

**Department Of Energy Resources
Chapter 25A, Section 5 Annual Report
For Activity Occurring Fiscal Year 2011**

DOER Purpose:

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

A) Chapter 25A, Section 5 Reporting: List of DOER employees including title, salary, funding source, and potential funding expiration date for federal funds (July 2011 snapshot date):

Number of Employees: 56 FTEs

Title	Source of Funding (Appropriation)	Annual Salary	Fed Fund Term Date (if applicable)
Program Coordinator III	70061001	70,745	
Program Coordinator III	70061001	70,745	
Manager V	70061003	79,000	
Program Coordinator III	70061003	50,263	
Program Manager V	70061003	83,000	
Manager VIII	70061003	105,000	
Program Coordinator III	70061003	53,790	
Economist III	70061003	70,745	
Program Manager IV	70061003	76,000	
Program Manager III	70061003	70,000	
Program Manager III	70061003	67,568	
Program Manager V	70061003	74,340	
Program Coordinator III	70061003	70,745	
Program Manager III	70061003	60,000	
Program Manager VIII	70061003	100,000	
Program Manager III	70061003	50,000	
Administrative Assistant II	70061003	42,053	

Title	Source of Funding (Appropriation)	Annual Salary	Fed Fund Term Date (if applicable)
Counsel II	70061003	80,821	
Counsel II	70061003	70,022	
Program Manager IV	70061003	72,500	
Program Manager V	70061003	74,640	
Program Manager VIII	70061003	100,000	
Program Coordinator III	70061003	70,745	
Business Mngmnt Specialist	70061003	64,013	
Program Coordinator II	70061003	45,854	
Program Coordinator III	70061003	70,044	
Regional Planner III	70061003	68,529	
Program Manager IX	70061003	100,000	
Chf Methods And Sys Analyst	70061003	73,950	
Program Coordinator III	70061003	66,665	
Program Manager VII	70061003	88,000	
Program Manager III	70061003	72,500	
Program Coordinator II	70061003	60,321	
Program Coordinator III	70061003	59,292	
Program Coordinator III	70061003	70,745	
Mechanical Engineer IV	70061003	74,950	
Economist III	70061003	70,745	
Program Coordinator III	70061003	70,745	
Program Manager VIII	70061003	105,000	
Accountant IV	70061003	64,013	
Program Coordinator III	70061003	70,745	
Program Mgr Specialist VIII	70061003	100,000	
Administrator X	70061003	120,000	
Environmental Analyst V	70061003	80,945	
Counsel II	70061003	80,821	
Program Manager IV	70061003	70,000	
Program Coordinator III	70061003	70,745	
Manager VI	70061003	85,000	
Program Coordinator II	70069800	52,075	8/31/2012
Business Mngmnt Specialist	70069800	44,418	8/31/2012
Program Coordinator II	70069800	50,444	8/31/2012
Program Coordinator III	70069800	50,407	8/31//2012
Program Coordinator II	70069800	52,075	8/31/2012
Program Coordinator II	70069800	47,336	8/31/2012
Program Coordinator II	70069803	64,013	8/31/2012

Title	Source of Funding (Appropriation)	Annual Salary	Fed Fund Term Date (if applicable)
Program Coordinator II	70069803	45,854	8/31//2012

B) Chapter 25A, Section 5 Reporting: List of federal funds including: amount of funding by grant, grant program description, FY10 expenditures, and projected spending for FY12.

Account	Federal Grant Name	Federal Grant Program Description	Funding Amount	Expended FY11	Projected Spending for FY12
70069243	Sustainable Forest Initiative	The goal of the MA Sustainable Forest Initiative is to research forest management & assess the forest resource, establish a strategic plan for development of a fuel supply infrastructure, evaluate the regional economic impact of a bioenergy economy, and support bioenergy development through public education & outreach.	\$495,000	\$44,800	\$1,898
70069300	Save Energy Now (non-ARRA)	This grant provides funding for a collaboration between DOER and the Center for Energy Efficiency and Renewable Energy (CEERE) at UMass. CEERE will conduct energy assessments to industrial facilities and will also establish an energy efficiency program at the University of Massachusetts. This grant is the non-ARRA companion to 7006-9804.	\$599,965	\$63,384	\$501,550
70069303	SEP Advance Energy Codes	This project through the Northeast Energy Efficiency Partnerships assists Northeast and Mid-Atlantic States (participating states include MA, CT, the District of Columbia, MD, NH, ME, VT, RI, NY, NJ) in developing and implementing plans to upgrade, implement and enforce building codes that are 30% improvement over ASRAE 90.-2004 and/or the 2005 IECC.	\$500,000	\$143,740	\$195,495
70069304	Catalyzing the Home Energy Market	Grant is a pilot in the Springfield area in which DOER, in partnership with several utilities, is incorporating innovations to the Mass Save program designed to motivate homeowners to implement energy efficiency upgrades that achieve at least a 20% reduction in energy use.	\$2,289,636	\$298,340	\$1,043,828
70069720	State Heating Oil and Propane Program	Provides USDOE with MA retail heating oil and propane prices surveys, including supply and demand events that affect those markets.	\$22,287 (FY12)	\$25,276	\$22,287
70069730	State Energy Program	The Massachusetts Department of Energy Resources uses these funds to pay for a percentage of staff working on a variety of program and policy initiatives approved by the U.S. Department of Energy.	\$858,000 (FY12)	\$576,902	\$858,000
70069800	State Energy Program-ARRA	The mission of the State Energy Program is to provide leadership to maximize the benefits of energy efficiency and renewable energy through communications and outreach activities, technology deployment, and accessing new partnerships and resources. Working with DOE, DOER helps to increase the energy efficiency of the U.S. economy; reduce energy costs; improve the reliability of electricity, fuel, and energy services delivery; develop alternative and renewable energy resources; promote economic growth with improved environmental quality; reduce our reliance on imported oil.	\$54,911,000	\$22,309,626	\$18,728,167
70069801	ARRA Energy Assistance Planning	This grant helps improve the Commonwealth's plans to respond to, and facilitate recovery from, energy supply disruptions. In addition, the Department of Energy Resources plans to use these funds to track duration, response, and restoration and recovery time of energy supply disruption events. The Department of Energy Resources also uses these funds to train staff to respond to possible energy supply disruption situations.	\$796,207	\$527,266	\$50,169
70069802	ARRA State Energy Efficient Appliance Rebate Program	The purpose of the State Energy Efficient Appliance Rebate Program is to stimulate the sale of energy efficient appliances and decommission existing high consumption home appliances. Appliances eligible for this program include washing machines, dishwashers, refrigerators, and freezers.	\$6,235,000	\$24,074	\$325

Account	Federal Grant Name	Federal Grant Program Description	Funding Amount	Expended FY11	Projected Spending for FY12
70069803	ARRA Mass Energy Efficiency and Conservation Block Grant	This grant works to advance clean technology and energy efficiency goals at the community level. More than 80% of the grant will be allocated to towns through a competitive, sub-grant process to municipalities less than 35,000 in population and provides technical assistance, energy code training for municipal officials and an energy information reporting system for all 351 cities and towns to benchmark energy consumption and identify priority targets for efficiency investments.	\$14,752,100	\$5,352,483	\$3,056,767
70069804	ARRA Mass Save Energy Now	This grant provides funding for a collaboration between DOER and the Center for Energy Efficiency and Renewable Energy (CEERE) at UMass. CEERE will conduct energy assessments to industrial facilities and will also establish an energy efficiency program at the University of Massachusetts.	\$500,000	\$63,619	\$35,811

C) Chapter 25A, Section 5 Reporting: other DOER programs including description, funding source, FY11 expenditure and projected FY12 expenditure:

Green Communities Division—funded primarily through an Interdepartmental Service Agreement (ISA) between DOER and the Executive Office of Energy and Environmental Affairs using proceeds from the Regional Greenhouse Gas Initiative (RGGI) Trust. For FY12, a winter and spring grant round, as well as a Green Communities competitive grant round will be funded, in part, through Alternative Compliance Payment (ACP) funding. Please see below for description of DOER’s ACP overall spending plan.

The Green Communities Division serves as the hub to all Massachusetts cities and towns for energy-related matters, helping them understand all the programs in the state at their disposal, and providing streamlined delivery of those programs. The Green Communities Grant Program meets the statutory requirement of the Green Communities Act, Chapter 169 of the Acts of 2008, to set five criteria for communities to achieve in order to earn “Green Communities” designation and receive a Green Communities award grant for their achievement.

The FY11 total expenditure amount for the DOER Green Communities Division was \$5,954,986. FY12 projected spending amount is \$15,300,000 with 74 active grants to municipalities underway. Note that \$8.1M in grants to Green Communities was allocated in FY10, \$7.7M in FY11 and \$2M to date in FY12. Actual spending for each of these grant awards vary project by project, but as a general rule take approximately 24 months to complete.

Funding for Energy Efficiency Plans—funded through the RGGI trust

Per the Green Communities Act, DOER disburses RGGI auction proceeds to electric efficiency program administrators (NSTAR, National Grid, Western Mass Electric, Fitchburg Gas and Electric, and Cape Light Compact) to fund, in part, the 2010-11 Energy Efficiency Plans approved by the Department of Public Utilities in 2009. Available RGGI auction proceeds will be allocated proportionately according to each investor-owned utility/municipal aggregator’s percentage of total annual electricity sales by all electric utility distributors and municipal aggregators.

The FY11 total expenditure amount for this program was \$32,636,802. The FY12 projected spending amount is approximately \$10,450,000. Note that this conservative projection is due to potential market changes in available funding from future RGGI auctions.

The Municipal Efficiency Grant Program—funded through the RGGI trust

In FY2009, DOER contracted with municipalities to fund Energy Conservation Measures identified by DOER energy audits. As per the contract requirements, municipalities worked with utility companies to

maximize all available utility company rebates and incentives as a first funding source for the projects. Municipalities then submitted plans to DOER for review and approval regarding timelines for contractor bidding and construction work.

The program completed in FY11 and the total expenditure amount for FY11 was \$725,114.

Alternative Compliance Payments--For a detailed description of the DOER Alternative Compliance Payments (ACP) Spending Plan, please refer to Attachment A: "Executive Office of Energy and Environmental Affairs Massachusetts Department of Energy Resources Renewable Portfolio Standard (RPS) and Alternative Portfolio Standard (APS) Compliance Year 2010 Alternative Compliance Payment Spending Plan." This document was made available to the public on January 17, 2012.

D) Chapter 25A, Section 5 Reporting: Description of the Energy Audits, Energy Conservation, and Alternative Energy bond programs (renamed Green Communities Division Energy Audit Program)

The DOER Green Communities Division's Energy Audit Program (EAP) provided technical assistance for all buildings owned and operated by cities, towns, regional school districts and waste water treatment plants. The technical assistance provided by the EAP included benchmarking of structures in the application and detailed energy audits, when appropriate and funding is available, along with non-conservation assessments such as savings through better energy procurement practices and revenue producing strategies like demand response. Clean technology implementation opportunities were also identified when appropriate. This comprehensive assistance provided our communities with the knowledge they need to save energy and dollars.

Once applications are received, DOER reviewed the applications, placed them in a queue based on date received, and assigned auditors to conduct Preliminary Audits on a first-in first-served basis. Benchmarking of structures was conducted to evaluate annual energy use and to assist in cost estimate and appropriateness for a detailed energy audit providing conservation measure analysis, potential for clean technology, and associated costs and savings. Based on this audit, applicants may have been eligible for potential funding from DOER to implement eligible efficiency and/or clean technology measures.

In FY11 \$11,840 was spent from DOER bond funds for energy audits. There is no spending planned for this program for FY12.

ATTACHMENT A

Executive Office of Energy and Environmental Affairs Massachusetts Department of Energy Resources

Renewable Portfolio Standard (RPS) and Alternative Portfolio Standard (APS)

COMPLIANCE YEAR 2010 ALTERNATIVE COMPLIANCE PAYMENTS

SPENDING PLAN

January 17, 2012

This report provides a Spending Plan for the over \$54.8 million received from retail electricity suppliers in the form of Alternative Compliance Payments (ACP) for the 2010 Compliance Year (CY). Suppliers make use of the ACP mechanism to meet their compliance obligations for the RPS and APS programs in the case that they have insufficient Certificates.

Background – Source and Use of ACP

As provided in the Green Communities Act of 2008, the RPS and APS programs have been expanded to include the following separate obligations, as laid out in the specified regulation.

RPS Class I	225 CMR 14.00
RPS Class I Solar Carve-Out	225 CMR 14.00
RPS Class II	225 CMR 15.00
RPS Class II Waste Energy	225 CMR 15.00
APS	225 CMR 16.00

In each regulation, the procedure for retail electric suppliers to use the Alternative Compliance mechanism is stated, more or less, as:

Alternative Compliance. A Retail Electricity Supplier may discharge its obligations under 225 CMR 14.07, in whole or in part, for any Compliance Year by making an Alternative Compliance Payment (ACP) to the Massachusetts Clean Energy Center (MassCEC). Such funds shall be held in an account separate from other accounts of the MassCEC.

The use of ACP revenues received from each of the programs is to be overseen by the Department of Energy Resources (DOER) with some restrictions as follows.

Program/Class	Use of Funds: The Department shall oversee the use of ACP funds ...	Section of Regulation
RPS Class I	... so as to further the commercial development of RPS Class I Renewable Generation Units and Solar Carve-Out Renewable Generation Units.	14.08(3)(c)
RPS Class I Solar Carve-Out		
RPS Class II	no restrictions	15.08(3)(b)
RPS Class II Waste Energy		
APS	... so as to further the commercial development of Alternative Generation.	16.08(3)(b)

Compliance Year 2010 ACP Receipts

CY 2010 saw a substantial increase in the amount of ACP received. (Total receipts in CY 2009 were approximately \$14.8 million.) The CY 2010 increase was due to the significant expiration of “exempt load” from compliance obligations for retail load contracts executed prior to 2009 (see 2009 Annual Compliance Report for more information), as well as the beginning of the RPS Class I Solar-Carve Out obligation and small increase in the APS obligation.

The ACP received for CY2010 by RPS Class and APS is as follows. Additional information on the CY2010 compliance will be available in the forthcoming 2010 Annual Compliance Report.

Program/Class	ACP Received
RPS Class I	\$241,551
RPS Class I Solar Carve-Out	\$11,682,793
RPS Class II	\$35,002,925
RPS Class II Waste Energy	\$57,970
APS	\$7,829,400
TOTAL	\$54,814,638

ACP Spending Plan – Activities

DOER has identified key areas of need in moving forward the Commonwealth’s clean energy goals, and specifically the renewable and alternative energy markets. With these priorities, DOER has established the following spending plan for the CY2010 ACP. DOER expects that these funds will be substantially expended in 2011 and 2012, with spending likely to be completed over the next three years.

2010 CY ACP Spending Plan

Program/Market Outreach		
MassDEP Clean Energy Results	\$4,300,000	These funds will launch a new program of the MassDEP, working in coordination with DOER and MassCEC, to provide strategic technical outreach and support for renewable and alternative energy project development. The funds will support staff resources at MassDEP and build on their core competencies to work with public and private constituents to address environmental issues and encourage adoption of appropriately sited wind, anaerobic digesters, combined heat and power, and other clean technologies.
Green Communities and State LBE Support		
Designation Green Communities Grant Fund	\$18,000,000	These funds are being set aside to ensure grant funding for upcoming grants for newly designated communities and technical assistance. DOER has been providing for \$8M in grants per fiscal year from RGGI auctions. Based on the most recent auction, this is not expected to be possible with RGGI funds alone. The \$18M will provide for \$6M/yr for each of the next 3 years.
Tornado Re-build Clean Energy Program	\$5,000,000	These funds are to provide clean energy and energy efficiency grants for rebuilding of business and residences impacted by the recent tornadoes in Springfield, West Springfield, Monson, and Brimfield. Clean energy technologies will include solar thermal, biomass thermal, and geothermal heat pumps while the energy efficiency grants will be used to rebuild to the Stretch Code and beyond.
Green Communities - Competitive Grant Fund	\$5,000,000	These funds are to provide for a competitive grant program and technical assistance for previously designated Green Communities who have completed their projects and expended their initial grant. The funds will provide for \$2.5 million in grants in both FY13 and FY14.
Owner Agent for Muni/State Projects	\$500,000	Owner's Agents are independent third parties who offer expertise in the negotiation and project management of energy projects that a municipality or state facility may otherwise not possess. Under the ARRA EECBG program, Owner's Agents proved very effective in supporting municipalities engaged in energy savings performance contracts and Power Purchase Agreement. These funds will enable Green Communities to continue to provide this service to meet the expressed need of the municipalities.
State Pilot Projects	\$2,000,000	State facilities have often been willing to try new, innovative technologies but lack the funding to do so. These funds will be used for demonstration of new, innovative clean technologies at state facilities under DOER's Leading By Example program. The LBE program will be able to provide close documentation of the results of these projects.
Technology/Market Development		
Public Housing Projects	\$2,000,000	Public Housing often affords good opportunities to employ renewable and alternative energy technologies which can relieve on-going energy costs on public budgets. These funds will be used to implement renewable energy projects at Public Housing facilities in MA, in coordination with the Department of Housing and Community Development.
Commonwealth Solar II Support	\$1,000,000	Over the past few years, the Commonwealth Solar program has successfully stimulated a robust market for residential scale solar PV installations. These funds will be used in coordination with the MassCEC funds, to extend the Commonwealth Solar II program to support the continued robust expansion of the solar residential and small commercial markets.

Allocation of Spending Plan to ACP Revenue Sources

Combined Heat and Power Financing	\$5,000,000	The APS program has stimulated new markets for Combined Heat and Power (CHP) projects in MA. Project financing remains a demonstrated barrier to project implementation. These funds will be used to establish a subsidized loan program to support the financing of CHP units in MA.
RE Thermal Project Pilots	\$4,000,000	These funds will be used, in coordination with the MassCEC, to establish a pilot funding program to support renewable thermal installations including high efficiency heat pumps and clean biomass heating. Pilot program will help inform DOER on the market and economic status of these technologies, and support policy development for renewable thermal energy.
RE Thermal Business Investment Financing	\$3,000,000	These funds will be made available to support investment needs of MA businesses that seek to establish or expand distribution or manufacturing of renewable thermal technologies, or investments in supply chain infrastructure.
Community District Energy Financing	\$2,000,000	Small district energy piping networks can facilitate the effectiveness of CHP and renewable thermal technologies. These funds will be used to support financing of pilot district energy systems implemented in association with CHP or renewable thermal projects in MA.
Organics Anaerobic Digesters Financing	\$2,000,000	In coordination with the on-going multi-agency Organics Task Force, these funds will be used to support financing of pilot anaerobic digester projects in MA that convert organic waste feedstocks eligible for the RPS (agricultural wastes, food wastes, biosolids at wastewater treatment plants) into electricity and/or heat.
Administrative Support - Small Project Fund		
	\$1,014,638	These limited funds will provide DOER with the ability to support small administrative projects to support the implementation of the RPS program and expand policy development. Initial projects identified include upgrade to the RPS on-line application, launch of the Solar Credit Clearinghouse Auction, assessment study of renewable thermal technologies and markets, and support for the implementation of the new RPS biomass regulations.
Total	\$54,814,638	

ACP Spending Plan – Allocation

The allocation of the spending plan to the ACP revenue sources is provided in the table below.

ACP Receipts	Total	Class I	Class I-SCO	Class II	Class II-WEC	APS
Compliance Year 2010 - received July 2011	\$54,814,638	\$241,551	\$11,682,793	\$35,002,925	\$57,970	\$7,829,400

CY 2010 ACP Proposed Spending Plan						
Program/Market Outreach						
MassDEP Clean Energy Results	\$4,300,000			\$4,300,000		
Green Communities and State LBE Support						
Designation GC Grant Fund	\$18,000,000		\$6,682,793	\$8,487,807		\$2,829,400
Tornado Re-build Clean Energy Program	\$5,000,000		\$2,000,000	\$3,000,000		
Green Communities - Clean Energy Projects	\$5,000,000			\$5,000,000		
Owner Agent for Muni/State Projects	\$500,000			\$500,000		
State Pilot Projects	\$2,000,000			\$2,000,000		
Technology/Market Development						
Public Housing Projects	\$2,000,000			\$2,000,000		
Comm Solar II Support	\$1,000,000		\$1,000,000			
Combined Heat and Power Financing	\$5,000,000					\$5,000,000
RE Thermal Project Pilots	\$4,000,000			\$4,000,000		
RE Thermal Business Investment Financing	\$3,000,000			\$3,000,000		
Community District Energy Financing	\$2,000,000			\$2,000,000		
Organics Anaerobic Digesters Financing	\$2,000,000		\$2,000,000			
Administrative Support - Small Project Fund	\$1,014,638	\$241,551		\$715,118	\$57,970	
Totals	\$54,814,638	\$241,551	\$11,682,793	\$35,002,925	\$57,970	\$7,829,400

ACP Spending Plan – Reporting and Modifications

DOER, in coordination with the MassCEC, will maintain careful records of the ACP spending, and report periodically on progress. DOER maintains the right to modify this spending plan as it deems appropriate and within the constraints of the regulatory purposes of the respective revenue sources.