Helping Massachusetts Municipalities Create a Cleaner Energy Future



COMMONWEALTH OF MASSACHUSETTS

Deval L. Patrick, Governor Richard K. Sullivan, Jr., Secretary Mark Sylvia, Commissioner

Partnering with Cities and Towns

Meg Lusardi, Director Green Communities Division

Green Communities Division -

MMA Leadership Conference for Selectmen

June 9, 2012

1

Massachusetts

- · Cleaner energy is an important part of our future
 - Key priorities of the Patrick Administration
 - Green Communities Act
 - Global Warming Solutions Act
 - Green Jobs Act
 - Landmark Green Communities Act in 2008 provides a strong foundation
 - Important progress is underway focusing on energy efficiency, investment in renewables and creation of the green communities program









Green Communities Division -Programs & Resources for Municipalities

- Green Communities Designation and Grant Program
- MassEnergyInsight energy tracking and analysis tool
- Municipal Energy Efficiency Program
- Energy Management Services Technical Assistance
- · ARRA stimulus funding for cities and towns
- Clean Energy Results Program (CERP)
- Mass Municipal Energy Group (MMEG)
- · Website filled with tools & resources www.mass.gov/energy/greencommunities

Email updates via listserv - Sign up by sending an email to: join-ene-greencommunities@listserv.state.ma.us

Green Communities Designation and Grant Program

Qualification Criteria - Designation



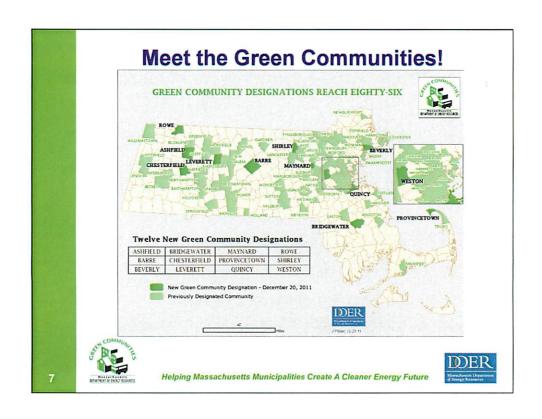
- Adopt as-of-right siting for RE/AE generation, R&D, or manufacturing
- 2. Adopt expedited permitting process
- Create an Energy Reduction Plan to reduce energy use by 20% in 5 years
- 4. Purchase only fuel-efficient vehicles
- Minimize life cycle cost in new construction → adopt the Stretch Code

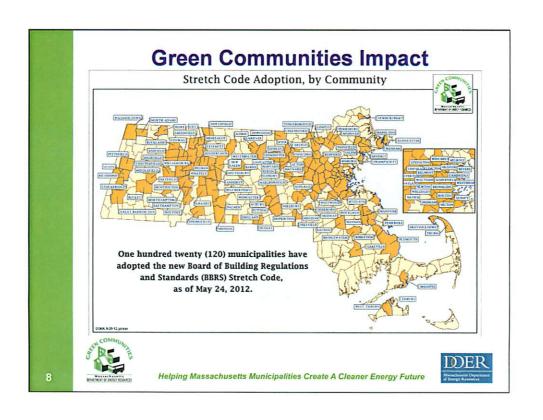
Grant Funding

- 1. Energy Efficiency Projects
- Renewable Energy Projects on municipal land









Green Communities Designation and Grant Program – the 86

- Range in size from 393 to 617,594.
- 37 communities enacted as-of right zoning for renewable generation
 - 32 provide for ground mounted PV of 250 kW
 - 5 provide for wind of 600 kW
 - 1 provides for both wind and PV
- Total Energy Reduction for all 86 Energy Reduction Plans – 1,699,063 MMBtus



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Green Communities Designation and Grant Program – the 86

- Communities receive 4 metal road signs and an official certificate
- Grant allocations based on a \$125K base plus a population/per capita income formula; maximum \$1M.
 - Range from \$130,725 in Hatfield to \$1M for Boston
- Projects being funded include energy conservation measures, performance contracts, solar PV projects, incremental costs for hybrid vehicles.
 - 24 grants complete to date
 - Grants \$5.58M
 - Total Projects Costs \$8.1M; utility incentives \$1.05M



Annual savings of \$1.2M

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10

Green Communities Designation and Grant Program – the 86

Lowell - JFK Civic Center Chiller Replacement & Four School Lighting Improvements

 Grant towards Performance Contract measures allowed Lowell to do additional energy measures in City Hall

 National Grid rebates applied to lighting fixture upgrades, lighting controls, and vending machine controls in schools









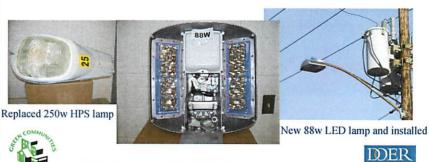
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Green Communities Designation and Grant Program – the 86

Easthampton - LED Streetlight Replacement Project

- ~ 1/3 of the streetlights replaced with LED technology
- Incentive grant from WMECO augmented grant \$\$
- City set up a review committee to assess available products, vendors, and costs



12

Green Communities Designation and Grant Program - the 86

Sudbury - New Lighting, HVAC & Lighting Controls, New Efficient Vehicle

 NSTAR rebates for lighting, and HVAC and lighting controls in 6 schools and 4 municipal facility buildings







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Mass**EnergyInsight** POWERING EFFICIENCY

- · FREE online tool for MA cities, towns, RSD & WTP
- ·Provides:
 - · Automated electronic download of utility data
 - ·All energy costs and accounts in one place
 - ·Standard and custom reporting
- Use and Emissions by Department

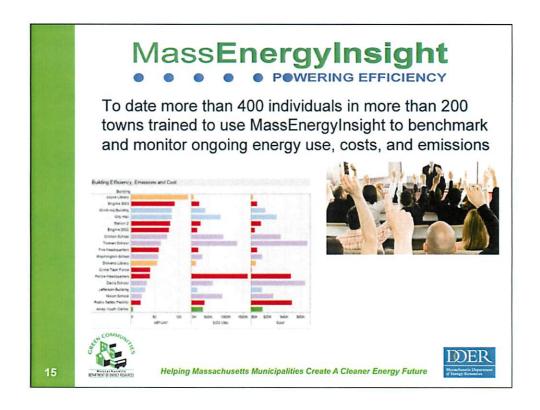
- · One tool to do it all:
 - · Benchmark: track energy use by town, department or building
 - · Identify: least efficient buildings for efficiency action
 - · Measure and verify: energy use trends by building over time

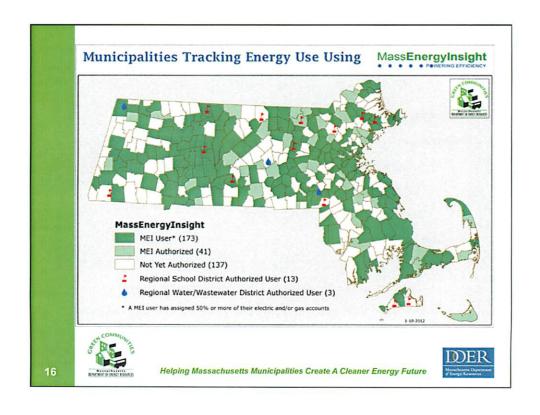


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14





Green Communities Division - What's New?

Massachusetts Municipal Energy Group

Made possible by a grant from the Green Communities Division

What

- Web-based community
- Managed by MMA

Goal

•Help Commonwealth's cities and towns exchange information and knowledge to reduce local energy use and carbon footprint

Who

Mayors, town managers, boards of selectmen, building inspectors, school superintendents, school board members, members of energy or sustainability committees . . . and others

MMA CONTACT: Victor Nascimento, vnascimento@mma.org



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Massachusetts Municipal Energy Group Made possible by a grant from the Green Communities Division In Other print Illy or locate to Illy or Other print Illy or Other

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Green Communities Division - What's new?

More Opportunities for Green Communities!

- Competitive Grant Program
 - Application Deadline March 30th
 - 22 applications under review
 - \$2M available in total, max award of \$250K
 - Annual Program in Fall, pending available funds
- Solarize II
 - 13 applications from 17 communities SOLARIZE selected



- REP issued for installers
- Solarize I in 4 communities increased total installations from 29 to 162



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What Can YOU Do?

- Organize an Energy Committee
- Contact your Regional Coordinator
- Get trained on Mass Energy Insight
- · Contact your utility about an audit
- Talk to other municipalities in your region





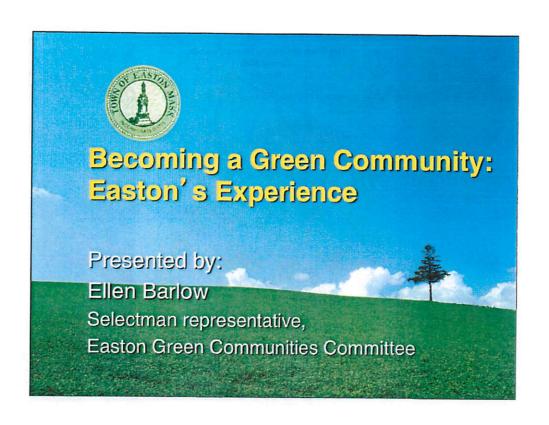
Contact Information

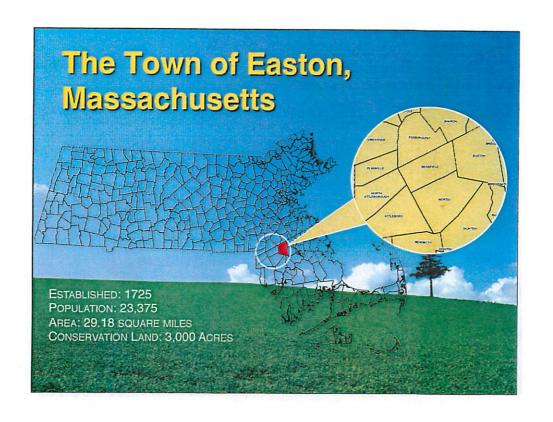
Meg Lusardi meg.lusardi@state.ma.us

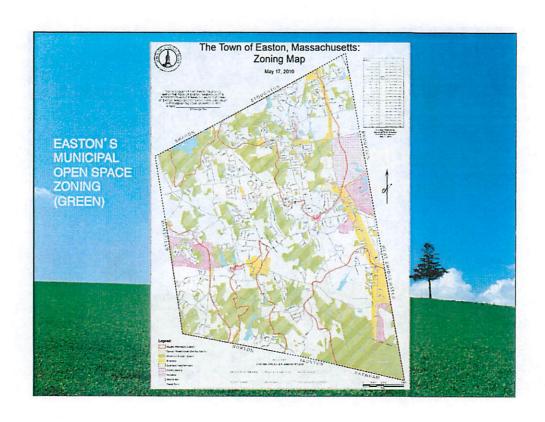
www.mass.gov/energy/greencommunities

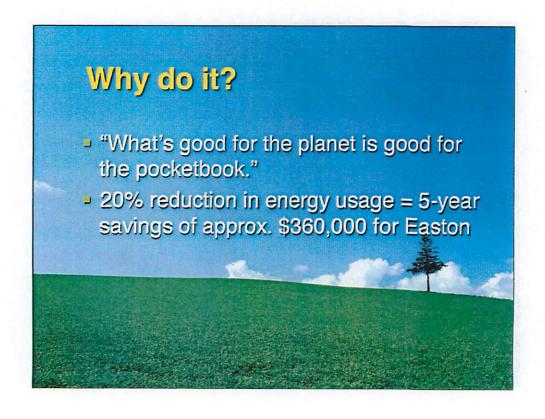


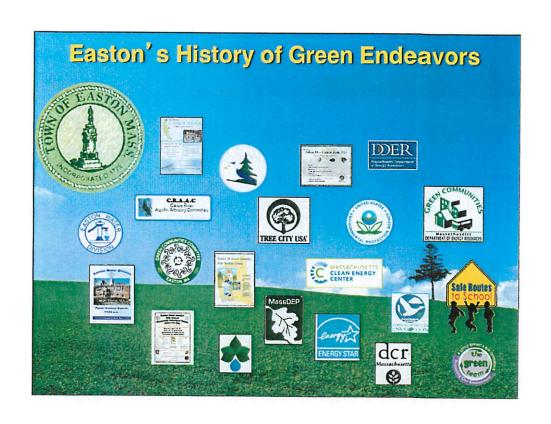


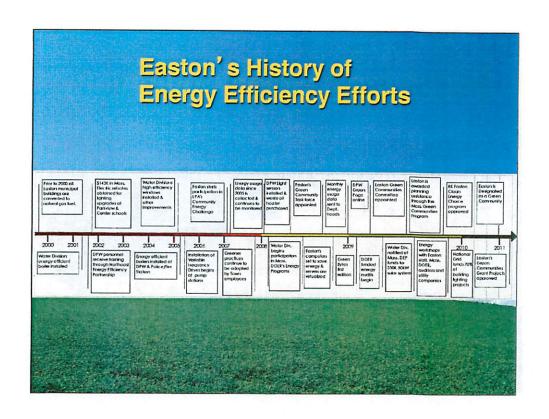




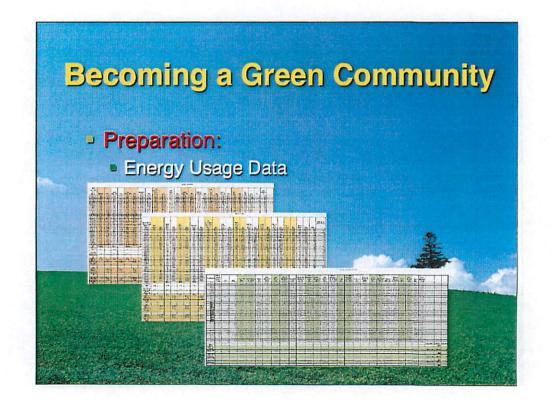








Timeline Governor Patrick signs Act in 2008 Easton Green Communities Act Task Force appointed in 2008 Easton Green Communities Committee appointed in 2009 Designated a Green Community in December of 2010 Received Green Communities grant of nearly \$170,00 in 2011





Easton's Green Communities Committee



Who we are - Residents, students, municipal & school designees:

Wendy Whitty - At-large member Andrea Waklorf - Secretary & at-large member Stephen Drown - At-large member Katie Loftus - Oliver Ames High School Designee Adrienne Edwards - Chair & Town Employee Ellen Barlow - Board of Selectmen Designee

Colleen Less - School Committee Designee

What we do

Our mission is "to help educate the Town of Easton on clean energy options and measures that can be implemented to reduce energy use, conserve resources and reduce emissions; to assist in the development of cost effective projects on municipal facilities to reduce energy and resource use and develop renewable energy resources; and to promote awareness of new technologies and their potential impact on energy use and resource conservation."

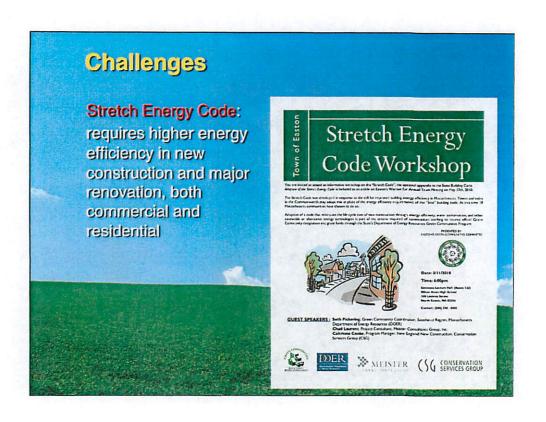
Our tasks include

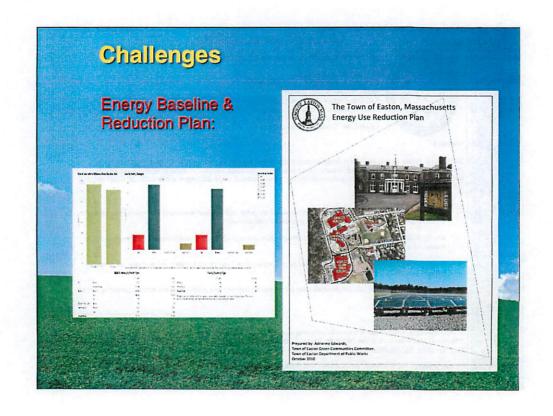
- Building an energy consumption baseline for Easton's municipal and school buildings and vehicles and working with Town officials to develop a cost effective energy plan to reduce energy and other resource use.
- Working to identify funding sources that support the implementation of energy efficiency, renewable energy development, and reduction of resource utilization projects.
- Recommending changes to municipal codes, ordinances, and policies when these are appropriate to reduce energy use, conserve resources, and reduce emissions within Easton.
- Reporting activities, projects, and completed initiatives to the Town Administrator on a periodic basis and submitting annual reports to the Board of Selectmen.

How this involves you

An important task of the Committee is to serve the community as an information resource on the benefits of energy and resource conservation. Please visit our websites through the Town of Easton website by clicking on Boards & Committees: http://www.easton.ma.us/Directory/green_comm/GreenCommFS.htm

We want to hear your suggestions on energy savings, energy efficiency, renewable energy development and resource utilization! Email: aedwards@easton.ma.us





Community outreach

- Outreach materials: flyers, Green Bytes newsletter, DPW Green Page website, social media
- Local festivals, energy-related workshops, cable tv show
- Donated educational materials on clean energy and science kits to schools
- Library energy meter loan program; solar-powered holiday lights



Our progress

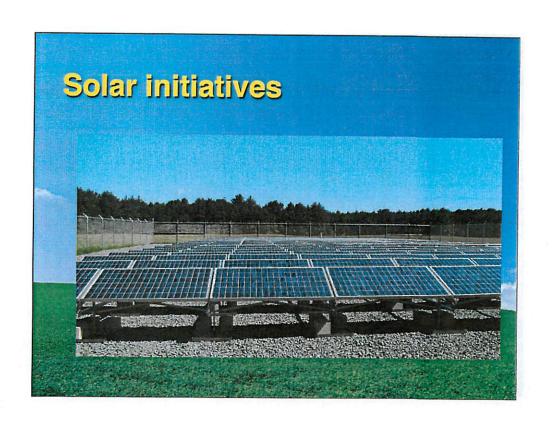
- Baseline FY 2009: 74,554 Mmbtu (million British thermal units)
- FY 2010: 69,321 Mmbtu (7% below baseline; estimated savings = \$126,055)
- FY 2011: 73,181 Mmbtu (2% below baseline, severe winter; saved \$35,867)
- Five-year goal: 59,644 Mmbtu, a savings of approx. \$360,00

20% reduction equals =

- 1,677 fewer tons in C02 emissions
- the equivalent of powering 185 homes for one year
- annual greenhouse gas produced from 290 passenger vehicles
- the amount of carbon sequestered by growing 39,000 trees

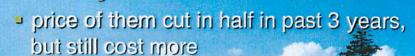
How we're doing it

- Replacing lighting fixtures, aging boilers, installing light sensors, programmable thermostats, computers set to switch to sleep mode
- Encouraging recycling, digital instead of paper documents



LED streetlights use about half the energy as the most common U.S.

streetlight



have to own them to achieve savings

Ingredients for success

- community support and participation: town, schools, leadership, citizens
- take advantage of consultant support at DOER, DEP; MMA Municipal Energy Group
- prepare: gather energy data, get energy audits, and track
- adapt ideas that are best for your community

