.masssave.com
- Clean Energy Center: www.masscec.com
 - Investments in Clean Technology
 - Workforce Development
 - Renewable Energy
 - Clean Energy Sector Development

