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EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENERGY RESOURCES GREEN COMMUNITIES DIVISION

ANNUAL REPORT TO THE MASSACHUSETTS GENERAL COURT, APRIL 2011

To: William Welch, Clerk of the State Senate

Steven James, Clerk of the House of Representatives
Stephen M. Brewer, Chair, Senate Ways and Means Committee
Brian B. Dempsey, Chair, House Ways and Means Committee
Benjamin B. Downing, Senate Chair, Joint Committee on Telecommunications, Utilities and Energy
John D. Keenan, House Chair, Joint Committee on Telecommunications, Utilities and Energy
Kenneth J. Donnelly, Senate Chair, Joint Committee on State Administration and Regulatory Oversight
Peter V. Kocot, House Chair, Joint Committee on State Administration and Regulatory Oversight

In July, 2008, the Massachusetts General Court enacted and Governor Deval Patrick signed into law the Green Communities Act (the "Act"). The Act established a Green Communities Division (MGL ch.25A, Section 10 - the "Division"):

.....to assist the commonwealth's municipalities and other local governmental bodies to: reduce energy consumption and costs, reduce pollution, facilitate the development of renewable and alternative energy resources, and create local jobs related to the building of renewable and alternative energy facilities and the installation of energy-efficient equipment."

As part of this charge, the Division is required to "establish a green communities program to provide technical and financial assistance in the form of grants and loans to municipalities and other local governmental bodies that qualify as green communities." To qualify as a Green Community, a municipality or local governmental body must meet five specific criteria. The Division is responsible for establishing this program and adopting rules, regulations and guidelines, including establishing applicant criteria, funding priority, application forms and procedures and energy efficiency product requirements. The Division is also responsible for establishing a green communities program for communities served by municipal light plants that have adopted the renewable energy charge.

Following is a report of the Division's activities and accomplishments related to the Green Community program requirements found in M.G.L c. 25A § 10(f) since the Division's last report of April 2010:

TIMELINE AND ACTIVITIES

May 14, 2010	Deadline to submit Green Communities designation applications to be eligible for the first grant round
May 25, 2010	35 municipalities designated the first Green Communities (<u>press release - 35 Green</u> <u>Communities</u>)
June 4, 2010	Deadline for designated Green Communities to submit grant applications
July 14, 2010	Grant projects announced for the first 35 designated Green Communities (press release- grants for 35 Green Communities)
Aug 11, 2010	Revised Designation application and FY 11 Green Communities Designation and Grant Program Guidance released
	Application for second round of Planning Assistance available
Sept – Nov 2010	Regional recognition events for first 35 Green Communities held throughout the Commonwealth
Oct 1, 2010	Application deadline for second round of Planning Assistance
Oct 28, 2010	Planning Assistance provided to 42 municipalities
Nov 19, 2010	Deadline to submit Designation application to be eligible for second round of grants
Dec 16, 2010	18 new municipalities designated Green Communities (press release - 18 Green Communities)
Jan 21, 2011	Deadline for 18 newest Green Communities to submit grant applications
March 21, 2011	Grant projects announced for newest 18 Green Communities (press release- grants for 18 Green Communities)
March 28, 2011	Designation application available to be eligible for Summer 2011 grant round
April 2011	Annual Reporting requirements issued to designated Green Communities to ensure they are maintaining their Green Communities status
April – May, 2011	Regional recognition events for 18 newest Green Communities held throughout the Commonwealth
June 10, 2011	Deadline for designation applications to be eligible for Summer 2011 grant round

GREEN COMMUNITIES DESIGNATION AND GRANT PROGRAM ACCOMPLISHMENTS

<u>Designation and Grant Program</u> – Since the Division's report of April 2010, 53 municipalities have been designated Green Communities and received grant awards. Green Communities grants are funded not through taxpayer revenue, but by carbon allowance auction proceeds under the Regional Greenhouse Gas Initiative (RGGI). By statute, up to \$10 million annually in RGGI auction proceeds is dedicated to the Green Communities program.

The 53 Green Communities are diverse geographically, socio-economically, and in size, demonstrating that any municipality can become a Green Community, the criteria do not discriminate. Appendix A is a map of these 53 communities as well as a list of their grant awards and approved projects.

As part of the designation process, the Division offers a Preliminary Consultation period where municipalities can submit draft materials for review and the Division provides feedback and comment on the materials and their potential ability for meeting the Green Communities designation criteria. Twenty-three municipalities availed themselves of a Preliminary Consultation, 15 in the first group of designees and eight in the second group.

In addition to the grants received, all of the municipalities received Big Belly solar-powered trash compactors, four metal road signs for display in the community, and an official certificate signed by the Governor and presented to them at the regional recognition events.

<u>Planning Assistance</u> – In FY2010, the Division successfully deployed a planning assistance program to approximately 105 recipients including small towns, large cities and municipalities that applied as regions. Six consulting firms provided this planning assistance, which includes public presentations, review of the five criteria and program requirements, analyses of where the communities are in meeting the five criteria and the development of a plan to meet the criteria within one year. Thirty of the first 35 designated communities received Planning Assistance and 16 of the second group of 18 received Planning Assistance. In FY2011 we are continuing to provide Planning Assistance with three of the original consulting firms to 42 more municipalities. Appendix B is a list of the 42 municipalities receiving assistance.

<u>Program Support</u> –Additional strategies utilized by the Division to support the Designation and Grant program and a variety of other programs and services offered by the Division include:

- Preference Programs for designated Green Communities The Green Communities Division recognizes the effort that municipalities have made in order to achieve designation and as a result has provided and will continue to provide special opportunities for Green Communities. To date, this has included: 1) providing preference for Green Communities in the application made available to municipalities for electric vehicle charging stations, and 2) offering to Green Communities the opportunity to apply for a pilot program, Solarize Mass, for procuring residential and small commercial PV systems in bulk to achieve lower installation costs. (Solarize Mass press release)
- *MassEnergyInsight* The Green Communities Division continued to provide training of this free, web-based tool, available to all 351 cities and towns and other local governmental bodies to help them understand their energy use and reduce their carbon footprint by delivering customized, easy-to-use reports on electricity, natural gas and oil use. After providing 12 classroom trainings, online webinar trainings are now being held to reach a wider audience on a regular basis. To date, through the 12 classroom trainings and 14 webinar trainings, 390 individuals from 215 municipalities have been trained on the system. The tool was also further refined based on feedback from a focus group and user surveys. MassEnergyInsight assists cities and towns in meeting Criteria 3 of the Green Communities Grant Program, which includes developing an energy use baseline of all municipal buildings, vehicles and street/traffic lights. (see www.massenergyinsight.net).

- *GCD Website* The Division website includes a page dedicated solely to the Green Communities Designation and Grant Program (see <u>www.mass.gov/energy/greencommunities</u>). Included on the site are application materials and a grant program toolkit containing guidance documents on each of the five criteria. The guidance materials have been updated on a regular basis as we receive feedback from the municipalities and learn from the designation process. In addition, as we have designated Green Communities we have posted "best-practice" application materials from those communities on our website.
- *Listserv* A subscriber listserv (over 1500 subscribers to date) allows the Division to rapidly distribute program information to the public. We contracted with a new provider for our listserv that now allows recipients to sign-up for notices in their particular areas of interest. The service also provides us email response statistics so we can better understand our audience and the impact of our mailings.
- *Regional Coordinators* Four regional coordinators, one located at each of the four DEP regional offices, continue to work with more than 70 municipalities each on meeting their energy goals and attaining Green Communities designation.
- Webinars The Division utilizes webinars as a means to reach out to municipalities and citizens across the Commonwealth on a range of topics. Beginning in October 2010 we began a monthly webinar series, with the first webinar focusing on how to become a Green Community. Our average webinar attendance is 95, with our attendance reaching as high as more than 153. The Executive Office of Energy and Environmental Affairs has publicized the webinars on its *Energy Smarts* blog to boost participation. All of our webinar materials including the audio file, are posted on the Division website for future reference.
- *Outreach* The Director, Deputy Director and four Regional Coordinators have participated in numerous meetings with municipal leaders, energy committees and local civic groups, presented at regional and statewide workshops, including the annual Massachusetts Municipal Association conference. Green Communities Division officials have also made themselves available to answer questions that municipal officials, members of the public, legislators and the press have asked. It is estimated that the Green Communities Division has interacted with over 300 municipalities during the last year.

The Green Communities Division has also participated on the Lt. Governor's Municipal Affairs Coordinating Cabinet and is a subcommittee of the Commonwealth's Regionalization Commission. The Green Communities Designation and Grant Program are also integrated into the Commonwealth Capital Program.

<u>Communities served by Municipal Light Plants / Separate Program</u> – MGL c. 25A, Section 10(e) requires that the Division provide for a separate Green Communities program for cities and towns served by municipal light plants ("MLP") that have adopted the renewable energy charge. Under the grant process established by the Green Communities Division, such MLP communities will use the same forms as non MLP communities, however, the MLP communities must provide specific documentation that the MLP has adopted the renewable energy surcharge established in M.G.L c. 25 §20. All other aspects of the Green Communities Grant Program and designation/application process shall remain the same. The City of Holyoke is the one municipality to date that is served by an MLP and applied and became designated as a Green Community. Holyoke was approved for adoption of the renewable energy charge in August 2009.

FUNDS COMMITTED for GREEN COMMUNITIES DESIGNATION AND GRANT ACTIVITIES

Object	Funds Committed*	<u>Fiscal</u> Year
Green Communities Grants – first 35	\$8,100,000	2010
Planning Assistance – Round II (Oct 2010 – June 2011)	\$424,500	2011
Green Communities Grants - 18	\$3,600,000	2011

* The established payment schedule requires payment to awarded Green Communities and Planning Assistance after submission of invoices for completed work. Therefore, committed funds have not all been expended at this point

APPENDIX A

MAP OF DESIGNATED GREEN COMMUNITIES

LIST OF GRANT AMOUNTS AND FUNDED PROJECTS



Green Community Grants for First Group of 35 Designated Cities and Towns

Acton: \$150,794 for energy conservation measures at the public library, an HVAC analysis of town hall, tankless hot water heaters and an energy education and outreach program.

Andover: \$160,329 for a municipal lighting retrofit project at six school buildings: the Doherty Middle School, High Plain Elementary School/Wood Hill Middle School, Sanborn Elementary School, South Elementary School, West Elementary School and at two municipal buildings: Public Safety Center and Town House.

Arlington: \$200,188 to improve energy efficiency of lighting and steam traps, and for an energy management system at the Hardy School

Athol: \$171,523 for energy efficiency improvements at the senior center, an HVAC analysis of the town hall and library, and a solar hot water system at the fire station.

Becket: \$141,326 to fund a two-phased project for two municipal buildings; Town Hall and Town Garage. First, to fund energy audits to identify energy usage and potential energy efficiency measures. Second, to fund implementation of energy conservation measures determined appropriate and cost effective in the two buildings.

Belchertown: \$160,917 to buy down cost of town's energy management services contract for municipal buildings

Cambridge: \$283,770 for an energy efficiency revolving fund for municipal facilities.

Chelmsford: \$187,224 for a 30-kilowatt (kW) solar photovoltaic (PV) system at Parker Middle School.

Easthampton: \$174,985 for high-efficiency LED streetlights.

Greenfield: \$202,066 to buy down the cost of an energy management services company contract, community energy efficiency programs, and consulting services.

Hamilton: \$144,819 to buy down the cost of an energy savings performance contract for implementation of energy conservation measures at the Town Hall, Council on Aging, Recreation Department and Public Safety Building.

Hanover: \$148,598 for incremental costs of a hybrid public safety command vehicle, energy efficiency measures in municipal buildings, and to support an energy staff person.

Holyoke: \$321,221 for conversion of exterior parking lot lighting to LEDs at all twelve schools, for high-efficiency LED traffic and street lights and to insulate City Hall.

Hopkinton: \$137,502 for various energy efficiency measures in the school buildings, DPW Garage, Police Department, Fire Department and Senior Center.

Kingston: \$163,528 for energy efficiency measures at the Kingston Elementary School, Kingston Public Library and Smith's Lane Fire Station, and to fund an Idleright fuel management system for police vehicles.

Lancaster: \$141,114 towards various energy efficiency measures at the Town Hall, Library, Fire Station, Police Station, Community Center and DPW building; the installation of a solar PV project at the Fire Station; an energy analysis of the town hall and the incremental costs of a hybrid vehicle.

Lenox: \$134,766 for energy efficiency measures and training, energy expert consulting services, community wind forums and a mini-grants program for solar and hot water systems on commercial and residential properties.

Lexington: \$158,083 for an energy efficient street lighting project.

Lincoln: \$140,294 for various energy efficiency measures in municipal buildings, including the K-8 school complex, the town library and Town Hall.

Lowell: \$546,506 to supplement existing residential and commercial energy efficiency incentive programs and to buy down the cost of an energy savings performance contract for implementation of energy conservation measures across all municipal buildings.

Mashpee: \$170,124 for energy efficiency measures at the Town Hall, the Police Department, and KC Coombs Elementary School, and to hire an engineering firm.

Medford: \$271,651 for energy efficiency measures at Medford High School and to update the municipal climate action plan.

Melrose: \$176,265 for an energy efficient roof at Melrose High School, for energy expert consulting services, and to support the salary of an energy efficiency coordinator.

Montague: \$154,944 to buy down the cost of a performance contract on eight municipal buildings: Town Hall, Carnegie Library, Montague Center Library, Millers Falls Library, Wastewater Treatment Facility, Montague Parks and Recreation Office, Sheffield Elementary School, and Hillcrest Elementary School.

Natick: \$173,526 for a solar PV power purchase agreement at the middle school, for the incremental cost of hybrid vehicles, and for carbon dioxide sensors at Town Hall.

Newton: \$179,500 to be leveraged with other funding for a deep energy efficiency retrofit of the Lower Falls Community Center.

Northampton: \$198,500 for a 51 kW solar power project on the Smith Vocational and Agricultural High School (SVAHS) and to purchase an energy auditor/building performance education kit for the SVAHS Home Building Program.

Palmer: \$169,103 to buy down the cost of an energy service company contract related to efficiency measures at the Palmer Town Building.

Pittsfield: \$256,632 for an energy management system at City Hall.

Salem: \$245,624 for energy efficient streetlights, to buy down the cost of an energy service company contract, a residential weatherization pilot program and a bike sharing pilot program.

Springfield: \$988,102 to replace inefficient boilers at the Mary Lynch and Freedman Elementary Schools and the Fire Repair Building, installation of vending machine misers at the Freedman and Brunton Elementary Schools and the Fire Repair Building, and for five energy management systems at the Mary Lynch, Brunton and Zanetti schools, the Fire Repair Building and the Sixteen Acres Branch Library.

Sudbury: \$136,238 for energy efficiency measures in five town schools, the Fairbanks Community Center and the Lincoln/Sudbury Regional High School, and for the incremental costs of a fuel efficient vehicle.

Tyngsborough: \$161,649 for building envelope improvements in town offices and the Tyngsborough Middle School and Administration Offices.

Wenham: \$138,974 to buy down the cost of an energy savings performance contract for implementation of energy conservation measures at the Town Hall, Fire Station, Police Station, Council on Aging and Public Library.

Worcester: \$852,083 to fund a residential stretch code implementation program that provides grants to property owners to upgrade existing buildings to meet the performance requirements of the Stretch Energy Code and to fund an outreach campaign to market the program and educate residents.

Green Community Grants for Second Group of 18 Designated Cities and Towns

Boston: \$1,000,000 for energy conservation measures including auto igniters for natural gas streetlights and lighting controls at municipal ball fields; and an upgrade of the energy management system for Copley Library and four library branches.

Dedham: \$179,800 towards its energy savings performance contract in municipal buildings.

Easton: \$168,300 for energy conservation measures in municipal buildings including replacement of the rooftop HVAC air handling unit at the Police Station and new energy efficient boiler at Town Hall.

Gardner: \$206,100 for energy conservation measures including energy efficient boiler replacements, insulation, air sealing and a heating system evaluation at the High School and Senior Center; and a solar PV assessment.

Gloucester: \$198,200 for energy conservation measures including improvements to the O'Maley Middle School building envelope, demand control ventilation upgrades, and the installation of an energy saving ceiling (Low E) and heat exchanger at the O'Maley Rink.

Harvard: \$141,200 for energy conservation measures including; demand control ventilation and mechanical upgrades at the Elementary School, an HVAC upgrade at the Police Station, energy efficient boiler replacement at the Fire Station, and a deep energy retrofit analysis for Town Hall.

Hatfield: \$130,725 for energy conservation measures including; insulation and heating system upgrades at the Water Filtration Plant office, installation of a heat recovery system at the Wastewater Treatment Plant, an energy conservation study for Town Hall, and purchase of an electric light duty truck for multiple department use.

Marlborough: \$217,125 for energy conservation measures at several municipal buildings; purchase of a hybrid vehicle, and a site evaluation for a solar PV system, and to fund an Energy Efficiency Manager position.

Medway: \$158,450 for energy conservation measures and energy audits at several town buildings including; LED lighting replacements, anti-idling devices on all town vehicles, and window replacements.

Milton: \$157,100 for energy conservation measures at several municipal buildings and funding towards the installation of a wind turbine on municipal land.

New Salem: \$138,100 for a 20 kW solar PV system on town property.

Newburyport: \$155,000 for energy conservation measures at the Police Station and City Hall including; air sealing, modification of HVAC system, lighting replacement, and other mechanical systems improvements.

Scituate: \$163,025 for energy conservation measures in municipal buildings, including insulation and weatherization.

Swampscott: \$143,800 for energy conservation measures at municipal school buildings including lighting retrofits and steam trap upgrades, and funding for a part-time Energy Manager.

Watertown: \$192,825 for energy conservation measures including replacement of street and parking lot lighting with LED technology.

Wayland: \$131,775 for energy conservation measures at several municipal and school buildings including; lighting upgrades and retro commissioning, and design of an energy retrofit for Town Hall to improve energy efficiency.

Williamstown: \$142,000 for energy conservation measures at several municipal buildings, installation of a 6 kW solar PV array at the Cemetery office building, and to fund an energy education and outreach program.

Winchester: \$151,475 for energy conservation measures at municipal buildings and to fund an Energy Conservation Coordinator position.

APPENDIX B

Agawam	Framingham	Plainfield
Ayer	Franklin	Plainville
Barre	Granby	Sherborn
Bedford	Haverhill	Southwick
Beverly	Holland	Sturbridge
Blackstone	Maynard	Sutton
Blandford	Medfield	Townsend
Boston	Mendon	Walpole
Boxford	Middlefield	Waltham
Bridgewater	Millbury	West
		Newbury
Chesterfield	Monson	Westminster
Douglas	Montgomery	Whately
Dudley	Norfolk	Williamsburg
Falmouth	Northfield	Woburn

COMMUNITIES RECEIVING PLANNING ASSISTANCE - Round II